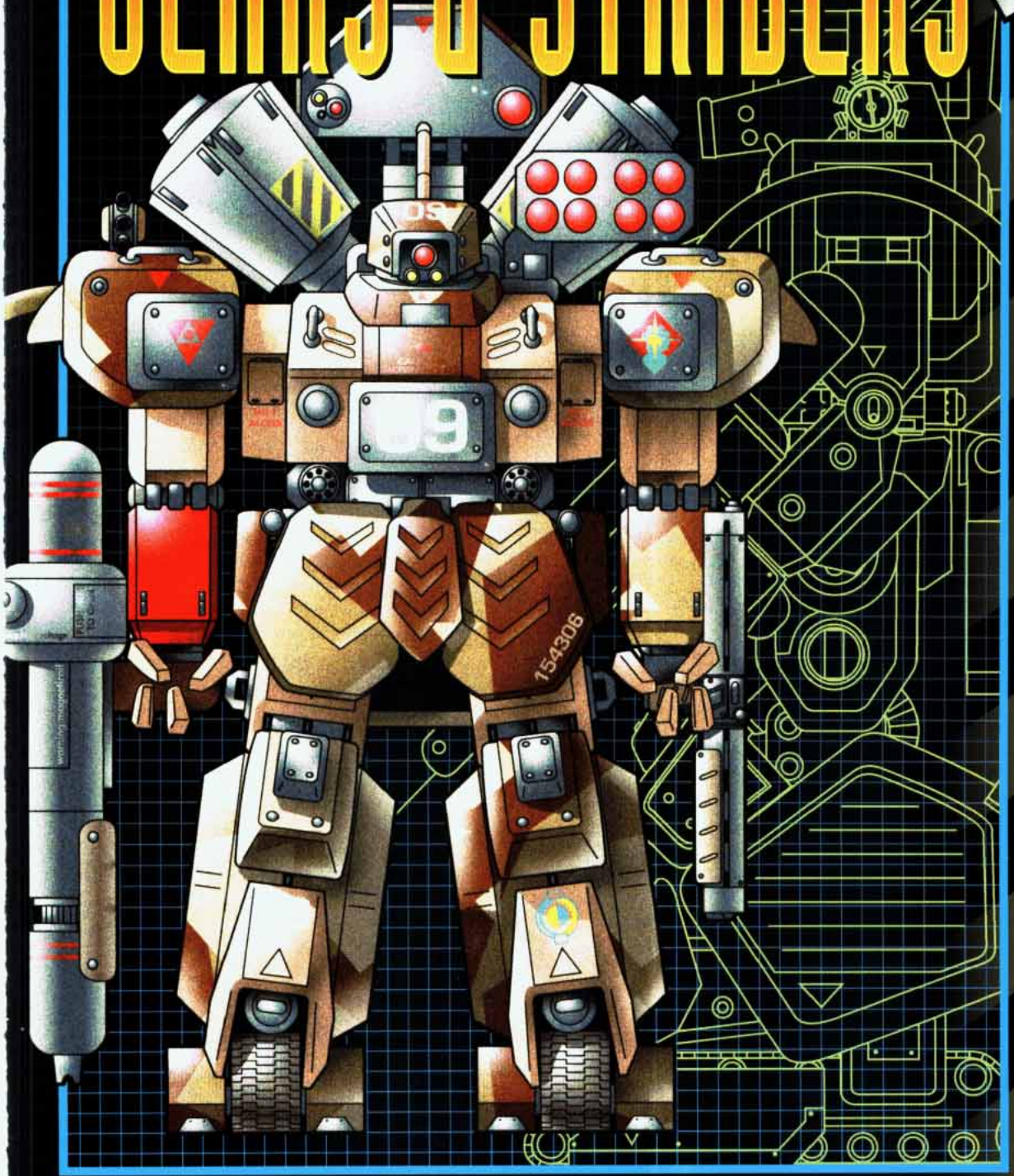
NORTHERN VEHICLES COMPENDIUM ONE

DP9-025

GEARS & STRIDERS



SHIELDS OF FAITH

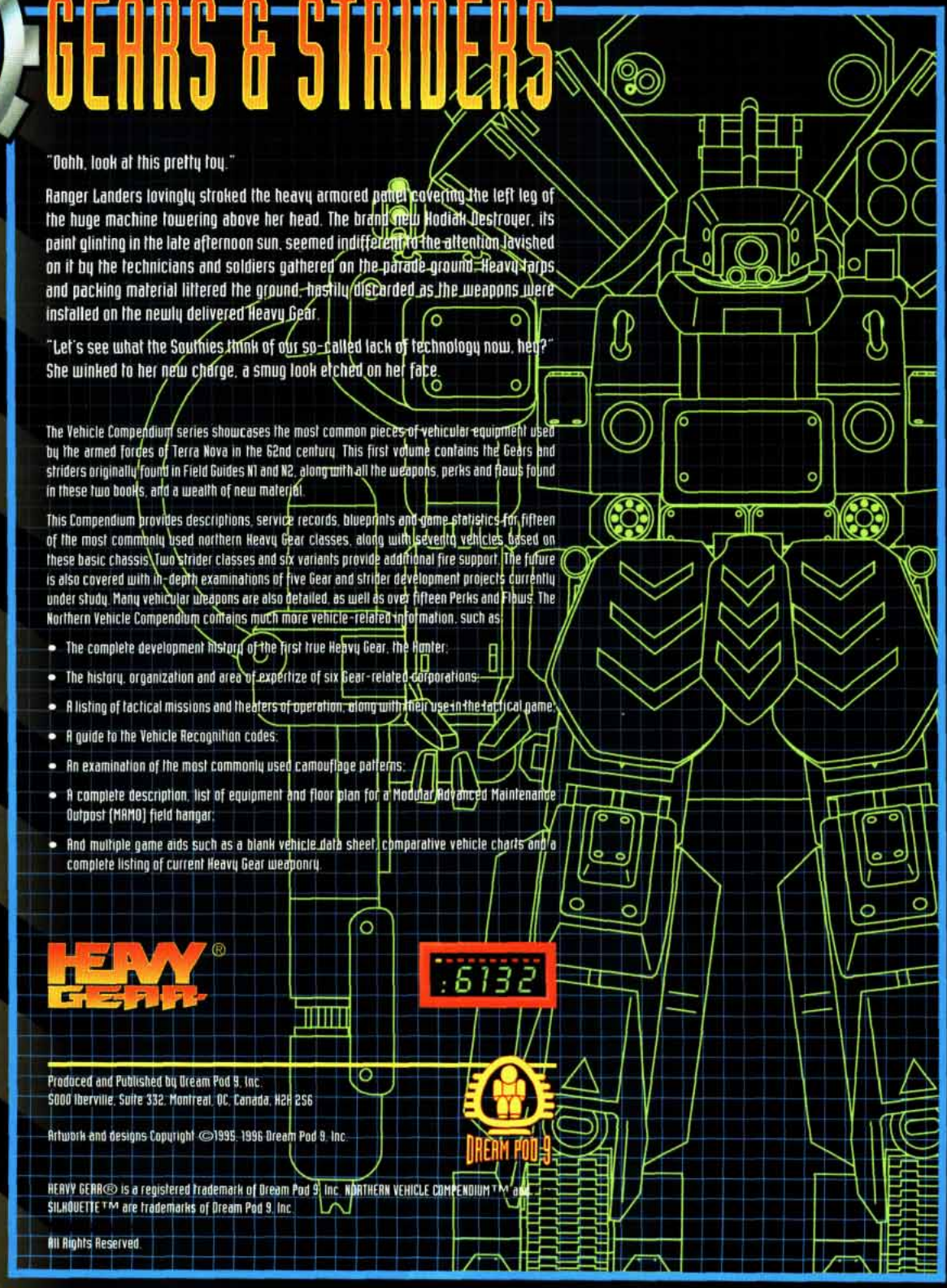
HEAVY GEAR® SOURCEBOOK

DREAM POD 9

Bryce Hubbard (order #5318102)

NORTHERN VEHICLES COMPENDIUM ONE

GEARS & STRIDERS



"Oohh, look at this pretty toy."

Ranger Landers lovingly stroked the heavy armored panel covering the left leg of the huge machine towering above her head. The brand new Hodiak Destroyer, its paint glinting in the late afternoon sun, seemed indifferent to the attention lavished on it by the technicians and soldiers gathered on the parade ground. Heavy tarps and packing material littered the ground, hastily discarded as the weapons were installed on the newly delivered Heavy Gear.

"Let's see what the Southies think of our so-called lack of technology now, hey?" She winked to her new charge, a smug look etched on her face.

The Vehicle Compendium series showcases the most common pieces of vehicular equipment used by the armed forces of Terra Nova in the 62nd century. This first volume contains the Gears and striders originally found in Field Guides N1 and N2, along with all the weapons, perks and flaws found in these two books, and a wealth of new material.

This Compendium provides descriptions, service records, blueprints and game statistics for fifteen of the most commonly used northern Heavy Gear classes, along with seventy vehicles based on these basic chassis. Two strider classes and six variants provide additional fire support. The future is also covered with in-depth examinations of five Gear and strider development projects currently under study. Many vehicular weapons are also detailed, as well as over fifteen Perks and Flaws. The Northern Vehicle Compendium contains much more vehicle-related information, such as:

- The complete development history of the first true Heavy Gear, the Hunter;
- The history, organization and area of expertize of six Gear-related corporations;
- A listing of tactical missions and theaters of operation, along with their use in the tactical game;
- A guide to the Vehicle Recognition codes;
- An examination of the most commonly used camouflage patterns;
- A complete description, list of equipment and floor plan for a Modular Advanced Maintenance Outpost (MAMO) field hangar;
- And multiple game aids such as a blank vehicle data sheet, comparative vehicle charts and a complete listing of current Heavy Gear weaponry.

HEAVY GEAR®

:6132

Produced and Published by Dream Pod 9, Inc.
5000 Iberville, Suite 332, Montreal, QC, Canada, H2H 2S6

Artwork and designs Copyright ©1995, 1996 Dream Pod 9, Inc.

HEAVY GEAR® is a registered trademark of Dream Pod 9, Inc. NORTHERN VEHICLE COMPENDIUM™ and SILHOUETTE™ are trademarks of Dream Pod 9, Inc.

All Rights Reserved.

DREAM POD 9

SHIELDS OF FAITH

DP9-025

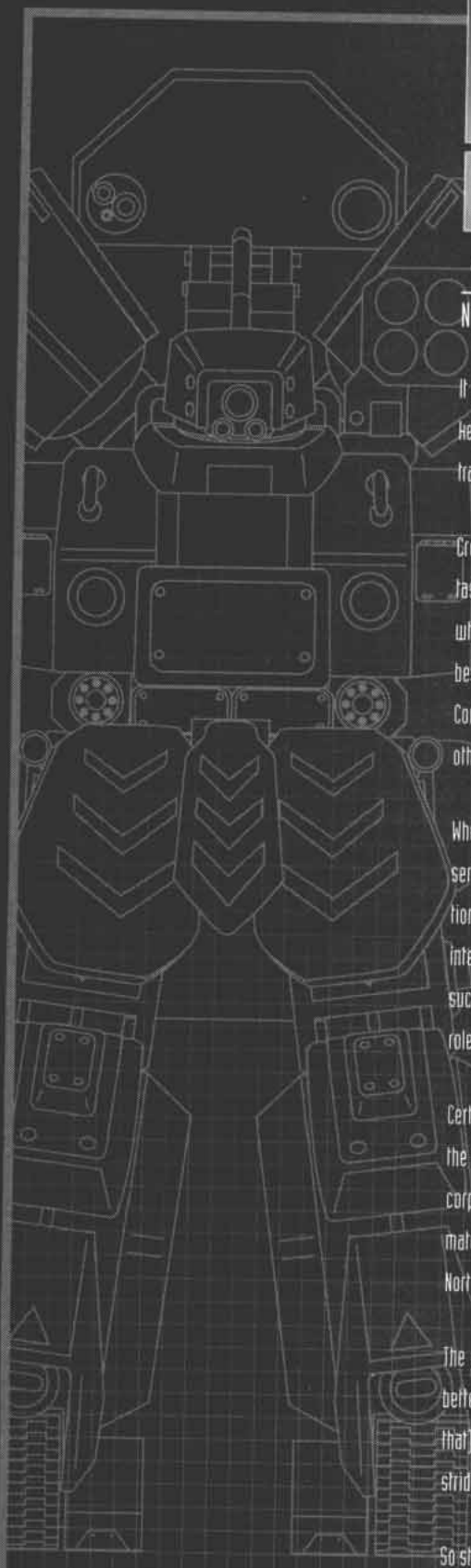
ISBN: 1-896776-11-6

9 781896 776118

ISBN 1-896776-11-6
Printed in Canada

Bryce Hubbard (order #5318102)

HEAVY GEAR



Northern Vehicle Compendium — Behind the Scenes

It should come as no surprise that vehicles — and Gears in particular — are one of the keystones of Heavy Gear. Gears and their lumbering cousins the striders are the tools of the trade for tactical games as well as being the symbolic figureheads of the entire game line.

Creating a fictional setting, regardless of its applications, is a rewarding but arduous task. In the case of a tactical and roleplaying game, the scope can be almost overwhelming. While a novel or movie might require a few dozen characteristic vehicles at best, a wargame needs to provide its players with a far greater number of designs. This Compendium alone includes over a hundred vehicles and it will be joined by several others in the months to come.

When preparing a vehicle guide such as this one, it is tempting to simply slap together a series of game statistics and operational roles with very little accompanying information, and then call this a new vehicle design. Heavy Gear, however, has always striven to integrate a full-fledged background with wargaming, so we could not limit ourselves to such a dry overview. Instead, this Compendium is filled with source material useful to roleplayers and tactical gamers alike.

Certain sections are dedicated to these game world references, taking a detailed look at the development of the Hunter Heavy Gear and examining several of the more prominent corporations involved in Gear design and manufacturing. Other sections present source material more tangentially, giving glimpses of the development of military power in the North through the individual histories of its war machines.

The goal of the Compendium is not only to provide Heavy Gear players with "new and better" ways to blow each other up on the tactical game field (although it does provide that), but also to further explore Terra Nova and provide indications on how Gears and striders are actually used by the Terranovans themselves.

So strap on your harness, activate your IHADS virtual reality display, and enjoy the ride.

SHIELDS OF FAITH

DREAM POD 9

Bryce Hubbard (order #5318102)

TABLE OF CONTENTS

DREAM POD 9 TEAM

WRITING	
Philippe Boulle	Writer
Jean Carrières	Writer
Mark Hofmann	Writer
Jeff Mackintosh	Writer
Prabal Nandy	Writer
Michael O'Shea	Writer
Erik Pohjola	Writer
Heith Tracton	Writer
Marc-Alexandre Vézina	Writer
Martin Ouellette	Additional Writing
Pierre Ouellette	Creative Director
Jean Carrières	Senior Editor
Marc-Alexandre Vézina	Line Editor/Developer
Philippe Boulle	Story Editor
Brian Faughnan	Copy Editor
Erik Pohjola	Copy Editor

PRODUCTION	
Pierre Ouellette	Art Director/Designer
Jean-François Fortier	Layout Artist
Ghislain Barbe	Illustrator/Colorist
Normand Bilodeau	Technical Illustrator/Colorist

ADMINISTRATION	
Robert Dubois	Marketing Manager

SILHOUETTE	
Gene Marcil	System Designer
Stéphane L. Matis	System Designer

OTHERS	
Typo Express, Inc.	Color Separations & Linotronic
Payette & Simms, Inc.	Printing

DEDICATION

To Jean, Marc-Alex, Philippe, Brian, Jeff, Bob, Ghislain and Norm, because they're simply the best.

CHAPTER 1: INTRODUCTION 4
1.0 ATTENTION TO DETAIL 4
1.1 OVERVIEW 5
1.1.1 CHASSIS AND VARIANTS 5
1.1.2 DEFINITIONS 6
1.1.2 TACTICAL ICONS 7
1.1.3 TERRAIN ICONS 8
1.1.4 AVAILABILITY 9

CHAPTER 2: HUNTER DEVELOPMENT 10
2.0 A NEW BREED 10
2.1 BACKGROUND / OVERVIEW 11
2.2 WALKERS ON TERRA NOVA 13
2.2.1 THE BREAK WITH EARTH 14
2.2.2 THE BATTLE OF PIONEER 14
2.3 THE BOT PROJECT 15
2.3.1 XBOT-1 RACCOON 16
2.3.2 X-BOT-2 //HUNTER// DEVELOPMENT 17
2.3.3 TESTING 19
2.4 LATER DEVELOPMENTS 20
2.4.1 EARLY VARIANTS 20
2.4.2 HUNTER MARK TWO 21
2.4.3 LATER VARIANTS 21

CHAPTER 3: VEHICLE AND WEAPONS MANUFACTURERS 22
3.0 SKELETONS 22
3.1 INTRODUCTION/BACKGROUND 23
3.1.1 ABALINE RESEARCH 24
3.1.2 ELEMENTECH 25
3.1.3 HYPERION WERKS 26
3.1.4 HEIMURI GEAR 27
3.1.5 NORTHCO 28
3.1.6 SHIRAN MECHANICS 29

CHAPTER 4: NORTHERN COMBAT VEHICLES 30
4.0 SAND STORMS 30
4.1 INTRODUCTION AND OVERVIEW 31
4.2 CHEETAH 32
4.2.1 CHEETAH AIR CLAW 35
4.2.2 CHEETAH FANG 36
4.2.3 CHEETAH MP 37
4.2.4 CHEETAH PARATROOPER 38
4.2.5 CHEETAH POLIZEI 39
4.2.6 STALKING CHEETAH 40
4.2.7 STALKING CHEETAH AFL 41
4.2.8 STRIKE CHEETAH 42
4.2.9 STRIKE CHEETAH SECCOM 43
4.2.10 WHITE CAT 44
4.2.11 LIGHTING CHEETAH 45
4.2.12 WHITE CAT EWH 46
4.2.13 SILVER CAT 47
4.3 BLACK CAT 48
4.3.1 BLACK CLAW 51
4.4 HUNTER 52
4.4.1 ARMORED HUNTER 55
4.4.2 ASSAULT HUNTER 56
4.4.3 ASSAULT HUNTER AC 57
4.4.4 BEARHUNTER 58
4.4.5 BRICKLAYER 59
4.4.6 DEMOLISHER 60
4.4.7 DESERT TANKHUNTER 61
4.4.8 HEADHUNTER 62
4.4.9 HUNTER COMMANDO 63
4.4.10 HUNTER COMMANDO EW 64
4.4.11 HUNTER MINELAYER 65
4.4.12 HUNTER NBC 66
4.4.13 HUNTER PARATROOPER 67
4.4.14 HUNTER PARA-MORTAR 68
4.4.15 HUNTER RECON 69
4.4.16 HUNTER RECON AC 70
4.4.17 HUNTER ZERSTÖRER MK 2 71
4.4.18 HUNTER ZERSTÖRER MK 2A 72
4.4.19 SPEARHEAD 73
4.4.20 HUNTER UC 74
4.4.21 HUNTER BULLDOZER 75
4.5 GRIZZLY 76
4.5.1 ASSAULT GRIZZLY 79
4.5.2 CROSSBOW GRIZZLY 80
4.5.3 DEFENDER GRIZZLY 81
4.5.4 ENGINEERING GRIZZLY 82
4.5.5 FIELD SUPPORT GRIZZLY 83
4.5.6 RABID GRIZZLY 84
4.5.7 THUNDER GRIZZLY 85
4.5.8 DESTROYER GRIZZLY 86
4.5.9 POLAR GRIZZLY 87
4.6 KODIAK 88
4.6.1 DESTROYER KODIAK 91
4.7 JAGUAR 92
4.7.1 ARROW JAGUAR 95
4.7.2 FIRE JAGUAR 96
4.7.3 FLAK JAGUAR 97
4.7.4 FLASH JAGUAR 98
4.7.5 JAGUAR MP 99
4.7.6 JAGUARUNDI 100
4.7.7 MAGMA JAGUAR 101
4.7.8 FIREFIGHTER JAGUAR 102
4.7.9 MOUNTAIN JAGUAR 103
4.7.10 PANTHER 104
4.7.11 PATHFINDER JAGUAR 105
4.7.12 PREDATOR JAGUAR 106
4.7.13 STRIKE JAGUAR 107
4.8 NEMESIS JAGUAR 108
4.8.1 SOUTHERN SPECIAL 111
4.9 MAD DOG 112
4.9.1 MAD DOG-R 115
4.10 BEAR 116
4.10.1 MAULER BEAR 119
4.11 DEN MOTHER 120
4.11.1 DEN MOTHER II 123
4.12 BOBCAT 124
4.12.1 BIRD ARROW 127
4.13 FERRET 128
4.13.1 SABOTEUR 131
4.13.2 FERRET MK II 132
4.13.3 WILD FERRET 133
4.13.4 RABID FERRET 134
4.13.5 MAULER FERRET 135
4.14 RAZORBACK 136
4.14.1 PEACEMAKER 139
4.15 TIGER 140
4.15.1 SABERTOOTH 143
4.16 WEASEL 144
4.16.1 TATTLETALE 147
4.17 MAMMOTH 148
4.17.1 ASSAULT MAMMOTH 151
4.17.2 BRAWLER MAMMOTH 152
4.17.3 COMMAND MAMMOTH 153
4.17.4 DAMOCLES 154
4.17.5 DAMOCLES A2 155
4.18 THUNDERHAMMER 156
4.18.1 RECOVERY HAMMER 159

Bryce Hubbard (order #5318102)

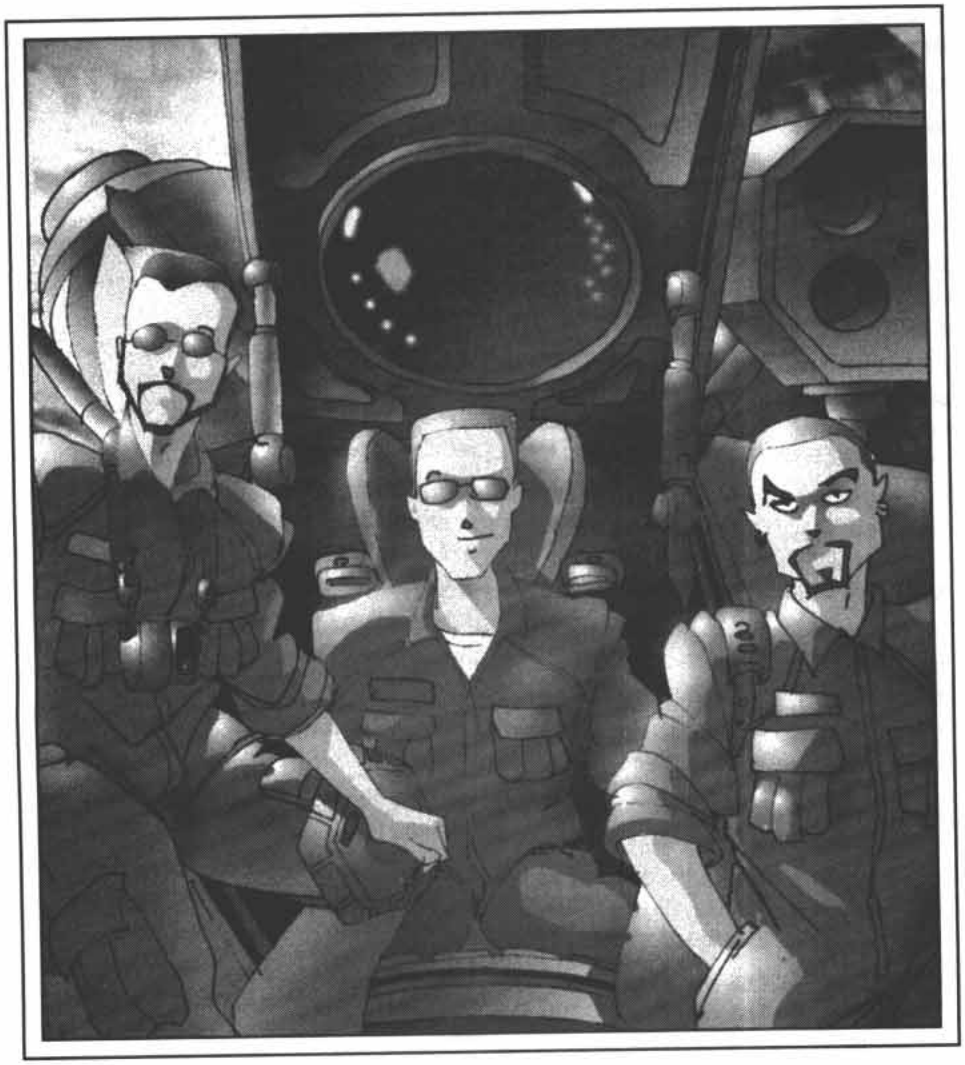
TABLE OF CONTENTS

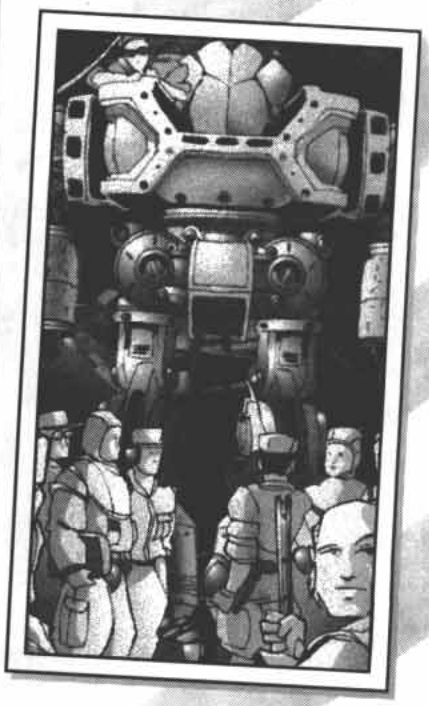
CHAPTER 5: RESEARCH & DEVELOPMENT 160
5.0 TEST DRIVE 160
5.1 INTRODUCTION AND OVERVIEW 161
5.2 CHEETAH MH2 162
5.2.1 S-C2001X-B PROTOTYPE 165
5.3 HUNTER XMG 166
5.3.1 N-103X-2 PROTOTYPE 169
5.4 PANDA 170
5.4.1 SAVAGE PANDA 173
5.5 SAND CAT 174
5.5.1 STICHY CAT 177
5.6 MASTODON 178
5.6.1 MASTODON II 181

CHAPTER 6: TECHNICIAN'S CORNER 182
6.0 UNDER THE TABLE 182
6.1 NEW WEAPON SYSTEMS 183
6.1.1 CANNONS 183
6.1.2 CLOSE COMBAT WEAPONS 184
6.1.3 FIELD MORTARS 185
6.1.4 LASER WEAPONRY 186
6.1.5 ROCKETS AND MISSILES 187
6.1.6 ADDITIONAL WEAPONS 188
6.2 NEW PERKS 190
6.3 NEW FLAWS 195
6.4 WEAPON CHARACTERISTICS 196
6.5 AMMUNITION TYPES 197
6.6 WEAPON TABLES 198

CHAPTER 7: GAMEMASTER'S RESOURCES 200
7.0 COMMAND AND CONTROL 200
7.1 STANDARDIZED VEHICLE CODES (TN 1914) 201
7.1.1 NORTHERN CODES 201
7.1.2 OLD PRODUCTION ID CODES 202
7.2 COLOR SCHEMES 203
7.2.1 BASE COLORS 203
7.2.2 ENVIRONMENTS 203
7.2.3 THE EFFECTS OF CAMOUFLAGE 203
7.3 INSIGNIA AND MARKING PLACEMENT 206
7.4 HEAVY GEAR HANGAR 208
7.4.1 GENERAL APPEARANCE 208
7.4.2 TOOLS AND EQUIPMENT 209
7.4.3 CONTENTS AND CAPABILITIES 209
7.5 MODULAR ADVANCED MAINTENANCE OUTPOST 211

CHAPTER 8: CHARTS AND GAME AIDS 212
8.1 COMPARATIVE VEHICLE CHART 212
8.2 NORTHERN GEARS GENEALOGY 214
8.3 VEHICLE RECOGNITION 216
BLANK VEHICLE SHEET 221





SPECIAL THANKS

Alan Eisinger, Alisfair Gillies, Lloyd D. Jessee, David Monaghan, Gerald T. Ping Jr., Joseph L. Poulin, Jason P. Prince, Alex Rhodes, Chris Ruhl, Andrew South, Jon Souza, Bill Valera, Heavy Gear Mailing List

Produced and Published by

DREAM POD 9

5000 Iberville, Suite 332
Montréal, Québec, Canada, H2H 2S6

HEAVY GEAR™, NORTHERN VEHICLE COMPENDIUM™, TERRA NOVA™ and SILHOUETTE™ are trademarks of Dream Pod 9, Inc. All artwork ©1995, 1996 Dream Pod 9, Inc. All Rights Reserved.

No part of this book may be reproduced without written permission from the publisher, except for short excepts for review purposes. Any similarities to characters, situations, institutions, corporations, etc. (without satirical intent) are strictly coincidental.

Dream Pod 9 can also be reached through the internet. Check the rec.games.mecha conference for support and information about Heavy Gear. You can also visit our World Wide Web page at http://www.dp9.com.

Stock DP9-025

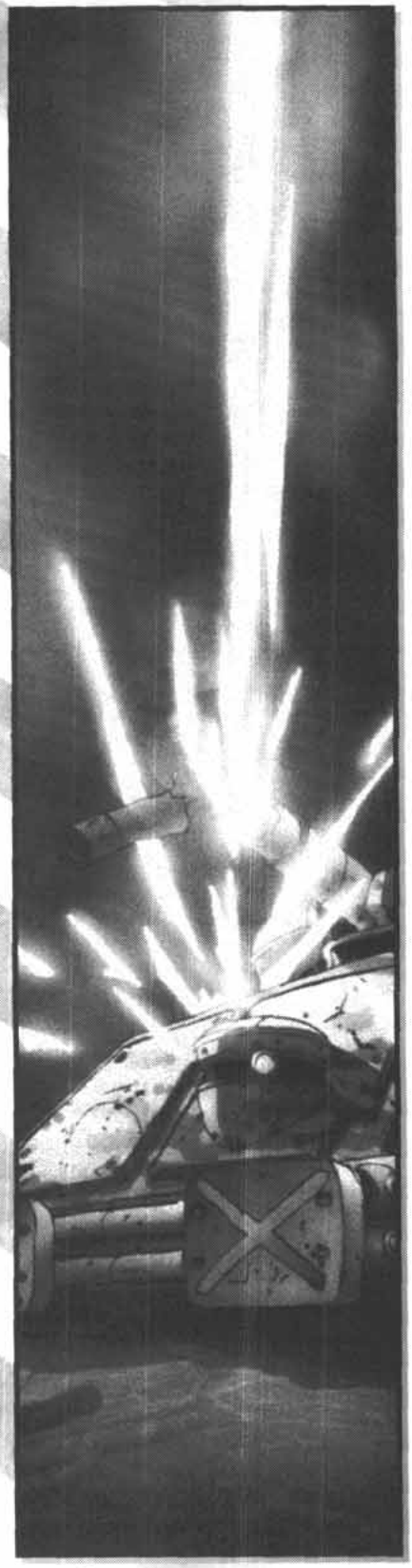
Legal Deposit: December 1996
Bibliothèque Nationale du Québec
National Library of Canada

ISBN 1-896776-11-6
Printed in Canada

Bryce Hubbard (order #5318102)

INTRODUCTION

ATTENTION TO DETAIL



The desert sun was high in the sky, sending heat shimmers floating up from the dunes. Desert patrol was never amusing, but at 45° C it was unbearable. Caporal Barton knew, however, that war waited for no man.

Soldat Finks put down his binoculars and pulled down his polarized desert goggles. "Caporal, we've got movement coming our way."

Barton frowned and scanned the horizon with his own binoculars. Finks was right, two or three squadrons of Northern Gears coming over the ridge on the horizon. This might mean trouble. He wiped the sand from his filter mask and hit the comm switch on the side. "Sergent, I think you should come take a look at this."

In the damp coolness of the *Caïman* parked in the shade of the dune, Sergent Axelsson took a deep breath. Pulling a desert scarf over his head, he opened the hatch; light and heat rushed in as he walked out of the APC and joined Caporal Barton and Soldat Finks on top of the dune. "What's up, Caporal?"

"Well, there seems to be some new activity along the Grenberg Ridge, Sergent. At least fifteen Northern Gears are coming our way." Caporal Barton handed Axelsson his binoculars so the NCO could take a look for himself.

The Sergent scratched his scruffy beard while he waited. When he had finished a cursory look, Barton gave his equally cursory report. "It looks like a Northern border patrol, Sergent. They're deploying in a standard sweep looking for hidden enemies."

"Well, they're still a few klicks out, Caporal. Go to the meat-wagon and radio C&C."

"Oui, mon Sergent," Barton said, slipping into his native Universal French. Axelsson, born in the Mekong Dominion, frowned but let it pass. The Caporal rushed down to the APC. Soldat Finks was looking through the binoculars.

"Not to disagree with Caporal Barton, Sergent, but I don't think this is a simple patrol." Finks handed his binoculars to the Sergent so he could take another look, and continued his own report. "There are at least four *Rabid Grizzlies* and two *Fire Jaguars.* These are not regular Northern patrol Gears."

Axelsson zoomed in on the Gears. Those were heavy assault vehicles, used in concentrated attacks not standard desert patrols. "I see. Well, it would seem you're correct, Soldat. This looks more serious than... wait. One of them is coming towards us... Is that a *Cheetah*? I can't tell... Here, you take a look."

Finks took back his binoculars and focused on the incoming Gear. It was light and fast, traveling easily over the dunes. It was also making a B-line for their position. It certainly wasn't a *Cheetah*, however. "I see it, sir. I'm pretty sure it's a *Weasel.* A fairly rare electronic warfare Gear. You can tell by the satellite dish on its back —"

"...For calling long-range artillery and orbital strikes," the Sergent chimed in, finishing Finks sentence. "Nasty stuff. You really know your Gears, Soldat. Attention to detail like that always pays off."

Finks put down the binoculars and looked up at the NCO. It was rare that Axelsson gave compliments. "Thank you, Sergent, but I'm still —"

Horror and realization simultaneously flashed across both soldiers' faces. Long-range artillery. Finks tried to speak, but Axelsson beat him to it.

"Run! Run!" screamed the Sergent as they both scrambled down the dune, away from the *Caïman.* Inside, Caporal Barton — who had just sent the report to the command center — watched them flee, confused.

He was still puzzled when the barrage of supersonic shells tore right through the *Caïman*'s body. The vehicle vanished in a ball flame, leaving behind only a vast crater in the blackened sand.

Bryce Hubbard (order #5318102)

INTRODUCTION 1

1.1 INTRODUCTION

The **Northern Vehicle Compendium** contains all the basic Gear and strider chassis and variants that previously appeared in the rulebook and in the **Terra Nova Field Guides N1** and **N2**, plus many more. This book, along with the other field guides, is intended to be a quick reference manual for students of military history on Terra Nova. They will find within these pages the statistics and specifications for the most common Gears and striders used by the armies of the North on Terra Nova. The only models listed here are those that are common to several leagues, city-states or paramilitary organizations. Designs or variants that are used by a single league will be examined at a later date in other manuals.

While meticulous care was taken to ensure an accurate and up-to-date manual, the ever-changing nature of vehicles and the secrecy of military-related designs make this task Herculean at best. The reader must also take into consideration the fact that most of the information contained within the guides originates from the manufacturers themselves and reflects generic, minimally trained Gears. Depending on individual machines and maintenance records, field performance might differ from that published here. Since the last edition, some specifications and statistics have been modified to reflect newer, more accurate information.

The Northern Vehicle Compendium is divided into several chapters, each covering a specific subject. Chapter one contains the keys to the new elements found in the vehicles' statistics, i.e. the tactical uses icons, the color schemes and the availability numbers. Chapter two describes the development of the *Hunter*, the first true military Heavy Gear. Six well-known Gear or Gear-part manufacturers are examined in detail in Chapter three.

Chapter four constitutes the meat of the book and presents 17 Heavy Gear chassis presently in use, along with 71 commonly seen variants (chassis and variants are explained in 1.2.1 and elsewhere). Each vehicle is fully detailed both in terms of background and game statistics. Chapter five is similarly constructed, but presents five research programs currently underway to create new and more advanced vehicles. Chapter six includes all the weapon systems that were found in the old (now out of print) Field Guides, grouped together for convenience. That chapter also includes all the Perks and Flaws of the Field Guides, again grouped together. Note that even though they are presented in the Northern Vehicle Compendium, these weapons and systems can be used by any faction with no restrictions other than those the Gamemaster sees fit to apply.

Chapter seven, contains multiple tools that should prove useful to all Gamemasters (and to the players, to some extent). These tools range from the explanation of the complex vehicle identification system used by the Northern leagues to the camoflage patterns used by each army. Diagrams show the relative distribution of each of the vehicles shown in this book. Finally, a typical field garage and maintenance shed is examined in detail, ready to serve as a base of operations for a group of players in the field. The book closes with an Appendix, which contains various game aids such as a chart that allows the Gamemaster and players to compare the vehicle statistics at a glance and blank vehicle and squadron sheets.

▲ All major manufacturers use a variety of advertising methods to sell their wares. One of the most popular is a holographic catalog that permits clients to examine the specifications of all the machines for sale. From **Northco Virtual Catalog**, Autumn TN 1933.

1.1.1 CHASSIS AND VARIANTS

For the reader's convenience, the vehicles in this book have been divided into two general categories: the chassis and the variants. For the purpose of the game and its background, there is no practical difference between the two. The division has been made purely to maximize the content of this book. Both categories feature vehicles that are in fully-fledged production or have been permanently modified into their current configuration.

A chassis is the basic production model of a certain vehicle type; for example, *Hunter* chassis are often mass-produced and easily recognizable in shape and function, and they form the core of the armies. Because chassis are so common, three full pages have been devoted to each, along with a listing of their full gaming statistics. Variants based on a particular chassis will use this set of game statistics as a reference for their own, through a set of modifications (see page 6). The full explanation of the various sub-sections of the chassis section can be found on the next page.

Variants are vehicles derived from a basic chassis. In general, variants are slightly modified versions of the mass-produced chassis designed to answer a specific need. They can differ in terms of operation role, performance, equipment or weapon payload, but they tend to share the same basic structure as the chassis on which they are based. Variants can either originate from the factory or the field — no distinction is made within the book, except perhaps in the production type. To save on space, the statistics of each variant are given only as modification to the statistics of the original chassis. For example, the *Strike Cheetah*'s statistics are given as modifications to the game statistics of the *Cheetah*. The Threat Values supplied have been calculated after the modifications were applied to the basic game statistics and can be used as is to evaluate the strength of a combat group.

In general, chassis have a Northern identification code that ends in MP (for Mass Produced), while variant codes end in a task specific code, such as AST (Assault), or TK (Tank Killer/Anti-Armor). The chassis and variant, however, will share the same basic code which indicates frequency and general size. For example all *Hunters* have a code beginning with HACS-01MG. The few exceptions to this rule cover Gears which are based on a previous model, but whose modifications are major enough that they have become a chassis in and of themselves. The high-technology *Black Cat* (related to the *Cheetah*) and *Nemesis Jaguar* (related to the *Jaguar*) are only the two most obvious examples. Northern identification codes are explained in full on p. 201.

Bryce Hubbard (order #5318102)

1.1.2 DEFINITIONS

The information contained in the presentation of the various chassis is divided into several tables, for easy access. The tables are grouped into subsections, which are Vehicle Specifications, Weapon Payload, General Stats, Availability, Optional Equipment and the Weapons Location Diagram. The following text describes each sub-section and how to use it.

Another subsection, Modifications, is found only in the text of the variants and lists how the vehicle differs from the chassis on which it is based.

• VEHICLE SPECIFICATIONS

The Specifications subsection is a single table containing the basic information about the vehicle, including product, physical, tactical and engineering data.

Product data includes the production code, manufacturer, cost and use. Physical data includes the weight (expressed in kilograms), height and width (in meters) of the main hull, without its various accessories, i.e. antennae and sensor pod extensions are not counted. The tactical data listed includes the various movement modes available to the vehicle along with the corresponding maximum speeds that can be attained on clear ground (Note: a vehicle's "true" top speed, known as its road speed, is one and a half times the speed on clear ground). Finally, there is some basic engineering data such as the type and name of the powerplant(s), their power output, and the type and thickness of the armor plating (when any is used).

• WEAPON PAYLOAD

The Weapon Payload subsection is a fairly straightforward table. It lists, in order of importance, the various weapon systems carried by the vehicle. This list includes the name and/or code of the weapon's primary manufacturer, its caliber (where applicable) and the ammunition payload. In some cases, where space is available, the type and method of loading of the ammunition carried is also supplied.

• GENERAL STATS

The General Stats subsection includes the Game Stats, Movement, Electronics, Armor, Weapons Summary, Perks, Flaws and Defects tables which contain the basic game information required to use the vehicle in a Heavy Gear tactical battle. To ensure that scenarios can be put together quickly, all information not directly relevant to the game has been moved to the Specifications table. This includes the cost, production type, deployment range, sensor range and communication range.

The rest of the data found in the General Stats subsection directly applies to the game and can be recopied on a blank sheet of paper. Alternately, players can photocopy the Blank Vehicle Sheet at the end of this book and fill it with the stats, or they can buy the pre-filled Data Sheet packs.

• VEHICLE AVAILABILITY

Availability is a table with two new statistics that have just been introduced to the Heavy Gear universe: the Availability Threshold and the Maximum Number of Units in the Field. These are meant to reflect how common a vehicle is and help the Gamemaster (or the players in a pure tactical scenario) use a realistic number of vehicles of each given design. For example, *Hunters* are so common that they are likely to participate in almost every battle. On the other hand, a highly specialized and secret model such as the *Black Cat* stealth Gear is unlikely to participate in a routine border patrol, and even if it does, not more than one will be available. The use of the Availability factor is fully explained on page 9.

• OPTIONAL EQUIPMENT

Optional Equipment is just what the name says, common options that are available to further customize the vehicle for a specific mission. Not all vehicles have been designed with this in mind, and many options are modifications made by troops in the field to answer a specific need. Not all vehicles routinely use options — only the most common are listed.

• WEAPONS LOCATION DIAGRAM

The Weapons Location Diagram is a small schematic found on the third page of each chassis. It shows the vehicle from the front and side and includes arrows and lines that point to the various weapons carried by the vehicle. In certain specific cases, the diagrams are also used to show some particular equipment mounted on the machine, such as a target designator, electronic warfare device or airdropping package. When space permits, the Weapons Location Diagram will also include a few notes on points of interest on the machine.

• MODIFICATIONS

The Modifications sub-section is a table found only on the pages where the variants of each chassis are shown. As the name suggests, this table lists, in as much detail as allowed by the available space, the modifications and changes that need to be applied to the basic statistics of the chassis in order to get the statistics for that particular variant. Using this method, although it requires a bit more work on the part of the reader, saves a lot of space that would otherwise be wasted in repeating already published information.

Bryce Hubbard (order #5318102)

1.1.2 TACTICAL USES ICONS

Special icons will be used for several purposes in this book. Beside the usual codes indicating the content of a given chapter or section, icons have been attached to each vehicle to suggest the best tactical uses for that particular unit. A tactical use is a mission, or function, that is easily handled by the type of equipment or armament carried by the vehicle. It may also be a type of mission for which the vehicle is particularly suited due to its performance profile — one should not, for example, expect a heavy fire support unit to perform well on a lighting strike raid.

The following paragraphs describe the various tactical uses icons used throughout the book.

• GENERAL PURPOSE

General purpose vehicles are jacks of all trades. They may fulfill almost any mission requirements, though they will seldom perform nearly as well as a more specialized unit. General Purpose vehicles are thus best used as straightforward front-line combat machines in an all-out confrontation. They fulfill the role of a vehicular basic trooper and can be used for both offensive and defensive missions, as well as more mundane assignments such as sentry duty or escort. They are generally simple in design and can thus form the core of the mechanized army.

• SCOUT

It is said that information is power; certainly, one cannot harm the foe without knowing where to strike first. Even in the age of satellite detection, nothing beats a friendly eye on location. Scout machines are generally fast and agile, capable of avoiding the enemy's notice as they skirt his position, trying to garner as much information as possible before returning to base. Often, scout machines carry dedicated electronic equipment and are capable of designating targets for fire support units. Scouts generally make poor fighting units and should avoid combat.

• FIRE SUPPORT

Fire support can often means the difference between life and death. The hallmark of the fire support unit is the presence of a hard hitting, indirect-fire weapon capable of great devastation. Fire support units usually hang as far back as possible and actively avoid contact with enemy units. For maximum battlefield effectiveness, fire support machines need to be paired with a forward observer of some kind who can relay target coordinates. Because of their size, fire support units are generally slow and cumbersome and must thus actively avoid close combat.

• ASSAULT

Assault units have been designed for one mission type: brutal frontal attack. They sport heavy armor — most, if not all, of it mounted on the front half of the hull — and carry high firepower, both of which are supposed to help them survive the most dangerous mission type ever conceived. Assault machines excel in search and destroy missions, but fare poorly in defensive and specialized roles. They also require extensive support in the field as they tend to suffer from low endurance (mostly ammunition-wise) and are rarely capable of extended missions.

• ENGINEERING

Engineering vehicles features high output engines and various tools that allow them to perform maintenance and construction tasks such as reloading ammunition, building bridges and fortifications, towing disabled units, etc. Most vehicles capable of performing engineering tasks have been specifically designed for this function and very few carry any armament. Some combat vehicles, by virtue of their strength, are capable of performing a few engineering tasks, such as towing equipment.

• COMMAND

Command vehicles are used as "focal points" for a combat group. They are equipped with additional communication equipment and ECCM devices to make sure that they can remain in contact with both the troops under their command and their command post. Since there is, at most, only one command unit per squadron, they are proportionally rarer than other units, but remain somewhat common. Depending on the mission and the commanding officer, command units may hang back from the battle or participate in the melee. It is important to remember that command vehicles are a prize target for enemy gunners and should be well protected by their teammates.

• ELECTRONIC WARFARE

Not all battles are fought and won with bullets and missile launchers. A vehicle with no sensors and no contact with headquarters or its commanding officers is easy prey for enemy units. Electronic warfare units carry powerful ECM and ECCM equipment that allows them to disrupt or intercept enemy sensor and communication signals. They are useful as an electronic shield against fire support units (who then cannot receive coordinates from their forward observers) and can disrupt the integrity of the enemy's command structure while preserving their own. Electronic Warfare units are rather specialized and are rarely seen in large numbers. Whenever possible, they should be kept out of heavy combat.

Bryce Hubbard (order #5318102)

1.1.3 TERRAIN ICONS

Another set of icons is used to indicate the type(s) of terrain where the vehicle is most often used. For example, few *Mountain Jaguars* will be deployed across the great plains leading to the Badlands, because their climbing equipment would be useless there. These icons may influence the vehicle selection process by modifying the Availability Thresholds (see next page).

The following paragraphs describe the various terrain icons used throughout the book. Each is in fact a typical example of the camoflage pattern used in that specific environment. For more detail about the color and application of these patterns, refer to *7.3 Color Schemes*, on page 203.

• DESERT

Although the Badlands contains a multitude of different terrain types, it still features quite a lot of empty, flat desert. The battleground is designated as Desert terrain when at least 50% of the playing surface consists of Clear or Sand hexes. Vehicles with the Desert terrain icon add +2 to their Availability roll.

• BROKEN GROUND

Although the Badlands contains a multitude of different terrain types, it still features quite a lot of empty, flat desert. The battleground is designated as Desert terrain when at least 50% of the playing surface consists of Clear or Sand hexes. Vehicles with the Desert terrain icon add +2 to their Availability roll.

• MOUNTAINS

For a time, Terra Nova was very geologically active — the large mountain ranges of the Northern Hemisphere are proof of this. The battleground is designated as Mountain terrain when at least 75% of the playing surface consists of Rough hexes or there are at least three different levels per map. Vehicles with the Mountain terrain icon add +2 to their Availability roll.

• WOODLAND

The micro-climates of northern valleys, sheltered from the Badlands heat by tall mountains, have led to the formation of large forested areas. The battleground is designated as Woodland terrain when at least 50% of the playing surface consists of Woodland hexes. Vehicles with the Woodland terrain icon add +2 to their Availability roll.

• JUNGLE

The hot and humid climates of the lower basins of the Southern Hemisphere have allowed huge rain forests to prosper. The huge vegetation and the high humidity wreak havoc with sensors, making combat a lethal, close-range affair. The battleground is designated as Jungle terrain when at least 50% of the playing surface consists of Jungle hexes or 75% consists of Woodland hexes. Vehicles with the Jungle terrain icon add +2 to their Availability roll.

• SWAMP

In some regions of the planet, water from the MacAllen network seeps to the surface and a swamp ecology develops. The battleground is designated as Swamp terrain when at least 50% of the playing surface consists of Swamp hexes or 75% consists of Water hexes. Vehicles with the Swamp terrain icon add +2 to their Availability roll.

• POLAR

Because of its position in the sky, Terra Nova features very few locations that can be truly referred to as polar, but they do exist. Combat there is quite unlikely, however. The battleground is designated as Polar terrain when at least 50% of the playing surface consists of Snow or Ice hexes. Vehicles with the Polar terrain icon add +2 to their Availability roll.

• WHITE SANDS

White sand is one of the most dangerous substances on the planet — few will willingly fight near its corrosive influence. The battleground is designated as White Sand terrain when at least 25% of the playing surface consists of White Sand hexes or 50% consists of White Sand Rough or Deposit hexes.

• URBAN

The urban battleground is rarely found within the heavily fortified walls of a city-state and is much more likely to occur in the crowded streets of neighboring towns and villages. The battleground is designated as Urban terrain when at least 50% of the playing surface consists of Urban or Dense Urban hexes (in any proportion, not including Roads or Bridges). Vehicles with the Polar terrain icon add +2 to their Availability roll.

Bryce Hubbard (order #5318102)

1.1.4 AVAILABILITY

Not all machines are common. Some models have been phased out of production, others were never manufactured in great quantities in the first place. To reflect this, each machine has been given what is refered to as an Availability Threshold. The thresholds reflect how rare/special a specific vehicle is.

If a specific model is desired, the player must roll equal to or above this threshold on two dice. Fumbles are treated as a roll of one. Modifiers for ranks, skill levels and unit priority may apply to the roll. If the roll fails, the vehicle could not be located or was not assigned to the unit. Note that some vehicles are so common they have a threshold of one: they are considered to be always available.

Availability Thresholds do not exist to serve as an iron-clad limit on the units brought into a **Heavy Gear** game. In tactical scenarios, the Threat Value system already ensures that opposing forces will be balanced even if they include units that are in fact very rare on Terra Nova. Rather, the availability system is designed to give players, if they wish, an easy way to remain consistent with the setting established in the various **Heavy Gear** products. While it may be fun to play a game pitting whole squads of *Kodiaks* and *Panthers* against a force of *Snakeye Black Mambas*, such a combat is unlikely to ever happen on Terra Nova. As a simple amusement, an unlikely battle can be a great deal of fun, but **Heavy Gear** remains a game based on the principle of integrating tactical gaming and roleplaying, and a certain "realism" in the distribution of forces is necessary for such an integration to take place.

Availability Thresholds are most easily used in tactical **Heavy Gear** scenarios and campaigns. In simple, improvised, head-to-head scenarios (a typical search and destroy skirmish in the Badlands, for example), unmodified Availability Thresholds help to ensure a realistic mix of forces on either side. Each vehicle description in Chapters 4 and 5 also lists the suggested maximum number of any unit type on the field at any one time. Together with the Threshold, this number limits the use of cutting edge vehicles. In more detailed tactical scenarios and campaigns, the whole list of modifiers can come into play when players choose their forces. In scenarios with a Gamemaster — where the forces are often fixed ahead of time — the Thresholds and modifiers should be consulted as a guide to what forces can realistically be present in any given situation.

AVAILABILITY THRESHOLDS

Threshold	Level
1	Very common; available almost anytime, anywhere
2	Common; can be found with little effort
3	Common
4	Common
5	Uncommon
6	Hard to find
7	Very hard to find
8	Restricted machines
9	Very limited production runs
10	Only a few units in existence
11	Prototypes
12	One of a kind

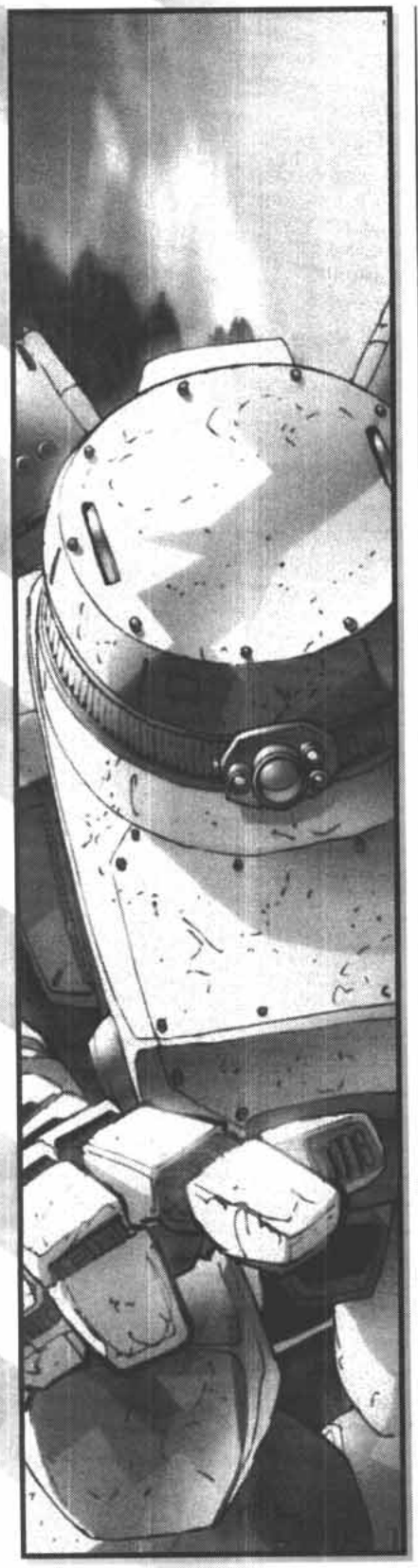
DIE ROLL MODIFIERS

Situation	Modifier
Civilian	-3
Rover	-2
Badlands Militia	-1
Enlisted Ranks	+0
NCO Ranks	+1
Officer Ranks	+2
Veteran crew	+1
Elite crew	+2
Legendary crew	+3
Vehicle has proper terrain icons	+2
Vehicle does not have terrain icons	-2
Elite Unit	+2
Task Force	+1
Front-line Unit	0
Second-line Unit	-1
Disfavored Unit	-2

Bryce Hubbard (order #5318102)

2 HUNTER DEVELOPMENT

A NEW BREED



"Mister Galland, I think you owe us an explanation." Lieutenant-General Daphne Balis did not look terribly pleased. She and the other members of the Joint Military Development Committee had been waiting for almost half an hour. They were seated at a large table hastily installed at one end of a vast hangar. An assembly of military brass and executive vice-presidents, they were waiting to see the future of the United Mercantile Federation Army. The future was late.

"Just a minute more, Lieutenant-General." Kurt Galland consulted his personal datapad nervously. A head engineer at Northco, he was the project director for the development of the company's Bipedal One-man Tank. Today was the second time he had come before the JMDC with a prototype. They had rejected the first one; the second was late. "I've just gotten word that it's on its way."

The members of the committee exchanged glances and some hushed comments. Galland knew how much was on the line. Northco's representative on the committee, a cold power-player named Vincent Dorion, glared at the engineer with frosty eyes. Others glanced at their watches or typed out rapid notes on datapads of their own. Galland could imagine that the comments so far were less than flattering. A glance at his own display, however, showed that the prototype was approaching rapidly. With any luck, all worries would be forgotten in a few seconds.

"Ladies and gentlemen, if I could draw your attention to the far side of the hangar." As Galland spoke bright spotlights lit up to trace a path from the committee table to the large door at the end of the hangar. The number "01" was stenciled on it in huge red letters. "I give you the future of warfare. I give you the *Hunter*!"

On cue, the metal slats of the door bent and exploded inward. Dust flew into the hangar and the noise was deafening, but the message was clear. A hulking humanoid form rocketed out of the cloud of debris, its knees bent as if in a dance, and darted forward on large foot-mounted wheels. Some massive concrete blocks were set-up near the door, and the *Hunter* began to weave around them. Its maneuverability was staggering, its knees shifting during the turns. It resembled nothing so much as a giant speed-skater. Its trajectory took it around the presentation platform, its left hand slightly touching the ground for stability as it completed the tight turn.

The crowd sat stunned, then some let out a cry when they realized that the thing was now coming straight at them. Just as it seemed as though it were going to crash into the table, the *Hunter* braked suddenly and raised its massive cannon. The huge red lens of its cyclopean sensor eye rotated on the turret-head . It stayed there for a few seconds, gazing at them, and then lowered its weapons. Galland stepped forward.

"I hope you weren't too frightened by our little, um, demonstration." He couldn't help but let the smug satisfaction show in his tone. "I know that it is not the standard way to do things, but we only wanted you to experience first-hand the surprise the enemy will no doubt feel when a *Hunter* assaults their position."

The machine came to stand at attention and saluted, its left hand stopping just before hitting the large turret atop its shoulder. Its cockpit hatch opened with a whirring of servos and actuators. The pilot, wearing what seemed to be a modified fighter pilot suit, stood up and doffed his helmet. He gave the brass a roguish smile while Galland continued his speech.

"May I present Lieutenant Ryuke Danzen, our test pilot. Now that we have proven the usefulness of the *Hunter* in surprise attacks, we will continue this demonstration with some traditional combat exercises. If you would direct your attention to the armored window behind you, you won't be disappointed."

As the committee members turned to face the window, amazement dancing on their faces, Galland knew he had them just where he wanted them.

Bryce Hubbard (order #5318102)

HUNTER DEVELOPMENT

2

2.1 BACKGROUND / OVERVIEW

The *Hunter* was the first Terranovan walker designed exclusively for military use. It is already over 250 cycles old and has gone through many wars and modifications. Like other successful weapon systems, it has also been the basis for many mass-produced variants and some highly specialized, limited-production machines.

Looking back to the Terranovan political situation in TN 1675, it is no wonder that Northern walker manufacturers were asked to conceive a true military walking vehicle. Jury-rigged *Hardhat* and *Groundhog* walkers had been fielded by many of the small city-states during the 150-cycle-long period of social and political unrest that followed the evacuation of Terra Nova. These engagements had proven that such a machine would be well suited to deal with the terrain and type of combat on Terra Nova.

The ultimate proof of the military walker's competence came during the so-called Battle of Pioneer, when an improvised force of United Mercantile Federation walkers helped repel a combined Norlight and Western force consisting of traditional armor and infantry. The Mercantile force, consisting of old *Hardhats*, *Prairie Dogs* and *Groundhogs* with armor plates and light anti-armor weapons attached to their frames, was able to make use of broken and unpredictable terrain to trap the heavy enemy armor in a series of ambushes that made a stale-mate out of what should have been a Mercantile defeat.

Despite the success at Pioneer, some senior military personnel, blinded by old tactical concepts, were dead set against the idea of military walkers as proposed by the youngest branch of the United Mercantile Front Army. The proposal was nearly shelved, but the renewed threat of hostilities breathed new life into the project and a call for tenders was issued. In one of several scandals in the Mercantile government at the time, industrial giant Northco was awarded the contract with very little difficulty.

When Northco's *Raccoon* model was eventually rejected, the team was pitted against the many problems of the heavier, bulkier *Hunter* model. In the end, it was decided to make it as low tech as possible, so that its parts could be manufactured by small contractors and easily repaired on the field. The result was a rugged yet efficient machine that is still in service after more than a hundred cycles.

Although the *Hunter* was, at first, a simple infantry machine, it soon proved to be both the most versatile weapon system on the battlefield and an invaluable tool for the military on both sides of the Badlands. The *Hunter* now exists in a myriad of forms. Its simplicity has helped spawn a legion of standard variants designed for everything from paratrooper to tank-hunting operations. That same well known design also leaves room for thousands of custom refits. In the Badlands, almost every *Hunter* is unique in one way or another. The *Hunter* also laid the ground-work for the development of every other combat walker vehicle on Terra Nova, from the light and unique *Ferret* reconnaissance Gear to such lumbering monsters as the *Thunderhammer* fire support strider.

About the Authors

The TN 1933 *Fort William Military Review Vehicle Guide* (Vol. 1) is designed to provide readers with a detailed overview of the principal battle systems in the arsenals of the Northern Hemisphere. The *Guide* builds on the mandate of its mother journal, the *Fort William Military Review*, and gives citizens (civilian and military alike) an honest look at the battle systems that exist to defend their interests at home and abroad. The editors of the *Review* pose at right with a HACS-01MG-MP *Hunter*.

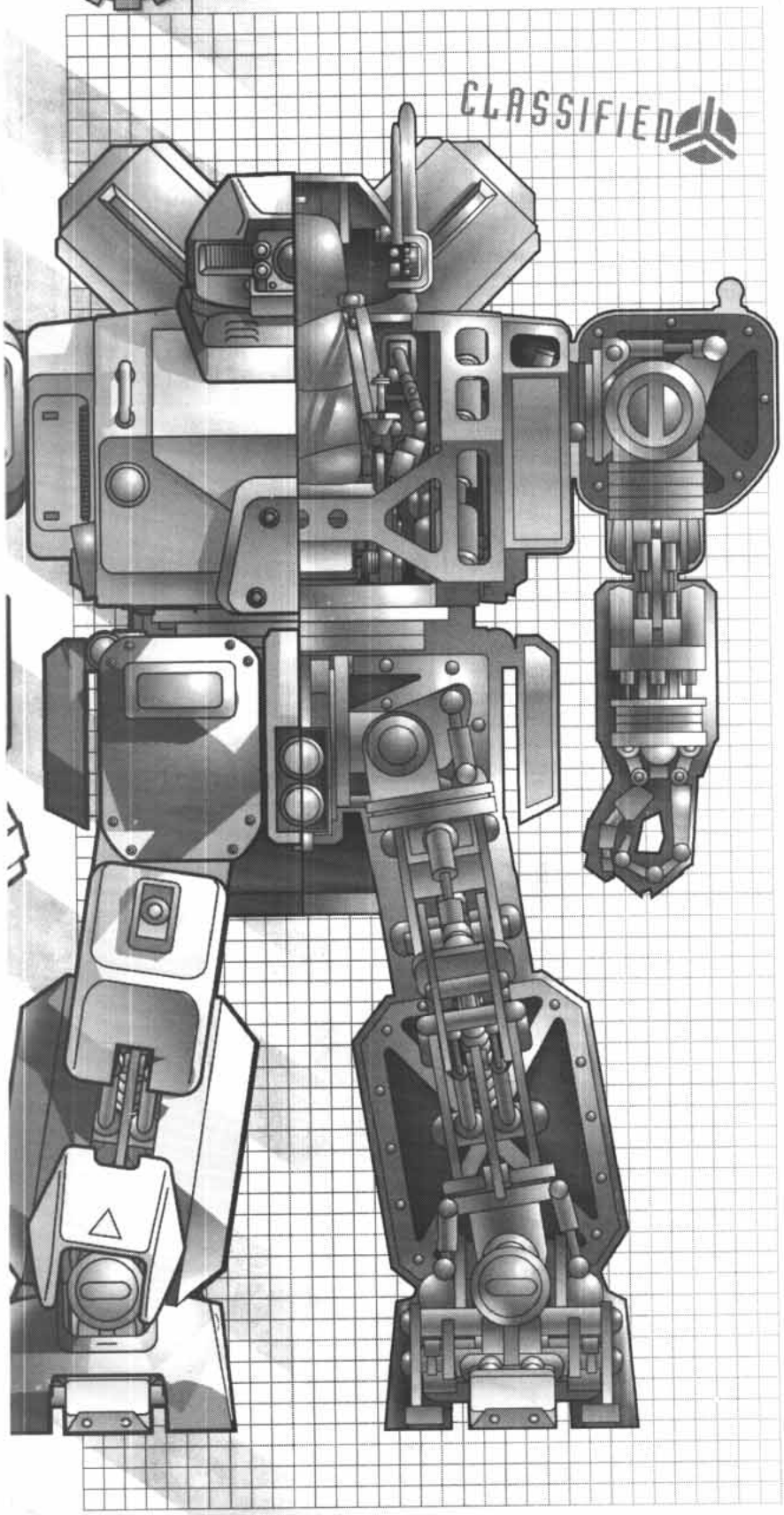
Head writer and vehicle specialist Veyman Marcus (pictured at top center) served two tours with the Western Frontier Protectorate Army before retiring to the private sector. An engineer and designer by trade, Veyman came to work for the *Fort William Military Review* in TN 1927 as a staff writer and consultant. He is now the lead writer on the *FWMR Vehicle Guide* series, as well as the author of several introductory texts on the military and military technology, including the best-selling *Ground War* and *Military Technology Today*.

Project director Jon Carteran (pictured lower left) has been special projects developer for *FWMR* since TN 1929 and on staff since TN 1925. Before coming to Fort William, Carteran was an editor at Morderad Press. Military historian Boyle Phyllip (pictured lower right) is a recent addition to the *Military Review*. Having served five cycles in the Fort James militia, Boyle has published several works on life in the Badlands, including *On the Brink*, and the recent *Codes of Honor*, a study of regimental dueling published by William Press. Boyle is now a staff writer at *FWMR*.

Not pictured at right are the technical illustrators and photographers who made such an important contribution to the *Guide*. Head illustrators Bilo Naurman and Berban Slaine created the weapon and system illustrations, while project designers Valet Peter and Fertan Jan Francys are responsible for the look and scope of the *Guide*.

Bryce Hubbard (order #5318102)

2 HUNTER DEVELOPMENT



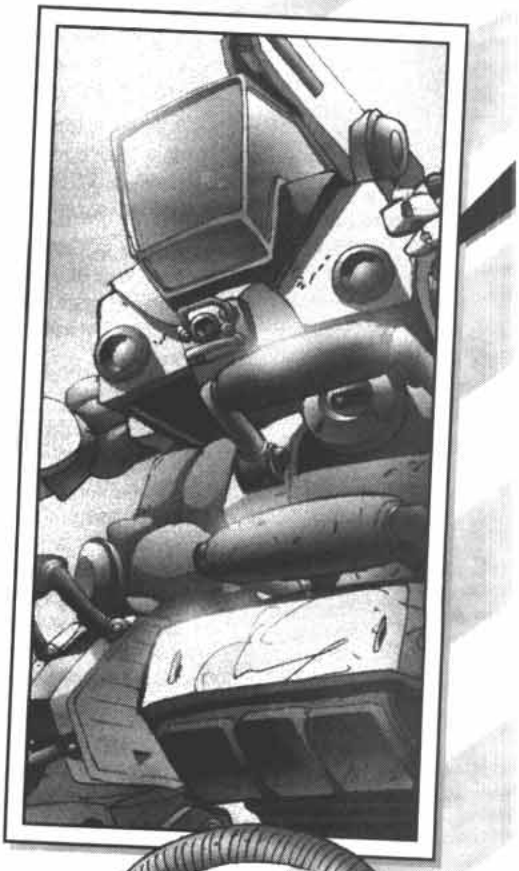
Hunter Development Timeline

TN 1455	Human Concordat withdraws from Terra Nova, plunging the colony world into chaos.
	Settlers begin to arm their *Hardhat* utility walkers for defense purposes.
TN 1551	United Mercantile Federation is founded.
	The UMF and other Northern leagues begin to absorb independent city-states and come into conflict with each other.
TN 1669	Battle of Pioneer: Improvised UMF military walkers repel combined Norlight-Western force.
TN 1673	UMF military and corporate leaders found the Joint Military Development Committee to oversee a technological renewal of the UMF Army.
TN 1674	Bipedal One-man Tank (BOT) Project: JMDC calls for dedicated military Gears.
	Northco proposals are approved for prototype development.
TN 1675	Northco's XBOT-1-P1 *Raccoon* prototype is rejected by JMDC.
TN 1676	Northco's XBOT-2-P1B *Hunter* prototype is accepted by JMDC.
	Development begins on the P1C pre-production model and the P2 to P5 high-technology prototypes.
TN 1678	GP-01 *Hunter* begins production, based on the XBOT-2-P1C prototype.
	Western agents steal the P5 *Hunter* prototype which contains design test logs within its computer records.
TN 1679	Southern commandos steal the Western *Hunter* prototype.
TN 1681	Second Southern War of Unification ends and the Allied Southern Territories are formed.
TN 1686	Merchant War between UMF and AST begins.
	GP-01DT *Desert Hunter* enters service.
TN 1687	GP-01L *Hunter Recon* enters service.
	GP-01C *Headhunter* enters service.
TN 1688	GP-01DT/A *Desert Hunter* Mark IA enters service.
	Azov Treaty ends the Merchant War.
TN 1702	GP-01F *Armored Hunter* enters service.
TN 1724	GP-01T *Hunter Zerstörer* enters service.
	GP-01N *NBC Hunter* enters service.
TN 1725	GP-01M *Hunter Minelayer* enters service.
	RGP-01TK *Hunter Recon AG* enters service.
TN 1738	GP-01ARV *Bricklayer* enters service.
TN 1750	GP-01DV *Demolisher* enters service.
TN 1781	GP-01HC *Hunter Commando* enters service.
TN 1785	GP-01HE *Hunter Commando EW* enters service.
TN 1843	Southern Republican Army Vehicle Modernization Program (SRA VModProg) initiates an overhaul of Southern Gears.
TN 1852	GP-01A *Hunter* Mk. II enters service.
TN 1905	GP-01F/A *Bearhunter* enters service.
TN 1913	GP-01TK *Assault Hunter* and GP-01TA *Assault Hunter AC* enter service.
TN 1915	GP-01P *Hunter Paratrooper* enters service.
	Joint Terranovan military command initiates HACS ID code system for Northern Gears.
TN 1916	HACS-01MG-TK *Hunter Zerstörer* Mk. II enters service.
	HACS-01MG-PM *Hunter Para-Mortar* enters service.
	HACS-01MG-TK/A *Hunter Zerstörer* Mk. IIA enters service.
TN 1930	HACS-01MG-C/A *Spearhead* enters service.
TN 1933	Advanced Technology Overhaul (ATO) program leads to minor modifications in *Hunter* design, including a new layout for sensor-head armor.

Bryce Hubbard (order #5318102)

2.2 WALKERS ON TERRA NOVA

The colonists who settled Terra Nova faced the classic problems of pioneers. Although the land was rich and fertile (at least in the temperate polar regions), the terrain of the new planet was rough and often impassable. Early colonists had a world-wide infrastructure to build and only limited resources to do it with. All-terrain vehicles were a critical part of early efforts because of the lack of roads and the expense and difficulties of air travel. Wheeled ATVs quickly became ubiquitous, but even they had trouble with the most rugged terrain. The southern jungles and northern forests were often impassable. Even more troubling, all-terrain vehicles were usually simple transports and were unable to accomplish many of the necessary tasks in the construction and agricultural boom of colonization.



Walker vehicles, however, were available to most colonists. These simple utility power-loaders and generic construction vehicles proved rugged enough to be used in the harshest terrain. Although laboriously slow, walkers could be converted into bulldozers, tractors, lifters and a variety of other utility vehicles with the help of various attachments. The relative ease of transport over rugged terrain made walkers popular with many of the independent colonists and even with the large conglomerates. The interest of the latter ensured that a plentiful supply of walker vehicles made it to Terra Nova during the colonial period. Mass purchasing also made the walkers affordable enough for small colonist groups to purchase one for their homestead, along with the necessary attachments for most tasks.

The most common of this long line of machines was a small cockpit/main body assembly known as the *Hardhat*. Capable of utilizing a wide variety of tool limbs, this versatile walker was a big money-maker for its manufacturer, Henerman Utility, a Terran company with close relationships to several of the conglomerates colonizing Terra Nova. A very simple machine, the *Hardhat* was equipped with a primitive walk control computer and was about as difficult to drive as a tractor. *Hardhats* even looked like tractors with legs and arms. The cockpit was encased in a padded roll cage and had large shoulder modules to accommodate the powerful hydraulic servos of the arms. Its thick legs and broad feet gave it all the necessary support to lift heavy loads. These vehicles were so common on Terra Nova that many colonists came to refer to all utility walkers as *Hardhats*.

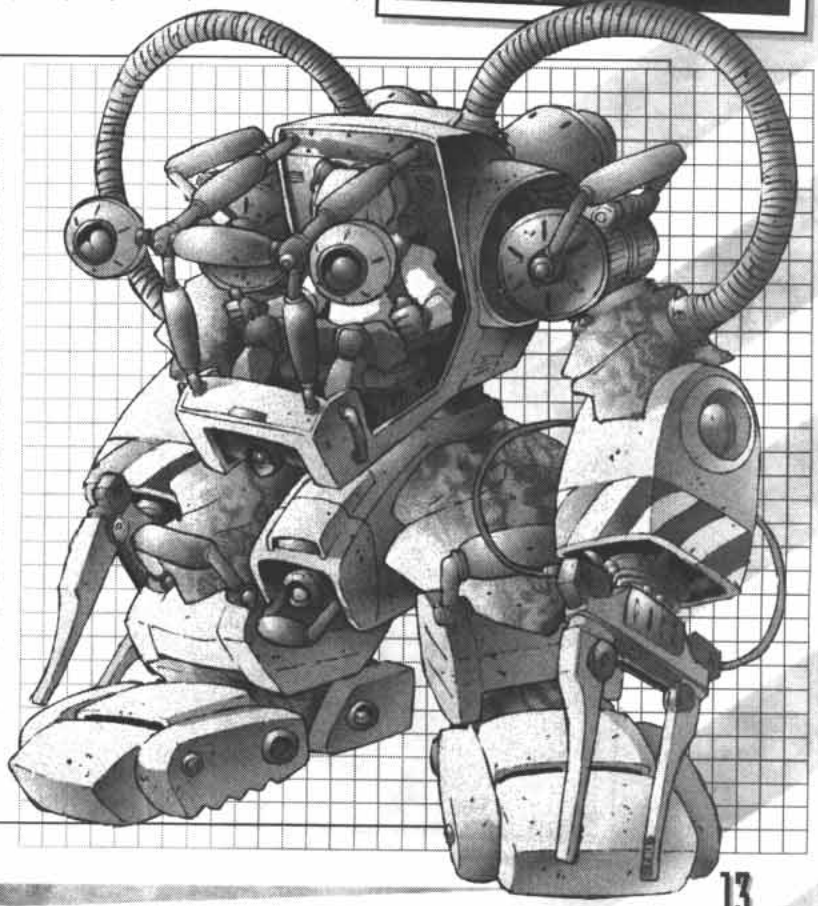
Hardhats became icons of the colonization effort, featured in Terranovan advertising campaigns on Earth and seen as a symbol of pride on Terra Nova. Trade shows were considered quite fashionable by the third generation of colonization, especially those that had agility contests. Some pilots could do incredible feats, such as juggling and dancing. There were also obstacle races and soccer-like games, as well as weight pulling competitions. Of course, some people customized their machines with special paint jobs and personal accessories, including vanity plates and fuzzy mascots.

Hardhat Specifications

Production code:	HU-0124L
Production Type:	Mass Production
Cost:	varies with market, roughly 10,000 marks/dinars
Manufacturer:	various, original design by Henerman Utility
Use:	all-purpose Work Gear
Height:	4.0 meters
Width:	? m
Average armor thickness:	10 mm
Armor material:	steel alloy
Standard operational weight:	5,900 kg
Primary Movement Mode:	Walk (25 kph)
Secondary Movement Mode:	None
Deployment Range:	375 km
Sensor Range:	250 m
Communication Range:	n/a
Powerplant:	250-series V-engine
Horsepower:	650 hp

Optional Weapon Payload

Name	Ammunition Payload
AR-15B 20 mm gatling autocannon	160 belt-fed rounds
RP-65 Rocket Pod	16 rockets
MK II Grenade Launcher	6 grenades



Bryce Hubbard (order #5318102)

2.2.1 THE BREAK WITH EARTH

In TN 1468, the Earth Concordat government, now in the hands of ultra-nationalists, announced the withdrawal of all support to the colonies. Suddenly faced with being cut off from the home-world, many colonists panicked and evacuated their new homes. In short order, Terra Nova was in shambles and Concordat and corporate forces were hard pressed to guard the spaceports against the assaults of desperate workers trying to get to the last Gateships home.

In the planet-wide chaos, homesteads were pillaged and pointless rioting became commonplace. Faced with the unprecedented need to defend their homes against their neighbors, some stranded colonists had the idea of welding metal plates and installing weapons on their *Hardhats*. Other colonists had been using *Hardhats* as makeshift defense mechanisms, but the practice became widespread as violence exploded across Terra Nova.

After the last Gateships left for Earth, taking much of the military hardware on Terra Nova with them, modified *Hardhats* became among the most powerful weapon platforms in wide distribution. As the colonial city-states recovered and repopulated, building agricultural and industrial bases for themselves, military industries were reborn and modified *Hardhats* were replaced by traditional tanks and armored vehicles. The walker vehicles, by this time called "Gears" by many Terranovans, remained popular with small communities, homesteads and militias.

2.2.2 THE BATTLE OF PIONEER

It took relatively little time for the small frontier communities to form city-states and then group together into small leagues. In the Arctic region, several of these leagues formed during the 16th Terranovan century. In TN 1525, the new Revisionist faith brought together several cities to form the first major league, the Northern Lights Confederacy, but others were soon to follow. By the TN 1650's the Northern situation has stabilized enough that three major leagues were recognized as the major Arctic powers: the NLC, the Western Frontier Protectorate and the United Mercantile Federation. Powered by a large industrial base, the UMF was widely recognized as the most powerful of the three. The Mercantile government of the time was gripped by a powerful desire for expansion and independent city-states and territories were being absorbed rapidly. Statements made by Anton Dorian, the Mercantile Treasurer from TN 1654 to 1672, implied that the UMF envisioned controlling the entire Northern hemisphere in the foreseeable future.

The NLC and WFP knew a real threat when they heard one and formed a rough-and-ready alliance in TN 1669. On Summer 19 to 23 of that same cycle, one of the great battles of Terranovan history was fought 10 km inside the UMF border, near the city of Pioneer. The combined Norlight and Western force consisted of conventional light tanks and armored vehicles, deployed to make a rapid punitive incursion into the UMF by attacking its northern border. The UMF responded with a smaller conventional force, supplemented by a force of modified utility walkers requisitioned from local militias. The Norlight and Western commanders expected to make quick work of the defenders, but the Mercantile leaders — particularly Brigadier Thomas Muldon, commander of the walker forces — made clever use of the rough local terrain and the advantages of their walkers. The battle halted the advance, but could not repel the combined Norlight and Western forces. It was nonetheless interpreted as a Mercantile victory and proved that walkers would be an important part of the future of modern warfare.

The natural conservatism of the upper echelons of all three militaries, and the lobbying power of military contractors, delayed the development of true military walkers in the north. By the time, a younger generation of leaders took control of the Mercantile Army in the TN 1670s — including General Muldon — the Southern Republic had already begun its first prototype, the AEV-1 *Chevalier* (see **Southern Vehicle Compendium 1** for more detail). Muldon and his fellow generals knew that it was time for the UMF to take advantage of its technological and industrial power base and leap ahead.

Charge of the Hardhats

"We are here tonight to honor the heroes who paid with their lives to keep us free. None were braver than the pilots of the 6th Walker Section. By 3500 hours on the 22nd, the men and women of the 6th had been leading the 3rd Norlight armored company on a merry chase through the roughest terrain on the Arctic plain for several hours. Two of them were dead, but they had disabled three *Montgomery* tanks. The enemy had done a good job of weakening our communications grid and several sections — among them the 6th — riding solo for hours at a time. At 3515 hours, when they stumbled upon the 12th Western Company coming to the 3rd Norlight's aid. The *Hardhats* of the 6th were suddenly cornered and overpowered. The Western guns turned on them mercilessly, and it seemed that they would all be killed unless something drastic was done. Lieutenant Hannah Mariah didn't hesitate for a second. She ordered two of her squadrons to beat a hasty retreat over rough ground, while her own command squadron covered them. She and her four companions charged toward the enemy in what she must have known was a suicide run. Nonetheless, most of her section escaped what would have been a massacre and she eliminated two more *Montgomeries* before she was killed. Lieutenant Mariah showed us then what bravery was and we honor her for it tonight."

— General Thomas Muldon, 20 Summer TN 1671.

Bryce Hubbard (order #5318102)

2.3 THE BOT PROJECT

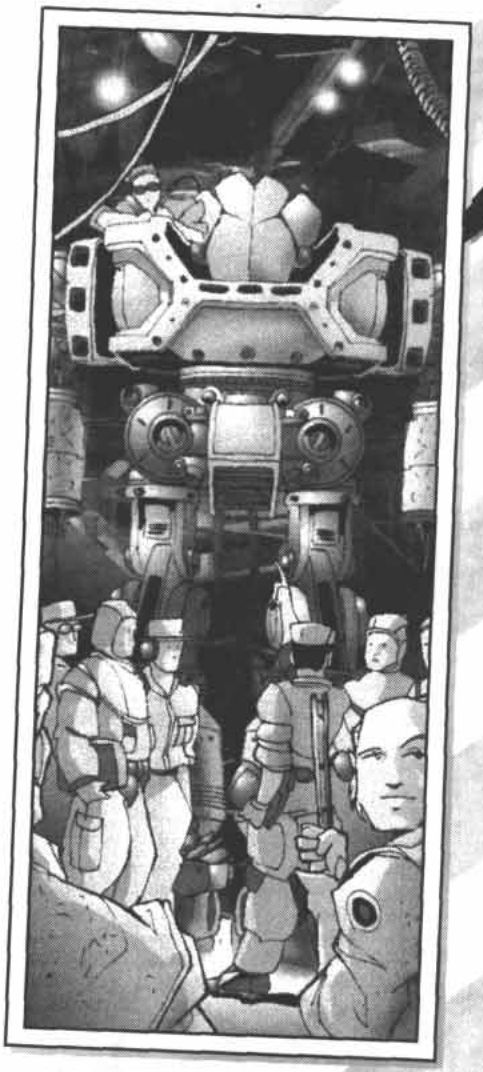
In Spring TN 1674, after overseeing overhauls of many other military systems, the UMF Army's Joint Military Development Committee — formed in the TN 1650s to oversee the evolution of the UMFA's equipment — issued a call for tenders concerning a BOT (Bipedal One-man Tank) unit, which was slated to become the army's first true military infantry walker vehicle. The committee was heavily influenced by the growing aggression of the southerners and some of the army's more progressive elements who advocated the use of walker vehicles for combat.

Essex Motors and Northco, two of the leading vehicle manufacturers in the UMF, answered the call. Media leaks inside Northco indicated that the corporate executives were not dedicated to the BOT Project, fearing that it would prove an unprofitable drain on their resources. Essex Motors saw this as their great opportunity to corner the market on the future of military contracting and invested huge amounts on their tenders, recruiting many top engineers and acquiring additional production facilities. The UMFA, however, rejected the Essex tender, citing design complexities and elevated production costs. The Northco proposal — called the *Raccoon* — was approved to advance to the prototype stage. This decision cost Essex Motors dearly, plunging them into a period of financial difficulties.

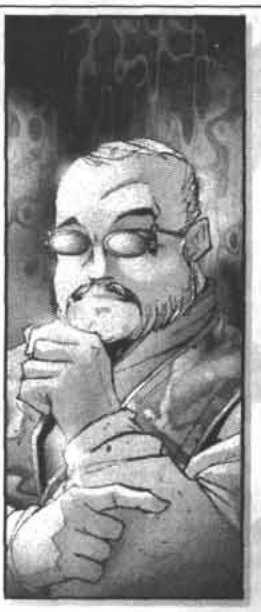
Northco was in fact much better prepared than Essex. In the TN 1650s, they had acquired the ailing Elementech corporation, which produced the *Groundhog* utility walker, thus giving them access to expertise in walker design. Northco's greatest advantage, however, was only revealed in the TN 1680s, when Maryan Griot, a reporter for the *Lyonnesse Press*, uncovered that the BOT Project had been destined from the start to be awarded to Northco. Northco executives were closely associated with the government of Treasurer Guy Rauland and members of his government had leaked the details of the call for tenders well in advance. By the time Griot exposed the scandal, it was too late: the UMFA was dedicated to the *Hunter* project and Northco's position as the biggest military contractor in the UMF was secure.

Northco placed Kurt Galland, its chief engineer, in charge of the project and placed at his disposal all the resources of the corporation. Northco was a very dynamic company at the time, benefiting not only from the support of the Mercantile government, but wielding an amazing talent pool. In the TN 1670s, Northco had brought together many of the most talented engineering and design minds on Terra Nova. Their many design bureaus and corporate allies gave them resources unavailable to Essex Motors or any other contemporary manufacturer. All this was put in the hands of Kurt Galland.

Galland was not the only star member of the BOT Project team. Despite the rumors leaked to the press as a smoke-screen, Northco saw the development of a combat walker as their top priority and several of their top people were put on the project. The command and control subsystems were under the direction of Eliah Teryen, a systems engineer who had been responsible for the development of a new command layout on the Northco *Sparrow* aircraft. Materials and metallurgy was the general responsibility of Kara Fawn, who would garner fame as part of the team which created the durasheet lattice used in the *Hunter*. Computer design and applications were Hariet Figaroa's responsibility and she acted as liaison with Abaline Research, paving the way for the application of ONNet technology to the *Hunter*. The chassis development of the *Hunter* — but not the *Raccoon* — was directed by Garidan Marcus, a senior engineer from Elementech.



Kurt Galland



The man behind the *Hunter*, Kurt Galland, was never satisfied with his own success. Born in Baton Rouge in TN 1621, Galland moved to Rapid City after his third cycle of engineering studies thanks to a grant from the Concordat Educational Trust, a Northco program to seek out the brightest young minds in the fields of research, design and engineering. In Rapid City, Galland found himself among many of the best minds in the Federation and excelled. Having grown up with a passion for racing cars, Galland gravitated toward vehicular engineering and found everything he was looking for at Northco. As a young designer, he was an integral part of the bureau that created the Northco *Diana*-series of high-performance professional race cars.

As the Federal government gained a more and more expansionist slant in the TN 1650s, and Northco moved increasingly to military production, Galland was moved to army vehicle design. He was very successful, overseeing as his first lead project the *Armadillo* armored fighting vehicle, which served the UMFA for several generations in one form or another. In TN 1670, Galland was promoted to head engineer of the military vehicles division. Friendly with several of the younger senior officers of the UMFA, Galland recognized the importance of the Battle of Pioneer and the future of military mechanized walkers. He recruited many members of Elementech, the Northco subsidiary responsible for the *Groundhog* into his department and worked in close consultation with Northco executives to prepare for the BOT Project.

Despite the overwhelming success of the *Hunter* — and the riches that followed for Northco and Galland himself — he was never happy with the results. Galland remained attached to his personal design, the *Raccoon*, and always saw the *Hunter* (designed by his subordinates) as an inferior machine. Galland tried several times to revive the *Raccoon* design and a dispute over the last of these efforts forced him into retirement in TN 1707. Galland returned to Baton Rouge to live among his lost dreams, becoming an enigmatic and quixotic figure for many young designers. Occasionally he would lecture publicly, or hold informal conferences at his home, but by the time of his death in TN 1729, the father of the military Gear was regarded by most as a senile old man.

Bryce Hubbard (order #5318102)

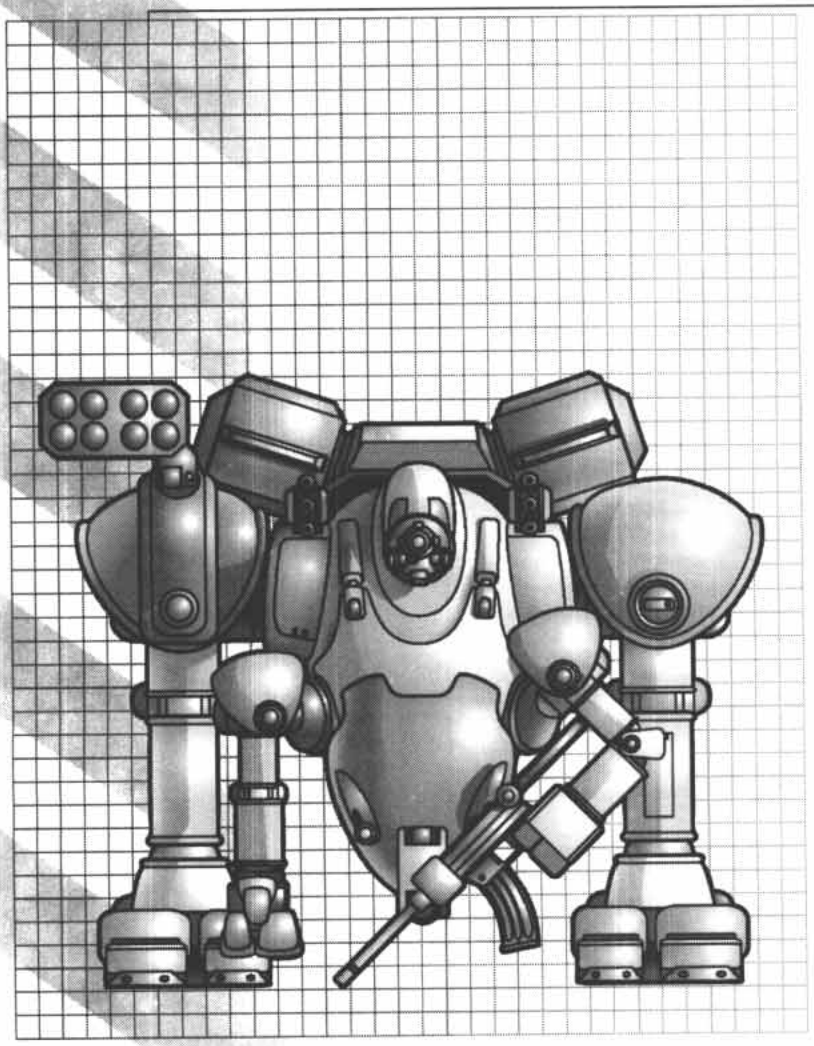
2.3.1 XBOT-1 RACCOON

Work on two trial prototypes began on Autumn 40, TN 1674; the *Raccoon* and a backup design called the *Hunter*. Since Galland thought the *Raccoon* was what the military needed, he assigned the majority of the 78 people under his direct supervision to its design, while the *Hunter* was worked on by a much smaller team. Galland saw the heavier *Hunter* as nothing more than a tank with legs. In his eyes, it was too big and clumsy, while what the military surely required was something light and very maneuverable. In the final analysis, Galland was wrong.

The *Raccoon* was the smaller of the two designs and was built on a light alloy frame. It had the minimum amount of armor required by the JMDC specs and had no head to speak of its sensors were simply mounted on a small hump atop its torso. The pilot's seat had a 55° backward angle, which gave the torso a heavily sloped profile. This design provided maximum resistance to weapons fire while keeping the machine's visual signature to a very low 2.92 meters. The pilot received information from three small holoscreens, which were located in front of his eyes. The two arms were equipped with three fingered manipulators and were controlled via computer sub-routines. The engine was a S-V600A V-type, made of light alloys and ceramics. Although Galland's team put together many mock-ups of the machine, only one working *Raccoon* prototype was ever produced.

The *Hunter* prototype was about half complete when the *Raccoon* prototype was presented to the JMDC, three seasons after the beginning of the team's work. To Galland's surprise, the military rejected the machine. According to the members of the Joint Military Development Committee, the *Raccoon* was too small and low-powered for their needs. They also complained that it was not versatile enough for the variety of battlefield roles envisioned. The JMDC was searching for a basic chassis it could adapt to almost any role and the *Raccoon* just would not do. Galland tried to argue that this was the perfect machine for their needs and that its speed and maneuverability would be its best weapon, the committee members would not hear of it.

In desperation, Galland revealed the *Hunter*'s half-finished frame. He was very much surprised to hear that this was the machine the United Mercantile Federation Army needed. It was big and squarrish, with large shoulders that gave it a look of brute power, much like a 4-meter-tall football player. It was fully humanoid, giving it all the potential capabilities of a giant infantry man, something the *Raccoon*, with its long, elongated torso and small arms, would never have been able to achieve. Galland was less than pleased by the turn of events, but he swept his angeraside and started work on "the monstrosity," as he called it.



Raccoon Specifications

Production code:	XBOT-1
Production Type:	Early Prototype
Cost:	not for sale
Manufacturer:	Northco
Use:	Experimental Bipedal One-man Tank
Height:	2.92 m
Width:	? m
Average armor thickness:	18 mm
Armor material:	steel alloy and composites
Standard operational weight:	4765 kg
Primary Movement Mode:	Walk (51 kph)
Secondary Movement Mode:	None
Deployment Range:	200 km
Sensor Range:	3 km
Communication Range:	13 km
Powerplant:	S-V600A V-engine
Horsepower:	400 hp

Proposed Weapon Payload

Name	Ammunition Payload
AR-7 15 mm autocannon	50 shells
RP-75 Rocket Pod	24 rockets
2 x MK II Grenade Launcher	6 grenades each

Bryce Hubbard (order #5318102)

2.3.2 X-BOT-2 HUNTER DEVELOPMENT

The failure of the *Raccoon* was a serious blow to Kurt Galland, who had invested much of himself into its design. Biographies of the various designers published over the intervening cycles have revealed that Galland sank into a deep depression immediately after his favored design was rejected. This dark mood — according to those who knew him — reflected the emotional attachment Galland had to his work. It was also, however, a natural reaction to the design difficulties ahead. The *Raccoon* had not been an easy machine to build and Galland had preferred its model, not because of crazed personal caprice, but because it was the most elegant way to meet the requirements of the BOT Project. The heavier and more cumbersome *Hunter* would never, he feared, be able to match the sped and performance characteristics desired.

It was Garidan Marcus, the team leader from Elementech who had designed the basic *Hunter* frame, who finally convinced Galland that the project had a future. While still focused on the *Raccoon*, Galland had seen Marcus and his team as a sort of back-up system, there to work on a secondary project (the *Hunter*) and to provide advice and expertise if and when the primary design team reached an impasse. In fact, the Elementech team provided many of the solutions that made the *Raccoon* possible, and its long-legged running system was designed by Galland and Marcus over a long night of work. The two men established a close relationship, and it was this bond that would be the directing force of the rapid development of the *Hunter*.

Thanks to Marcus, Kurt Galland became determined to prove to the JMDC and Northco executives that they had not given the project to the wrong man. For almost two full cycles, the *Hunter* team worked long hours to get their machine to perform as they wished. Each new subsystem seemed to create another impasse as the *Hunter* team faced the same problems that had made the Southern *Chevalier* prototype a failure several cycles previously. Galland soon realized that an operational *Hunter* was an impossibility with current technology. The solution was, obviously, to surpass current technology.

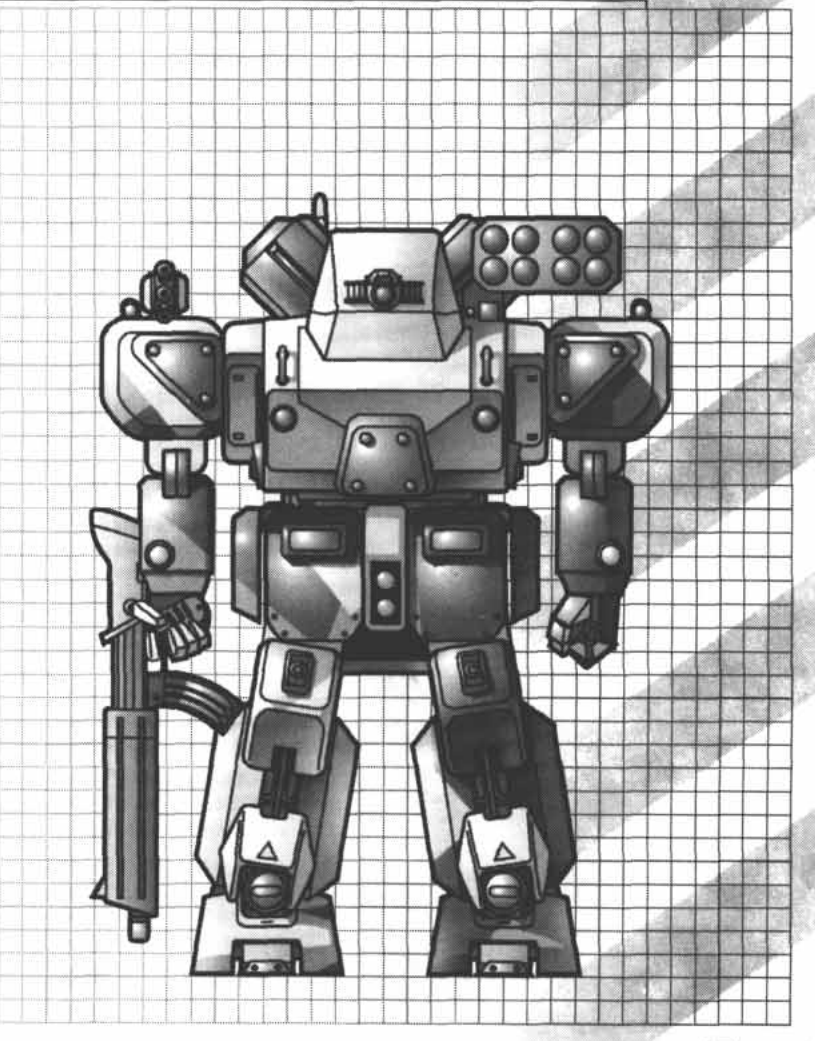
That this ambition was even remotely realistic was only a product of the scope of expertise that Northco could call upon. Almost all of the conglomerates design bureaus were involved in the *Hunter* project and several important breakthroughs were motivated by the needs of Galland's team, including a lighter and stronger variation of durasheet. The key to the success of the whole project, however, was the involvement of Abaline Research and their development of ONNet systems for computer control.

X-BOT-2 Hunter Prototype Specifications

Production code:	X-BOT-2
Production Type:	Early Prototype
Cost:	not for sale
Manufacturer:	Northco
Use:	Experimental Bipedal One-man Tank
Height:	4.6 m
Width:	? m
Average armor thickness:	28 mm
Armor material:	Durasheet
Standard operational weight:	6500 kg
Primary Movement Mode:	Walk (30 kph)
Secondary Movement Mode:	Ground (59 kph)
Deployment Range:	200 km
Sensor Range:	1 km
Communication Range:	8 km
Powerplant:	S-V950A V-engine
Horsepower:	450 hp

Weapon Payload

Name	Ammunition Payload
AR-10 20 mm Autocannon	30 shells
RP-101 Rocket Pod	32 rockets
MK II Grenade Launcher	6 grenades
M-1F Hand Grenade	3 grenades
HW-VB2 vibroknife	-



Bryce Hubbard (order #5318102)

HUNTER DEVELOPMENT

• MOVEMENT SYSTEMS

The first major challenge was making the *Hunter* mobile enough to match the battlefield requirements of the JMDC. The *Hunter* first had the same engine used in the *Raccoon*. Even without armor, however, the machine could not attain the minimum required speed. Galland decided to replace the S-V600A with the S-V950A. The new powerplant caused another problem: during the first running tests, it became evident that the Gear's leg struts would not be able to endure the stress of even a short run. The engineers then reinforced the structure of the lower legs and installed large shock absorbers in the feet and ankles, which added weight and taxed the knee linkages. Reinforcing these solved most stress problems, but forced the installation of a new drive assembly, making the lower body slightly wider than before.

With this equipment, the machine could reach the minimum required walking speed, but it still could not reach the minimum running speed. The engineering team tried many modifications to reduce the weight and increase efficiency, but it seemed that they had reached an impasse. By the end of Autumn TN 1676, Galland was ready to give up until he was saved by a flash of brilliance. Galland was inspired by a simple toy robot he had bought for his 5-cycle old son, Jaime. It could not walk very fast, but it had a set of wheels under each foot, which allowed it to dash forward at high speeds. The *Hunter*'s speed problems were solved. The team began work on the SMS (Secondary Movement System) the day after Galland's find, taking a full season to find the right way to mount both the wheels and the electric motor in the feet. With this system, although the running speed of the machine still did not attain the minimum required, its 59 kph rolling speed more than made up for it. Moreover, the SMS gave the machine a stunning maneuverability, particularly on even, flat surfaces.

• HEAD ASSEMBLY

The *Hunter*'s upper body did not give Galland's team as many problems as the lower body had, but there were still some glitches to work on, the most important being the sensor-head assembly. Some members of the team argued for a design similar to the rejected *Raccoon*, while the others preferred a turret-like head module. To make an enlightened decision, Galland ordered that a mock-up of both designs be done for tests. The *Raccoon* sensor-pod system provided better performance, but involved a complex electronics array that might be vulnerable to overheating or failure. The JMDC's rejection of the *Raccoon* on this basis made simplicity win out. Galland settled for a large turret module with a less sophisticated sensor array placed directly in front of the pilot's head.

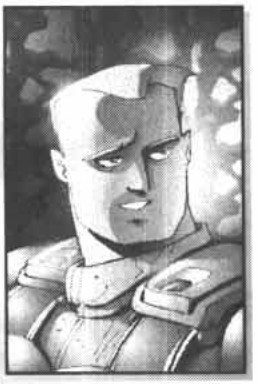
• MANIPULATOR SYSTEM

The Joint Military Development Committee was searching for a walker suitable for a wide variety of operational roles. One of the features that had displeased them the most about the *Raccoon* was its manipulator system, composed of three pincer-like fingers. To answer their concerns, Galland's team designed a human-like manipulator. This kind of system, however, was more complex and posed problems in terms of control. Galland's answer was to avoid the issue of computer-controlled fine motion altogether: he installed a "waldo glove" (a sensor studded glove which transmits all the pilot's hand movements to the computer) in which the pilot had to insert his hands when he wished to have the machine do complicated hand movements. Basic movements such as gripping or firing manipulator-held weaponry could be handled by CPU sub-routines, but all precision movement would be handled by mimicking the pilot's own hand-motion.

• CENTRAL PROCESSING UNIT

With all the complicated systems that were introduced to the *Hunter* design to meet JMDC standards, Galland's team began to have serious computing problems. The standard neural net processor that was slated to become the *Hunter*'s CPU was being taxed beyond its recommended capacities. Galland experimented with several innovative configurations, including pairing NNets, with very limited success. The breakthrough came thanks to one of Northco's close corporate allies, Marathon-based Abaline Research. Abaline had been in the process of developing the next generation of neural net processors, using optical crystals as a matrix. These ONNets, although more expensive to produce, had greater processing-power and were capable of a much wider range of "learned" abilities. On 25 Winter TN 1675 Northco and Abaline signed a five-cycle exclusive subcontracting agreement and 15 Abaline researchers relocated to Rapid City to join Galland's team. Almost all subsequent Heavy Gear CPUs, Northern and Southern alike, have been ONNets based on Abaline Research's developments. (For more information on neural net development, see the **Heavy Gear Technical Manual**, p. 12.)

The use of neural networks in military vehicles was uncommon at the time, and the advanced capabilities of the ONNet gave the *Hunter* an unheard of degree of adaptability. To the untrained eye of many test pilots, the *Hunter* almost gave the impression of being alive.



Thinking Machines

"They told us that the *Hunter* was just a development of what was there before. The computer was just going to be a more advanced version of the threat-assessment and tactical prioritization displays we had in fighters and tanks. That was a lie.

"At first everything seemed great. The *Hunter* would take care of all kinds of simple information and tasks. It would adjust speed automatically in turns and prioritize weapon selection when a bogey showed up. All that was great. The problems were more subtle, a little harder to explain. After a while you got the feeling the machine had a preference for a certain way of doing things.

"When we were fighting *Jägers* in the Westridge range, we used to always lob rockets to weaken a formation and close with autocannon fire. The snakes came to expect that and so we had to change our tactics. Some of us started saving rockets for up-close work. Well I don't think my *Hunter* ever agreed with me on that. The computer would always switch to autocannon tracking when I got close and — even worse — sometimes it would wait a beat before firing the rockets when I pulled the trigger.

"That cost me a leg back in '87. Let's say I'm not the *Hunter*'s biggest fan."

— Sergeant Malik Almovar, ret., UMFA, 25 Spring TN 1691.

Bryce Hubbard (order #5318102)

2.3.3 TESTING

The first *Hunter* prototype, designated XBOT-2-P1B, was rolled out on Autumn 40 TN 1677 and made quite an impression on the JMDC. Galland and his test pilot Ryuke Danzen staged a choreographed "attack" on the committee members. After "destroying" the audience, Danzen went after four remotely operated tanks and, in less than five minutes, utterly outmaneuvered and annihilated them. He then went into an unrehearsed house to house, SWAT-style attack, showing the *Hunter*'s tremendous ability to adapt to any situation and mirror all the experience and training of its pilot.

The committee was satisfied with the initial display of the *Hunter* and approved the development of further prototypes and extensive testing by military test pilots. Galland received even more resources. Armed with these, his team decided to try and get a jump on future developments by creating a two-tracked development scheme. One team would refine the P1B prototype, while another would develop a series of other prototypes using cutting edge technology being developed at Northco.

• PROTOTYPE DEVELOPMENT

The engineers assigned to the final development of the P1B prototype had only limited refinements to make before all-out testing could begin. The manipulator hands, extremely bulky on the P1B, were further refined, making them smaller. The head turret was slightly lowered, but remained a high tower atop the torso. The secondary movement system (SMS) wheels were reduced in thickness on the recommendation of test pilot Danzen himself, as he felt the need for greater maneuverability. By Winter TN 1678, the XBOT-2-P1C was being run through its trials and Northco's Elementech production line was retooling for the *Hunter*'s first production line.

Meanwhile, Galland's team two was busy exploring further developments based on the success of the P1 prototypes. Disappointed with the failure of the more technically sophisticated XBOT-1 *Raccoon*, Galland pushed his staff to explore the most innovative developments available to Northco. The result was four more prototype models, designated XBOT-2-P2 though P5.

The P2 prototype used the "no head" configuration of the *Raccoon*. Galland remained convinced that the lower profile and torso mounted sensor pods were ultimately more efficient than the large turret of the P1. The headless configuration also meant that heavier weapons linked to both shoulder hard-points could be mounted. The P3 was designed to test a fully electric powerplant for the Hunter, for a reduced noise and heat signature. The P4 was fitted with reactive armor, which was envisioned as a possible response to the low armor slope of the P1. The P5 was designed as the testbed for a unique composite/magnetic articulation system.

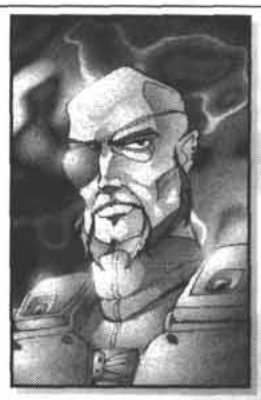
The P-series high-technology prototypes were a less than resounding success. The P2 suffered from the same electronic overheating and high-maintenance problems as the *Raccoon*. Placing the sensor "eye" of the P2 away from the upper torso made piloting the Gear more difficult, because pilots could no longer simply look out the eyes of a giant infantryman. The P3 suffered from a very limited deployment range and combat effectiveness, making a fully electrical system unpractical for the time. The P4 was destroyed during tests of its armor. The P5's articulations, on the other hand, performed too well. If the machine moved too rapidly, its limbs literally ripping off. The system would have to wait for the development of stronger materials and the standard electrical/hydraulic articulation system was maintained.

• BAPTISM OF FIRE

Meanwhile, the military had taken charge of the P1C and were conducting a grueling schedule of tests to work out the last bugs. the *Hunter* was certified for service on 37 Autumn TN 1677 and the first twelve operational, mass-produced *Hunters* were rolled out of the Northco manufacture lines on 2 Spring TN 1678. The new military vehicle was given the identification code GP-01 *Hunter*. This first production run began a season-long active combat trial almost immediately.

The first twelve machines and several retooled P-series prototypes were sent to serve in the region of Red Sands, which was then under dispute with the city-states of the Western Frontier Protectorate. The *Hunters* proved their worth in combat against light tanks and infantry, helping to secure the Mercantile "friendly relationship" with Red Sands. Two *Hunters* were destroyed in combat, but the gravest problem they faced was environmental. Sand got into their articulation systems, causing serious damage and repeated jams. The problem was temporarily solved in the field by covering the sensitive systems with thick cloth. A single *Hunter* — the retooled P5 prototype — was stolen during these operations. The "rovers" who made away with the P5 were later revealed to be Western agents. Ultimately, the P5 would end up in Republican hands, jump-starting the development of the Southern *Jäger* (see **Southern Vehicle Compendium**).

Pilot's Impressions



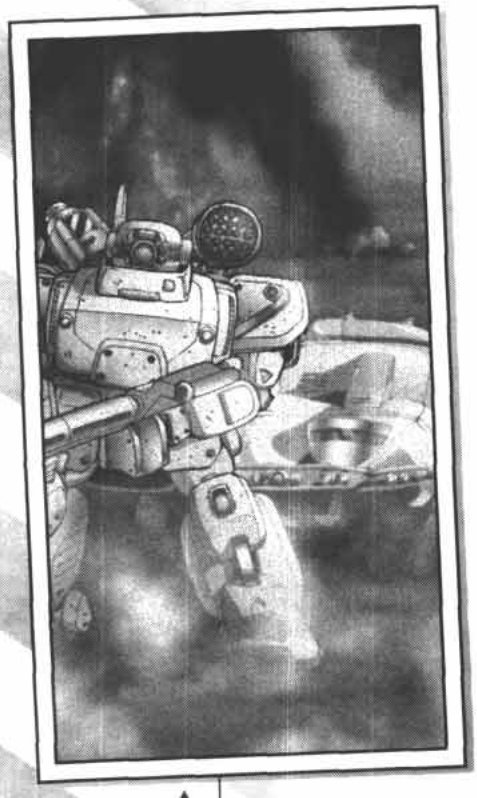
"At first, I was less than enchanted with the *Hunter*. But, boy! Did that ever change with time! I'll always remember my 27th mission. We went after a column of southy lights [Southern light tanks], a typical job for us. But the idiot in the scout chopper didn't notice the two heavy tanks that were with them. Three of my partners got blown to bits right away. We hung in there and blew one tank away, losing another of our guys. The other monster went after us and, as we were retreating to a more favorable position to trap him, I got distracted. The next thing I knew, I was being jolted in my seat and I knocked my head on one of the screens. I went back to my job, cursing my damn Gear. When we got back to the base, I ordered the tech to check the whole system of my "pile of crap" and went to bed."

"The next morning, the guy was waiting for me with the vid disc recorder. He played it and when I saw what was on it, I nearly blew my breakfast. My Gear hadn't jolted me for fun. He had seen the volley of rounds coming straight at us and had dodged them like crazy! I don't need to tell you that I went straight to the hangar after that little showing and begged him for forgiveness! I always trusted "Robby" implicitly after that and never had to regret it."

— Sergeant-Major Ruly Nadder, UMFA, 3 Winter TN 1689

Bryce Hubbard (order #5318102)

2.4 LATER DEVELOPMENT



In the years before the War of the Alliance, a *Hunter* Mark II armed with a Paxton LGPC snub cannon guards an APC. This weapon configuration would become standard for the *Assault Hunter* during the War. From **Cycles of War**, TN 1931.

Over the 250 cycles since the GP-01 *Hunter* rolled off the production line, the Heavy Gear has become the heart of most Terranovan military forces. The differences within the North have been (mostly) worked out and the Confederated Northern City-States now have *Hunters* and other Mercantile Gears across their territory. The *Hunter* inspired the Southern *Jäger* and has faced a dazzling variety of Southern Gears in combat through several wars and nearly constant low-intensity skirmishes in the Badlands. During the War of the Alliance, Gears from both poles played a critical role in defeating the invading Colonial Expeditionary Force. Throughout this long and bloody history, the *Hunter* has remained the basic Gear *par excellence*.

The *Hunter* has not gone unchallenged, however. While it remained the only basic chassis in the Northern military for several decades, it was soon joined by other models. These were also produced by Northco, which had signed an exclusive contract with the United Mercantile Federation Army, but the *Hunter* often seemed to suffer by comparison. These models have ranged from the early SC-01 *Bobcat* light recon Gear released before TN 1700, to the dreaded HACS-10HG-AST *Kodiak* born during the War of the Alliance. Nonetheless the *Hunter* has managed to survive.

The key to the *Hunter*'s survival has always been its versatility. Strained military budgets often saw the general purpose *Hunter* as a more efficient purchase than specialized machines such as the light recon *Bobcat* or fire-support machines such as the FS-01 *Razorback*. Other light trooper/commando Gears were developed to compete with the *Hunter*, however. The Western Frontier Protectorate and Northern Lights Confederacy developed the GP-02 *Mad Dog* and GP-03 *Wolf* as more advanced general purpose Gears. The *Hunter* kept an advantage, however, because of its simplicity of design. Variants based on its chassis were easy to manufacture and Northco flooded the market with them on several occasions.

The drive for more and more variants of the *Hunter* has almost always been tied to increases in tension and the outbreak of war. These points of crisis not only create a powerful demand for additional weapons, they also somewhat favor conversions over new technology.. The development of a new Gear chassis is a long and complex procedure that will rarely reach fruition in time to serve in the conflict that may have motivated its construction. Creating variations on a basic chassis, however, is relatively straightforward — especially for a chassis as simple and well-understood as the *Hunter*. While new designs have been born from conflicts, they are often outnumbered by the variants of established models for many cycles.

2.4.1 EARLY VARIANTS

In TN 1686 the United Mercantile Federation went to war against the newly formed Allied Southern Territories over trade routes and political alliances in the Westridge Range region of the Badlands. Victory in the war was seen as a critical goal for the Mercantile government, who were seeking to assure the UMF's superiority over their rivals in the Mekong Dominion. The Westridge trade zone was also critical to maintaining the virtual stranglehold the UMF enjoyed over the Western economy at the time.

The war cycles saw the release of the first generation of *Hunter* variants. The modifications made to GP-01s for Badlands operations were formalized in the GP-01DT *Desert Hunter*, released as a production variant in TN 1686. The *Desert Hunter* modifications, including filtered engines and cloth-covered articulations, were successful enough that by the early TN 1720s, the GP-01DT had become the standard general purpose Gear in forces deployed in or near the Badlands. The standard GP-01 was relegated to roles on borders between Northern states.

The following cycles saw Northco releasing other variants, including reconnaissance and command versions of their Gear. The GP-01L *Hunter Recon* was designed to serve as a scout and long range patrol Gear, and featured a far lighter weapons and armor load than its forefather. Much of the plate armor was replaced by polymer weave. The GP-01C *Headhunter* was a command variant of the standard *Hunter* It featured a prominent antenna array on its turret-head. Unfortunately for the UMF's expansionist leaders, the variants could not turn the tide of the war. In TN 1688 the Azov Treaty recognized the Westridge Range as independent territory and Mekong conglomerates began to take a large part of the trade market. The power of the AST, however, pushed the UMF to finally agree to tentative plans for the formation of the Confederated Northern City-States in TN 1693.

The creation of the CNCS, the birth of the Northern Guard, and the devastating St. Vincent's War of TN 1723-1729 prompted an increase in Heavy Gear production and the development of further variants. Most notable was a move toward heavier weapons loads, including the TN 1702 release of the GP-01F *Armored Hunter*, a heavily armored version of the basic machine. The *Armored* suffered from excessive weight, but remains in limited service to this day. A more successful heavy assault variant entered service in TN 1724 in the form of the GP-01T *Hunter Zerstörer*. The *Zerstörer* (literally "destroyer") featured a bazooka and heavier missiles than the standard *Hunter*. The *Zerstörer* was only surpassed in TN 1781 by the GP-01HC *Hunter Commando* which added paratrooper capabilities to the heavy assault capabilities of the *Zerstörer*. The *Commando* was always expensive to produce, however, and never displaced its predecessor save in elite units.

Many of the variants of the *Hunter* would face heavy competition from more specialized Gears. The *Hunter Recon* in particular was slowly phased out once the *Bobcat* and *Ferret* reconnaissance Gears entered service. The *Recon* became a light trooper rear-guard unit, featured among many local militias, even gaining a new code designation of RGP-01 in TN 1750. The fate of the *Recon* heralded that of several other variants which became outmoded over the centuries.

Bryce Hubbard (order #5318102)

2.4.2 HUNTER MARK TWO

By the middle of the nineteenth Terranovan century, the first generation of military Gears was more than showing its age. In the North, new generations of machines such as the *Bobcat*, *Mad Dog*, GP-03 *Wolf* and GP-04 *Wildcat* made the old *Hunters* look positively primitive. The Western-manufactured *Wolf* and Northco's own *Wildcat* were especially dangerous competition for the "old man" of Northern Heavy Gears and Northco's executive board was actively considering phasing out *Hunters* altogether when they received a new motivation from the military. The Norlight Armed Forces and Northern Guard both became extremely concerned when the Southern Republic initiated its intensive Vehicle Modernization Program (VModProg) in TN 1843, leading to an overhaul of the *Jäger* and its variants. Fearing that this was but a prelude to an act of aggression, Northern commanders began to demand modern and updated trooper Gears to bolster their own forces.

Northco launched into a rapid modernization of the *Hunter*, imitating their Southern counterparts. The GP-01A *Hunter* Mk. II entered service in TN 1852, with several important changes. The environment protection of the *Desert Hunter* was standardized and became a feature of all Mark IIs. The sensor-head developed for the *Bobcat* and *Wildcat* was reworked and replaced the large turret-head of the original *Hunter*. Overall performance was also improved.

The most significant improvement in the Mark II was the new Integrated Helmet And Display System (IHADS), which replaced the display holoscreens of all previous Gears. IHADS features a virtual reality display integrated into the pilot's helmet, which gives the impression of looking through the Gear's sensors. Pilots receive a completely unobstructed view, with a Heads-Up Display (HUD) system and an Audio Warning System (AWS) to convey additional information. All this is linked to an updated ONNet CPU provided by Abaline Research.

Although the Mark II was, at first, considered to be a makeshift mix of old and new parts, the IHADS system alone proved to be a significant step forward. In rapid succession, the now-defunct Mark I and *Desert Hunter* were phased out, remodeled or sold to local militias. All other *Hunter* variants were progressively recalled to be fitted with the new smaller sensor head and the IHADS system, as well as bringing their performances up to match the Mark II. The *Headhunter*'s communications and command suite was fully retooled and integrated into the IHADS display, earning the new identification code of GP-01A1.

Points of View

"Look, IHADS is great and all, but it sure takes some getting used to. You are literally looking through the eyes of the machine and get a real impression that the Gear's body is your own. It feels like the rounds are coming at you and its easy to forget you have durasheet to protect you. The worst is when they hit. Even if it's light weapon fire — which you know won't damage your Gear — your brain somehow registers it as if you were hit, because that is what your eyes see. I remember the time when my Gear stepped on a mine and I saw 'my' leg being blown off. I still have nightmares about that.

"It takes a lot of training and self-control not to give way to fear in these moments. You have to learn to separate yourself from what you're seeing and not to identify to closely with the Gear. You must know that most pilots give their Gears names and refer to them as if they were real people. Some of that has to do with morale and with the peculiarities of NNets, but other things come into play. I think we do it so we won't forget that the Gear *isn't* us. When its arms gets blown off it's a lot easier to feel sorry for a friend than to scream from imagined mutilation."

— Lieutenant Sigfried Harukys, Northern Guard, 38 Summer TN 1875.

2.4.3 LATER VARIANTS

The success of the *Hunter* Mark II ensured that the oldest of military Gear models would continue to see service, but its time as the center of innovation was over. Other models advanced the cause of general purpose/commando Gears while other functions were filled by specialized scout and fire-support Gears. It would take the all-out warfare of the War of the Alliance to spur on a significant wave of *Hunter* variants. The first wartime variant was created to respond to economic needs. The initial orbital bombardments of most industrial centers in TN 1913 seriously hampered Northco's ability to produce the Gears necessary to the North's defense. The *Hunter Commando* and *Zerstörer* involved heavier modifications that were just not practical in large numbers. Anti-armor Gears were desperately needed, however, to deal with the hover tanks of the CEF. The solution was the GP-01TK *Assault Hunter*, a basic *Hunter* chassis armed with a powerful LGPC "Little Joe" snub cannon.

Other contemporary *Hunter* variants were also considered as feasible ways to answer strategic needs. By TN 1915, CEF forces were bogged down in the Badlands and along the borders of several leagues. Terranovan forces needed a rapid strike capability and used paratrooper Gears with increasing regularity. The limited numbers of *Jaguars* and *Hunter Commandos* available led Northern commanders to order a virtual clone of the Southern *Jäger Paratrooper*. The GP-01P *Hunter Paratrooper* remains in service today as an inexpensive alternative to the *Jaguar*. TN 1916 would see the release of further assault variants, such as the HACS-01MG-PM *Hunter Para-Mortar* and a second generation *Zerstörer*.

The only significant change in the *Hunter* since the War of the Alliance has been as part of a general updating of Northern military Gears. Begun early TN 1933, the Advanced Technology Overhaul (ATO) program has seen most Northern Gears undergo very minor modifications. ATO changes generally consist of a renewed effort at standardizing components. The only obvious external change has been the introduction of a square-helmet design for the armor plates on the sensor head. This design dates back to the *Headhunter*, but has now become standard for the *Hunter*, *Cheetah* and *Jaguar* families. Aside from its production advantages, it removes the necessity for padded crash-bars.

Bryce Hubbard (order #5318102)

NORTHERN GEAR MANUFACTURERS

SKELETONS

"Whenever you want to begin, Mister Santos."

The young reporter from the *New Business Report* looked positively tiny in Natalya Korolov's office. Sitting in a corner of the 92nd floor of the Northco tower in Rapid City, the office gave a beautiful view of the city and the plains beyond it. Such a view suited the CEO of Northco. Natalya was wearing a simple sophisticated two piece suit and sitting behind the black expanse of her desk.

"Are you corrupt?" Santos almost spat the question, obviously trying to get his subject off-guard and conceal his own nervousness. He failed on both counts and continued when she did not answer. "You are aware that the Confederate Police just arrested three of your executives for fraud and accepting bribes, I assume. You do know that Commissioner Morston hinted that the corruption may run deeper at Northco; deeper and higher, perhaps."

"Commissioner Morston has a right to his opinions, that doesn't make him right." Natalya reached to the steaming cup of gourmet cawfee on her desk and took a sip. Its rich aroma filled her lungs. "Do you have any other questions, Mr. Santos, or have you come simply to throw accusations at me and sweat in my office?"

"Do you know this man?" Santos slipped a printed image from his briefcase. It was grainy photo of a man dressed in an expensive business suit.

"Of course. He's Adrian Falks, one of my executive managers."

"Would it surprise you to learn that Falks has been leaking secrets?" Santos slipped a personal computer from his brief case and placed it on the desk. It came on quickly and started displaying facts and figures. "These are files purchased from Mr. Falks; they detail production runs on the *Jaguar* and *Scorpion* and the development of the *Hunter XMG* prototype. Fairly valuable information, especially since my contact was posing as an agent of the Mekong Dominion."

Natalya's eyes met Santos'. She saw his satisfaction and sense of victory. "I didn't know the *Report* was in the business of industrial espionage, Mr. Santos."

"Only in the interests of the truth, Ms. Korolov. Now how do you explain that one of your managers has become the agent of a foreign power?"

"If you will wait one second, Mr. Santos." Natalya pressed a button on the desktop and opened the voice line to her secretary. "Christopher, could you bring me the Flytrap File and get Chief Rozam on the line?"

An awkward minute passed before the Christopher brought in the file and said that Rozam was holding for Natalya. She placed the file before Santos. "You'll find in here a summary of our counter-espionage program, Mr. Santos. In there you'll see reference to Project Flytap which has identified a few potential traitors in our midst and fed them erroneous information, hoping to see what they did with it. Adrian Falks heads that list of potential spies. Chief Rozam will be happy to answer your questions about the operation, Mr. Santos. Won't you, Chief?"

"Of course, ma'am. Just have him come down to my office." His voice was clear over the internal communications channel. On cue the door opened and Christopher reappeared.

"Christopher will show you the way." Natalya watched Santos leave, but kept Rozam on the line. "Chief, this has gone too far. Give the little fly the story, but make sure that Adrian never makes it to court. I think an accident is in order. Oh and prepare espionage charges against the *New Business Report*, will you?"

Natalya returned to her work, two fewer worries on her shoulders and one skeleton more in her closet.

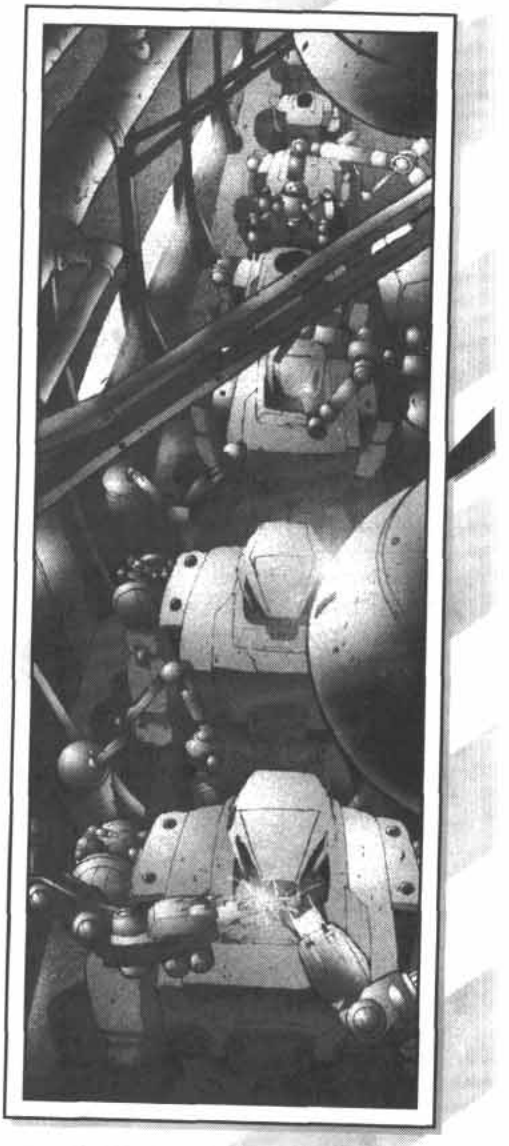
Bryce Hubbard (order #5318102)

NORTHERN GEAR MANUFACTURERS

3

3.1 OVERVIEW

Military Gears and vehicles are manufactured throughout the Northern Hemisphere. Components and subsystems are subcontracted out to literally hundreds of specialized corporations scattered across all three leagues. The number of conglomerates responsible for the actual manufacturing of Gears, however, is relatively limited. Standardization across the Northern Guard and the three national militaries has meant that a handful of contractors handle the lion's share of manufacturing duties. This has guaranteed their place as the elite industrial giants of the North.



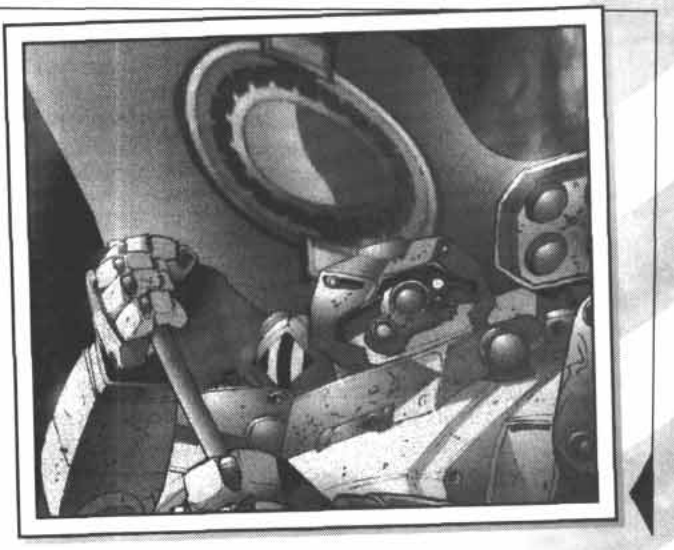
The most prominent of these conglomerates is Northco. Located in Rapid City — the industrial heart of the United Mercantile Federation — Northco developed the *Hunter* in the TN 1670s (see Chapter 2) and has kept a stranglehold on much of the Northern Gear market. The *Hunter* has remained a mainstay of almost all Northern military forces, and Northco's subsequent designs have had a great deal of success as well. Fire support Gears have been Northco's nigh-exclusive market ever since the release of the *Razorback* in the TN 1770s, although it was forced to cooperate with rival Shaian Mechanics in the development of the *Grizzly*. The *Wildcat*, *Tiger* and *Jaguar* Gears have all been successful forays into the commando/general purpose market, particularly the *Jaguar*. All of the numerous *Jaguar* variants have proven a great success with the pilots who have used them, although the complexities of production and lack of supply posed a serious problem during the War of the Alliance. Northco also keeps a strong hand in the civilian and engineering market, thanks to their subsidiary Elementech, which developed the *Groundhog* utility Gear and was involved in the development of the *Bricklayer*, *Demolisher* and *Engineering Grizzly* military engineering Gears.

Northco's greatest rival in current Gear production is the Norlight corporation Shaian Mechanics. Located in Kenema, Shaian burst onto the military Gear market with their *Cheetah* line of recon/scout Gears. Shaian originally made its name with its actuators subcontracted to Northco and others, but has moved aggressively into the manufacturing arena. Even Northco has had to recognize Shaian's skill and has cooperated with it on both the *Kodiak* and *Nemesis Jaguar*, two very rare elite combat units. Shaian has also had success with some of the most technologically advanced Gears in the North, including the *Black Cat* stealth Gear and the *White Cat* electronic warfare Gear — both based on the *Cheetah* chassis. Some analysts feel that Shaian is poised to take the lead in Gear manufacturing as they are rumored to be preparing a commando Gear to go face to face with Northco's successful *Jaguar*.

Northco and Shaian are not the only players in military manufacturing, however. The free market in the North has left room for competition, and several corporations have achieved success in specialized fields. Perhaps the most obvious is Abaline Research, based in Marathon. The original developer of the optical neural-net (ONNet) system which handles the computer needs of all Northern Gears, Abaline has managed to remain a cutting-edge developer for several centuries. Hyperion Werks, a relatively young Mercantile corporation, has built a niche for itself with the development of top-of-the-line electronic systems. Hyperion is currently riding high thanks to its involvement with the *Black Cat* stealth Gear and is looking to expand into subcontracting in the field of electronic warfare equipment. Keimuri Gear may be an important ally or competitor for Hyperion: the small manufacturer has built a similar niche market in the field of light electronic warfare machines. Their development started with the *Ferret* scout and *Wild Ferret* electronic warfare Gears, but their current stable is best represented by the *Weasel*, which — despite delays — is displacing the *White Cat*. Because of competition with Shaian, however, Keimuri has signed a strategic alliance with Northco to produce the *Tattletale* command and communications Gear and other models.

Nationalism and Economics

The Confederated Northern City-States is a relatively loose political, economic and military alliance that was initially formed because of the very real threat posed by the Allied Southern Territories. Over the 240 cycles since its formation, however, the CNCS has endured bouts of nationalist tension and has come to symbolize a certain unity of thought in the Northern Hemisphere. Military and economic cooperation have been critical parts of the CNCS's success, and combat vehicle and weapons manufacturers have sold their materials to armies across the North for centuries.



There are instances when nationalism does "get in the way" of business however. The *Jaguar* commando Gear, now the standard advanced combat model of most Northern forces, was almost exclusively a UMF vehicle until the War of the Alliance. In the case of the ultra-secret, stealth-capable *Black Cat*, even the desperation of war did not stop the Norlight government from keeping its development shrouded in secrecy.

Currently, corporate tensions between Northco and Shaian Mechanics are leading to a certain amount of nationalist bias. Shaian is rumored to be using special contacts within the Norlight Armed Forces to prepare the way for their next generation commando Gear.

Bryce Hubbard (order #5318102)

3 NORTHERN GEAR MANUFACTURERS

3.1.1 ABALINE RESEARCH

abaline research

In the late seventeenthTerranovan century, Abaline Computing Corporation was widely considered a leader in the computer field and was developing an advanced form of neural net called an optical neural net, or ONNet, which had a faster processing speed and increased reliability. Abaline, however, did not have a specific application in mind for their ONNet design until TN 1675, when Northco approached them, requesting a neural network system capable of controlling a multiple feedback, inherently unstable movement system

ACC engineers quickly began trying to overcome the numerous hurdles encountered as they applied their ONNet design to the Northco specs. Meanwhile, ACC executives attempted to uncover Northco's reason for commissioning the project. They eventually learned that a cycle earlier, the UMF military had accepted a Northco proposal for a Bipedal One-man Tank, referred to as a BOT. Upon learning of this, ACC founded a dedicated NNet development company known as Abaline Research. Abaline Research tested and developed "thinking interfaces," advanced ONNets with BOT applications as their primary focus.

In TN 1677, ACC delivered their neural network as commissioned. A cycle later, when Northco released the *Hunter* Mk I with Abaline's ONNet system, ACC executives knew they had a winner. When Northco sought an updated, more advanced version of the NNet for the *Hunter*, Abaline Research was contracted for the project. Having been developing the technology already for some time, Abaline provided Northco with their new NNet almost immediately. Since then, Northco has continued to use Abaline Research as their primary provider of neural network technology. In the cycles to follow, AR quickly grew into ACC's most successful branch until, in TN 1713, Abaline Research absorbed Abaline Computing Corporation, becoming the parent company itself.

While various groundbreaking developments are tested in Abaline's secondary labs, its top-secret research and development is conducted within the Computer Center. The site is located on a 156,000-square meter plot of land that is closely guarded by a private security force. *Northern Inquirer* tabloid reporters often claim that Abaline has a personal army of advanced, ultra intelligent Gears guarding the Computer Center. Though there are Gears on site for NNet training, Abaline officials laugh when this secret police force rumor comes up.

At present, Abaline Research's most interesting undertaking is Project: Marathon, Abaline's attempt to create a self-sufficient, intelligent city. The project is headed by Anthony Phills, vice-president of NNet Training and Development. Eighteen cycles ago, executives for Abaline and the longtime Mayor of Marathon, Brian Chambers, met and reached an agreement. Abaline would provide Marathon with all the equipment and personnel for the project, and in return Marathon would provide Abaline with a test bed for its NNets. For security reasons, an inquiry board was established to prevent corruption or criminal activities being carried out with the Marathon network, though siting an apparent lack of abuse, the inquiry board has not yet investigated the project.

Manufacturer Description

Legal Appellation:	Abaline Research, Inc.
Headquarters:	Abaline Computer Center, Marathon, United Mercantile Federation
Directing Executive:	Chief Executive Officer Sara Wright
Major Products:	NNets (both military and civilian), Various Computer Technologies

• ORGANIZATION

Abaline Research is a very large corporation with numerous departments located in the Computer Center and in Marathon, and with two production facilities located in Livingstone. Each branch is devoted to a specific aspect of NNet research, development or production. While there is only periodic friction between the various departments over the allocation of funds, equipment and the like, CEO Sara Wright, in an attempt to develop a sense of pride in the staff of each branch, encourages friendly rivalry. She understands the importance of a company spirit and that the success or failure of one department will affect the others. To ensure that morale remains good, Abaline has a batte league, a football league and various other team sports with each department competing for the overall championship (the prize being an extra week's vacation). Since the introduction of the competitive sporting events between the departments in TN 1921, staff morale and productivity have soared.

• AREA OF EXPERTISE

Abaline Research is the leader in NNet development and production in the North and arguably all of Terra Nova. Their NNets are used in a variety of civilian and military applications, ranging from air traffic control to the sophisticated Marathon Network, and over 75% of the Gears in operation in the North (and reputedly a fair number in the South) utilize NNets from Abaline. Not only a leader in production of the complex neural networks, Abaline is the top NNet training center on Terra Nova, turning out the most reliable and trustworthy NNets. Often, NNets that have been trained elsewhere develop problems and are sent to Abaline to be reconditioned. At present, Abaline is attempting to discover why some NNets are subject to malfunctions that resemble independent action, such as the case of Bowser's NNet, a reportedly almost-sentient *Hunter* Heavy Gear. While this research is public knowledge, any sort of progress report has been closely guarded. Rumors (and articles in the Northern Inquirer) abound that NNets might be capable of developing sentience.

Bryce Hubbard (order #5318102)

3.1.2 ELEMENTECH

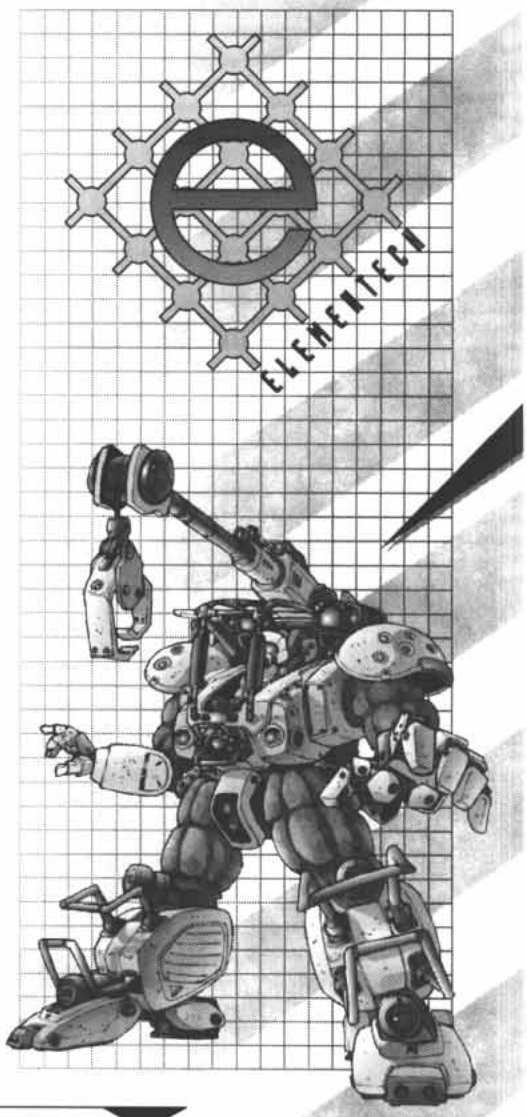
Elementech is probably one of the oldest companies on Terra Nova; founded in TN 1538 in Rapid City, it predates even the mammoth Northco. It was formerly known as Elemental Systems Inc., a construction equipment manufacturer. In 1620, ESI's designers began experimenting with the *Hardhat* series, pioneering several innovations in hydraulic layouts and powered support structures. The company changed hands in 1641, and new CEO Jaksson Van Nekk shifted its operations toward newer applications of old technology, re-naming the firm Elementech. The subsequent reorganization led to the success of Elementech's *Groundhog* work frame in TN 1648. Unfortunately, funding so much high-end research also sank the firm's finances into the red. In Spring 1653, Van Nekk's successor step-daughter Marguerite, approached Northco for financial help. After several intense closed-boardroom debates, Northco purchased Elementech with a promise to keep the current staff and allow Elementech to retain its creative integrity.

By TN 1674, Elementech was once again floundering. The corporation's design department had reached a creative plateau, and the *Groundhog* product line was suffering: only so much tweaking can be done to a simple construction machine.

At the time, however, Northco was working on its proposal for the BOT project. Chief Designer Kurt Galland was put in charge of the project and began recruiting from Northco's design teams and subsidiaries — Elementech engineers made for prime candidates. This proved to be just the creative challenge Elementech's engineers needed. The result was a durable combat frame that was used for the *Hunter* back-up BOT design.

Galland himself was busy working on the lead Northco BOT model, his beloved *Raccoon*. When that lighter machine was rejected by the JMDC, Galland was forced to fall back on the Elementech frame, which they had labeled the *Hunter*. Galland was not a strong believer in the Elementech heavy frame and expected the "converted work-bot" to be a lemon; instead it was the future of military hardware on Terra Nova. Ever since, Elementech has maintained a special place in the annals of Northern Gear design and Northco itself.

Elementech's facilities are less than a kilometer away from Northco's massive compound, although it is rumored that they are preparing to move to the Northco site soon. While not run-down, the old facilities are somewhat outdated, and are undergoing a Northco-funded overhaul. The corporation's current CEO, Moira Doyle, has steered the company clear of the financial problems that have plagued it in the past, but she is now implementing a brutal purge of its ranks in response to industrial espionage allegedly started by hostile competitors. There are several theories as to who these "enemies" are, the most popular culprits being Kenema's Shaian Mechanics or spies from Mekong Corporations. There are some in the Rapid City business community who suggest that CEO Doyle is trying to shake up her engineers, while others think her simply paranoid, calling her "Mad Moira."



Manufacturer Description

Legal Appellation:	Elementech, a Subsidiary of Northco Heavy Industries, Unlimited.
Headquarters:	Elemental Systems Compound, Rapid City, United Mercantile Federation
Directing Executive:	Coordinating Executive Officer Moira Doyle
Major Products:	Construction Equipment, Consumer Hardware, Government Contracts.

• ORGANIZATION

Elementech is currently comprised of two divisions: Consumer Products and MiliConcepts, the heads of each reporting to CEO Doyle. The income from Consumer Products, which manufactures inexpensive consumer hardware, currently supports Elementech. Consumer Products' design teams create everything from ratchet sets to the massive *Stonebiter* drill vehicles used by the mining industry. Recently, Consumer Products has been handling the plans for the next *Bricklayer* series.

MiliConcepts is little more than a think tank for Northco, comprised entirely of engineers and conceptualists. MiliConcepts' design chief, Alan Karr, resents the "bastards down the street" who don't give him "the credit he deserves." Karr has spoken out openly against the company on several occasions and has been reprimanded severely for it by Northco. Doyle shares his sentiments and is planning for the day when Elementech can function without Northco at the reins.

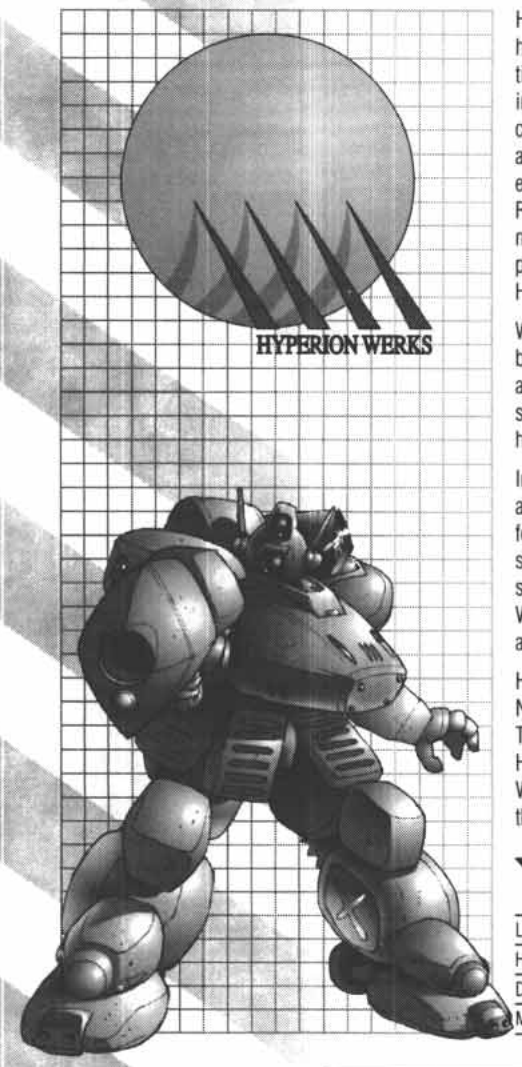
• AREA OF EXPERTISE

Elementech's MiliConcepts division was the earliest victim of CEO Doyle's recent "anti-espionage purge" and, as a result, currently benefits from a large influx of fresh talent. These young men and women have come up with many innovations, such as the equipment package for the *Nemesis Jaguar*. As a result, Northco will be keeping the Elementech team on for other Duelist-oriented projects as well as other field refits for existing models. These other projects include the next-generation of equipment upgrades for the *Grizzly* and *Kodiak* Gear lines.

Elementech's Consumer Products division produces a wide range of commercially available hardware. Their most profitable recent venture is a redesigned version of the reliable *Bricklayer*, customized for use underwater and in hostile environments. Consumer Products has also begun producing items for the medical field, such as gurneys, operating tables and some surgical implements.

Bryce Hubbard (order #5318102)

3.1.3 HYPERION WERKS



Hyperion Werks was founded in TN 1883. Originally a small concern in Marathon, it developed specialized hardware and software packages for private industry. Its pool of talented engineers soon brought in many lucrative contracts, most notably from the intelligence community. Hyperion's meteoric rise coincided, not surprisingly, with the start of the "Judas Syndrome." It was not long before Northern Intelligence had commissioned contracts from the infant company for several devices, such as "white noise" generators, detection equipment, and night-vision optics. While the money was not at all unwanted, the attention began to be. Amid other odd events, two employees disappeared under suspicious circumstances, only to reappear months later in the Southern Republic, penniless and noticeably shaken. It was this incident that prompted the company's executives to seek more "above-board" contracts. By TN 1902, Hyperion was once again producing relatively benign electronics packages both for consumer and military use. The number of "back door clients" seeking the odd device from Hyperion dwindled somewhat, but the company's income from them remained fairly steady.

When Colonial Expeditionary Force troops landed on Terra Nova, Hyperion was contacted almost immediately by its former clients seeking help to fight the enemy. The company was only too eager to help repel the invaders and immediately set its best engineers to work. In the ensuing cycles, Hyperion produced electronic warfare systems for the *Wild Ferret* and *White Cat* electronic warfare and reconnaissance Gears, as well as systems for half a dozen other vehicles and aircraft.

In TN 1916, it purchased Triton Limited, a small metallurgical engineering company also from Marathon. Soon after, Hyperion was handed the project specs for the *Black Cat* stealth Gear. The purchase of Triton proved fortunate. With the help of the newly acquired metallurgists, Hyperion was also able to bring RAM (Radar Absorbent Material) body-section designs to the table, along with its extremely advanced "Watchdog" electronics suite. The resulting stealth package made the reconnaissance machine virtually invisible and secured Hyperion Werks as the top high-performance stealth/reconnaissance system designer in the North. The *Black Cat* project also established good relations between Hyperion and the Gear manufacturing firm Shaian Mechanics.

Hyperion's facilities in Marathon are more secure now than ever. Since they hold many of the secrets of the Northern Guard's most advanced Heavy Gear, the North has been watching this small corporation very carefully. Their design offices and production facilities have now been consolidated within a single large building, and Hyperion uses one exclusive carrier, PX Couriers (see **Character Compendium**) for all of its shipping needs. While the military has expressed concern about this corporation, Hyperion Werks CEO Joel Legato insists on them, saying they are the best and most secure Marathon has to offer.

Manufacturer Description

Legal Appellation:	Hyperion Werks, Limited
Headquarters:	The Maxxil Building, Marathon, United Mercantile Federation
Directing Executive:	Executive Board Spokesman Joel Legato
Major Products:	Consumer Electronics, ECM/ECCM Equipment, Military Contracts

• ORGANIZATION

Although they have an entire building to themselves, Hyperion Werks' production facilities are rather limited. As a result, only the most sensitive materials and systems are produced on-site. The *Black Cat* project specs, for example, were drafted at Hyperion's facilities, while Racetech Inc. produced the RAM body panels and Shaian Mechanics assembled the actual Gear in Kenema. Prototypes and production specs for less sensitive systems are sent to government-approved subcontractors, produced in mass quantities there, and distributed. Hyperion's overhead is reduced since the aforementioned companies are charging government rates for government projects, as opposed to the wholesale rates for consumer-oriented projects.

Usually, the spokesman for the Executive Board is the company's designated CEO, but Hyperion is an employee-owned firm. Most major decisions are referred to a board of employee representatives, who are themselves appointed every few cycles from within the employee pool. Legato is more of a company spokesperson, sent to government and industrial meetings as a representative. There are times when a swing-vote is required, and Legato's vote tends to carry more weight than most.

• AREA OF EXPERTISE

Hyperion's purchase of another, smaller company during the War of the Alliance is what has allowed it to diversify. Not only does its design wing produce hardware/software packages, but Hyperion is now able to take a more holistic approach, incorporating diverse elements, including advanced materials, into its designs. The most recent example of this is the stealth package for the *Black Cat* Gear. Hyperion was able to design and integrate the Gear's ECM array with the machine's composite body panels and radiator surfaces. Shaian's engineers worked so closely with the Hyperion "Stealth Team" on the project, that it is difficult to know where Shaian's work ends and Hyperion's begins. Hyperion has used this approach with regards to their less-sensitive consumer products as well. Their ComSuite 725 is among the most efficient satellite communications packages today and is widely used by industry for near-instantaneous, interference-free communications, even when the parties involved are separated by an entire hemisphere.

Bryce Hubbard (order #5318102)

3.1.4 KEIMURI GEAR

In various incarnations, Keimuri has been a feature of the Norlight vehicle industry for more than two centuries. The company was founded by Gerolm Keimuri in TN 1705 in Kenema as a manufacturer of high-performance civilian vehicles. Keimuri all-terrain vehicles and racing motorcycles became quite popular with Norlight enthusiasts, but Gerolm unfortunately died seeing his life's work come to naught. In the economic collapse following St. Vincent's War, Keimuri saw its sales drop, several of its production facilities damaged and its infrastructure in a shambles. Like many other corporations, Keimuri had to close its doors in TN 1730.

Gerolm's daughter, Liayna, was not satisfied to watch her father's work fade away. A brilliant engineer and planner, she sought out several skilled business advisors and set about recreating the family business. In TN 1735, Keimuri reopened its doors with Liayna at the helm and moved aggressively into the military market, with high performance upgrades for military Gears as their specialty. By TN 1743, Keimuri was recognized as an important player in the Northern Gear industry and was widely known as Keimuri Gear. That same cycle, the company got the chance to prove its worth when the Northern Guard requested a new scout Gear to supplement the *Bobcat*; Keimuri answered with the innovative *Ferret*, which entered production in TN 1750.

The *Ferret* enjoyed a great deal of success in the latter half of the eighteenth century, and Keimuri released the *Wild Ferret* electronic warfare Gear in TN 1775. Northco sensed a threat to its market and embarked on a campaign of dirty tricks in the TN 1780s that cost Keimuri dearly. After a financial scandal rocked the upper management of the firm, it went into receivership and its resources were sold off. Northco itself purchased the research and development labs and moved them to Rapid City. The production contract for the *Ferret* was purchased by a small corporation known as KustomGear. KustomGear began selling civilian models to private individuals and the *Ferret* became a cult favorite at vintage Gear shows.

In TN 1919, a group of Keneman business people, allied to a group of disgruntled Shaian Mechanics engineers, decided to revive the old corporation. Calling themselves the Keimuri Consortium, they raised enough money to purchase KustomGear and retool the factory. Reclaiming the Keimuri name, the consortium began to rebuild its market and made a very credible offer to replace the oft-updated *Wild Ferret* with an entirely new Gear; their offer was accepted first by the United Mercantile Federation Army and later by the Northern Guard. Their new design was named the *Weasel* and was expected to enter service in the middle of the TN 1920s. Unfortunately, its development was plagued by problems and the *Weasel* only entered limited production in TN 1930. The superior armor and electronics on the *Weasel*, however, give it a good chance to displace the Shaian *White Cat* once it enters mass production.

Manufacturer Description

Legal Appellation:	Keimuri Motor Corporation, Inc.
Headquarters:	The Keimuri Building, Kenema, Northern Lights Confederacy
Directing Executive:	Chairman Elias Kobayashi
Major Products:	Specialized military Gears, civilian and military motorcycles, utility and all-terrain vehicles.

• ORGANIZATION

The Keimuri Consortium is a group of eighteen business people and investors who form the major shareholders of Keimuri Gear. Public stocks are traded on the stock exchange, but private agreements between consortium members ensure that their shares will not be sold without consultation. All is not well in the Consortium, however. The slow development of the *Weasel* has been very damaging to the young corporation — notably allowing Shaian to penetrate the EW Gear market with the *White Cat* — and profits have been less than expected. In TN 1931, the Consortium voted to accept a proposal for a "strategic alliance" with Northco that would allow Keimuri to utilize Northco's mass production facilities. The *Tattletale*, a command and communications Gear based on the *Weasel*, was released a cycle later under the joint Keimuri/Northco name. Some consortium members fear that this alliance, signed for ten cycles, is a prelude to Keimuri becoming a fully owned subsidiary.

• AREA OF EXPERTISE

The reborn Keimuri Motor Corporation (known to most as Keimuri Gear) has managed, despite a few false starts, to grab a foothold in the military Gear market. Building on the historic strengths of the *Ferret* family, Keimuri has focused on specialized and sophisticated light Gears like the *Weasel* and the *Tattletale*. The company's TN 1933 release is the *Ferret* Mk. II, a revised version of its classic Gear. Applying the cutting-edge technology and production facilities now available to it — and standardizing several field-optimizations — Keimuri has created a real competitor for Shaian's *Cheetah*.

Keimuri Gear continues to believe, however, in speed over power, and critics sometimes call its lightly armed and armored Gears "walking coffins." Rumors in Rapid City and Kenema state that Keimuri's next cycle of development will focus on solving these problems. Benefiting from unprecedented access to both Northco Weapons and Northco Armorers, the engineers at Keimuri hope to create a fast and agile machine that can carry significant armor and weapons — hence increasing its chances for survival — to the electronic warfare battlefield.

Bryce Hubbard (order #5318102)

3.1.5 NORTHCO

Northco was founded in TN 1618 in Rapid City, when two of the area's largest corporations, Northern Metals and Concordat Systems, decided to merge to support their mutual interests. The resulting agreement created a highly efficient internal power structure, allowing the corporations to manage their diverse subsidiaries more efficiently than other companies. As a result, the newly-born Northco's profits soared. Soon, Northco became the leading corporation in many industries, including military hardware, industrial chemicals, and electronics. Along with its commercial muscle, Northco's political power also grew until the approval of Northco's CEO meant life or death for a politician in the area. In TN 1653, Northco purchased Elementech, a smaller engineering firm, thereby gaining the rights to the *Groundhog* work frame and its brother unit, the *Prairie Dog*. This purchase proved fortunate because, in TN 1674, Northco submitted a proposal for the UMF military's BOT project. Soon after, the *Hunter* was born and entered mass production.

It wasn't long before Northco had its fingers in half a dozen other military pies, basing several successful Gear designs on the *Hunter*'s reliable frame. The heavier *Razorback* soon followed, then the *Bear* and *Grizzly* lines. The company also had a hand in the production of large vehicles, like the *Argo* and *Behemoth* heavy trucks, and even aircraft like the *Orca* Gear transport. Soon, Northco produced every possible type of vehicle, including civilian and industrial transports and hoppers. Northco's iron hold on several key Gear design patents has allowed them to sit back and let other, smaller companies follow its lead, among them, Shaian Mechanics. Its size proved to be a curse, however, during the War of the Alliance. Since Northco owned most of the major factory sites in the UMF and many elsewhere, they were the hardest hit by the orbital bombardment. Several of Northco's most innovative designs were forever lost, along with a great number of talented engineers and designers.

Today, the mammoth conglomerate spans the majority of the city states in the CNCS, with production facilities and regional headquarters in each of the major capitals.

Northco's corporate headquarters complex is nearly a city unto itself, supporting over half of Rapid City's 2.8 million inhabitants. CEO Natalya Korolov is a major power in the United Mercantile Federation today, although there are indications that she is at odds with her political ally, UMF Treasurer Banderas. Korolov has been troubled recently by rumors that Banderas has been negotiating with some Mekong Dominion Taipans. Word on the company grapevine suggests that Korolov is already taking steps to "kick Banderas back into line" but this is mere speculation. Still, several inquiries have been made of late into allegations of unfair business practices in Banderas' Polaris Pictures, and corporate analysts believe that Korolov may be the instigator.

Manufacturer Description

Legal Appellation:	Northco Heavy Industries, Unlimited.
Headquarters:	Northco Headquarters Complex, Rapid City, United Mercantile Federation
Directing Executive:	Natalya Korolov
Major Products:	The *Hunter*, *Jaguar* and *Grizzly* Gears, Other Military Vehicles, Government Contracts

• ORGANIZATION

Northco's current organizational chart reflects its composite origins. The company today is composed of hundreds of smaller, separate design bureaus and think tanks, each able to bring to bear its full creative facilities when needed. The distribution of production facilities also helps Northco deal with its massive production volume, while not bogging down engineers with trivial projects. Such design firms as Applefish and Elementech have some degree of autonomy, but are still linked through Northco's complicated chain of command. Occasionally, several of these bureaus may be pulled together to work on one massive project for the corporation — as was the case during the development of the *Hunter* Gear. These close working conditions aided the *Hunter* design teams by reinforcing communication and cooperation, resulting in many daring innovations. Northco's fragmented structure is not without its problems, however; inter-bureau mail delivery is mediocre, at best, and the use of any joint facility, such as a factory, is the cause of many conflicts.

• AREA OF EXPERTISE

Northco's production lines tend to run along two channels: military-related and civilian-related. While the bulk of Northco's money comes from its consumer sales, the company's creative engine is centered around two main areas: mechanized weapons (Gears, tanks, etc.) and automobiles.

The Northco Corporate Headquarters complex in Rapid City has twelve production compounds for consumer automobiles, while the rest of the buildings in the mammoth facility are dedicated to military hardware. Once in a while, a grand research project is undertaken and a line re-tooled for the purpose, but production remains constant. Despite its overwhelming size, CNCS legislation prevents Northco from maintaining a complete monopoly on Gear production. As a consequence, Shaian Mechanics has been slowly but surely drawing closer to Northco and, with the advent of the *Cheetah* Mark II, may surpass its giant competitor. Northco, thought to be re-designing the *Hunter* in response, may soon see itself slipping behind. Rumors of escalating industrial espionage and dirty tricks between the two corporations have several government officials concerned enough to have called for CNCS mediation.

Bryce Hubbard (order #5318102)

3.1.6 SHAIAN MECHANICS

Shaian Mechanics was founded in TN 1813, the result of several smaller machine-parts companies in Kenema deciding to combine their resources. In addition, Shaian began rapidly recruiting engineers from the top ranks of graduating technical school classes, bolstering its talent pool immensely. This, combined with an infusion of capital from the estate of its founding member, Weng Shaian, gave Shaian Mechanics a solid base to grow on. Within twenty cycles, Shaian Mechanics became the leading producer of articulated frames and actuators in the CNCS. Shaian's clients included not only the industrial giant Northco, but also the Hartmore Motor Company and other, smaller concerns. In time, it began producing vehicles as well, including the reliable *Badger* APC. Shaian also had a hand in Gear production, aiding Northco on the *Grizzly* project and, with that experience, successfully bidding on several others, including the lucrative *Cheetah* project.

With the *Cheetah*, Shaian was given its chance to shine, one that it did not shirk. The machine was given priority over all others, and the company's best engineers went to work on the project. The target speed of 85 kph was superseded by the prototype's actual speed of 91.6 kph, making the *Cheetah* the fastest Gear in existence. Shaian Mechanics had been redesigning the machine for even greater agility when the first CEF ships appeared in Terranovan space. With the war effort, Shaian's engineers once more went into full tilt, upgrading the design of the *Badger* (which had been stagnating of late) into the more durable *Rabid Badger*. The *Cheetah* received the attentions of Shaian's engineers as well — the *Strike Cheetah* proved itself one of the most effective machines ever fielded by the Northern Guard. Other variants soon followed, including the *White Cat* electronic warfare Gear. The crown jewel in Shaian's pantheon, however, is the *Black Cat* project (a joint effort with Hyperion Werks and Racetech) which firmly established it in the ranks of Terra Nova's top military contractors.

Shaian Mechanics is one of the most successful corporations on Terra Nova today. Although by no means as large as Northco, Shaian threatens to usurp the industry giant's dominance in the field of Gear design. Coordinator Tetsuko Hatsushiba is optimistic about his company's future, citing the recent success with their upgraded *Cheetah* Mk II, which is currently on the proving grounds.

Demand for actuators pioneered by the original *Cheetah* project is on the rise of late as the Northern Guard prepares to overhaul older models currently in service. A proposal is also currently on the table for a more specialized *Cheetah* to be used by regimental duelists. This new model would be designed to supplant the *Nemesis Jaguar* (produced by Northco in cooperation with Shaian).This is CEO Hatsushiba's own pet project and he has formed a dedicated design studio for it.

Manufacturerr Description

Legal Appellation:	Shaian Mechanics and Articulated Systems
Headquarters:	Shaian Tower and Assembly Center, Kenema, Northern Lights Confederacy
Directing Executive:	Coordinator Tetsuko Hatsushiba
Major Products:	Industrial-Grade Actuators, Articulated Frames, Military Vehicles

• ORGANIZATION

Shaian Mechanics is a centralized operation with all administration, design and manufacturing occurring within a single compound. The central structure of the compound, the Shaian Tower itself, is a monumental 300-meter edifice (described by some citizens as "the landship that wasn't") that dominates the Kenema skyline. In addition to its Research & Development and Production wings, Shaian is unique for having a dedicated distribution section. In this way, Shaian also maintains security on some of its more sensitive projects, such as the *Black Cat*. The building's internal structure is among the heaviest on Terra Nova because the roof was designed as a landing pad for V/STOL aircraft and large hoppers.

Shaian Mechanic's internal hierarchy is limited to a sort of caste system, whereby a worker cannot advance to executive status without first undergoing a series of examinations, very often subjectively "graded" by one's superior. While some complain about this, others have found ways to simply live with the "glass ceiling" — frivolous orders from executives are countermanded by "lower level" section chiefs, whose solidarity with their workers is unmatched, even in most labor unions.

• AREA OF EXPERTISE

Shaian Mechanics continues to produce the wide variety of actuators and articulated frames for which it is well known. While many of these are produced for Shaian's *Cheetah* line of Gears, every commercial contract is filled promptly and completely, further enhancing Shaian's reputation. Elementech has recently placed a large order, presumably in preparation for its release of the updated *Bricklayer*. Shaian also continues to produce the *Cheetah* and its variants on-site, as well as the numerous software and hardware-upgrade packages for units in the field. The Northern Guard has recently increased demand for these, as well as for new *Strike* and *Paratrooper* variants. A recent development is the design of a slightly different version of the military-police *Cheetah* for the Keneman police force. While Kenema's crime problems are well known, Norlight political analysts see this new design for such a limited market as a move on Kenema's part to become the corporate "father-figure" of the city-state.

Bryce Hubbard (order #5318102)

SAND STORMS

"Blue Five to Blue Leader. Target in sight." The desert wind was up today and Corporal Ganler could barely make out the silhouette over the ridge. Barely was enough for now however.

"Blue Leader to Blue Five. Hold position in cover and wait for my signal. Blue Three flank from the north and get in position. Two and Four move to the south." The Senior Ranger's voice was clipped and strong, giving his orders in his characteristically cool manner.

Corporal Ganler kept his eyes on the target — the faint shadow of a metallic mass passing over a dune — and kept switching modes on his omnicamera enhancement, hoping to find the best combination of night vision and thermographic to confirm the target. He kept his own profile low, his *Hunter Zerstörer*'s body hidden by a dune and only its head creeping over the ridge. Active sensors would positively identify the target, but would surely reveal his own position as well. For now he had to wait.

The tactical monitor showed the approximate positions of his squadron mates. Blue Leader's *Headhunter* and Blue Two and Four's *Zerstörers* were roughly a kilometer to the south, hidden from view by a rise in the desert landscape. Blue Three's *White Cat* was moving to the North using dunes and outcroppings as cover. If the maneuver went according to plan, Three should be reporting in just about —

"Blue Three to Blue Leader. In position and ready to light up." Ranger Kolis' voice was soft, slightly high-pitched and, Ganler thought, as beautiful as she was.

"Blues Two and Four, follow me in. Five prepare for illumination on my signal."

Ganler pulled gently on his right joystick and forward on the left, preparing his *Zerstörer* to stand straight up on call. He didn't have to wait long.

"Illuminate."

Ganler stood his Gear straight up and powered his active sensors. In a millisecond, a mixed Ladar/Radar beam streaked across the desert and hit the hulking enemy mass. target identification was instantaneous: a *Naga.* A split second later static flew across his screens as the white noise of Blue Three's wide-band ECM burst paralysed everyone's electronics.

The NNet in Ganler's machine took an instant to find the clear friendly channel and he began to move. The hulking mass of the *Naga* rose on its huge legs and swung its autocannon around. Just as he got to the bottom of the dune he had been behind, its crest was torn apart by high velocity shells. A second later, a heavy missile on a parabolic course detonated not twenty meters from his position.

Ganler headed to his left and another missile slammed into the desert sand, sending up a fire ball of fused silicate. He zigzagged frantically, trying to keep as much cover as possible between the strider and himself. Even with ECM coverage disrupting the *Naga*'s targeting systems, visual targeting was still possible and a near miss with the heavy missiles could still be deadly. He headed down a slight depression at full running speed, but was unpleasantly surprised to see the covering dune fade to nothing. For a second, he could see the enemy strider clearly, its autocannon tracking him relentlessly. It never reached its target.

Just then Blue Leader and his two companions came over a ridge to the south. The *Naga* tried to seek cover, but it was too late. Rocket-powered shells slammed into the plexiglas laminate of the strider cockpit. The crew was reduced to so much charred paste.

"Good work people." Blue Leader sounded confidant. Ganler wasn't so sure: striders were never deployed alone.

Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

4

4.1 OVERVIEW

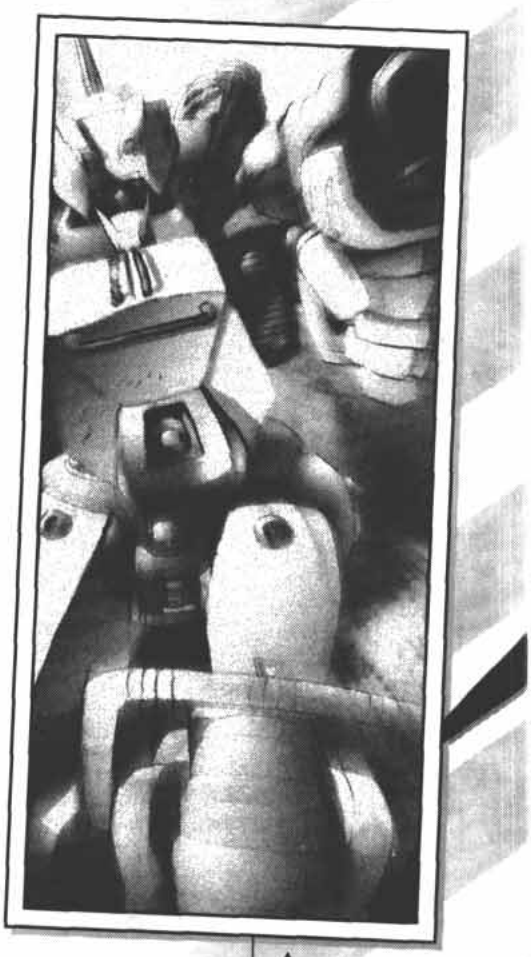
The huge production lines of Rapid City, Kenema and the other industrial centers of the Northern Hemisphere have been producing a dizzying variety of military Gears for two-and-a-half centuries. From the "tried and true" *Hunter* (the first military Gear) to the cutting-edge *Jaguars* and *Kodiaks* that have appeared on the field over the last twenty cycles, dozens of different designs have seen action in the armies and militias that defend the North and project its power abroad. Along the way, several specialized designs like the unique *Ferret* or the largely retired *Bear* have seen the light of day. While several of these machines are no longer considered front-line units for the league and confederation armies, Gears have proven rugged and dependable, and even models from the eighteenth century can still be found in local militias or in the Badlands.

Northern combat Gears are generally divided into three very broad classes: light/scout, general purpose/commando and heavy assault/fire support. These divisions are sometimes quite arbitrary and are often based more on the overall mass of the machine than its specific function. Light and scout machines are currently dominated by the Shaian Mechanics *Cheetah* and its many variants. Introduced at the turn of this century, the *Cheetah* brought a new level of performance to the scout market. Previously, light Gears such as the Northco *Bobcat* and the Keimuri *Ferret*, were very small machines that suffered from a lack of combat endurance.

General purpose — sometimes called "medium"-class — Gears have long been the heart of Northern armies. The grand-father of this class (and of all Gears) is the Northco *Hunter*, which continues to outnumber all other Gears. The current contender to replace the *Hunter* is the *Jaguar*, a highly advanced commando machine developed by Northco itself. Despite early competition from models such as the *Wolf* and the *Mad Dog*, Northco has long dominated the general-purpose Gear market. After the *Hunter*, Northco fielded the *Wildcat* and *Tiger* before introducing the *Jaguar*. Currently, no other company can challenge their hold on the market, but some see that trend changing with the rise to prominence of Shaian Mechanics.

Heavy-assault and fire-support Gears have also long been the domain of Northco, but this position is actively slipping. The current Northern landscape is dominated by the *Grizzly*, a cooperative effort between Northco and Shaian that predates the introduction of the *Cheetah*. Despite the climate of competition that has gripped the two corporations, Northco has still been forced to respect its contracts and Shaian has been involved in subsequent variants and the massive, completely reworked *Kodiak*. Before the development of the *Grizzly*, however, the *Razorback* and *Bear* Gears had been produced exclusively by Northco.

Many specialized Gear models, however, do not fall neatly into the light, medium and heavy categories. The *Bricklayer* engineering variant of the *Hunter*, for example, hardly qualifies as the trooper Gear its "size class" would indicate. Even in combat models discrepancies exist: the *Razorback*, the North's first "heavy fire-support" Gear, was in fact a much more capable assault machine than fire-support platform. With the proliferation of variants based on standard machines, the lines between the various classes of vehicles continue to blur.



▲ Although it is rarely seen on the battlefield today, the *Bobcat* scout Gear served with distinction in the first years of its deployment. *Bobcats* can still be found in the Badlands and in the Western Frontier Protectorate, where they are greatly appreciated. From **Fort William Military Review**, 13 Winter TN 1929.

4.1.1 CURRENT TRENDS

Northern Gear development is currently in a period of somewhat schizophrenic technical change. The early part of the twentieth century has been a heady time for Northern Gear development, with the release of the high-performance Shaian Mechanics *Cheetah* and the cutting-edge Northco *Jaguar*. At the dawn of the War of the Alliance, Northern forces were equipped with the best military Gears on the planet. Since the Treaty of Westphalia, however, many have felt that the North has lagged behind Southern developments. The technical edge granted by the *Jaguar* has been dulled by the introduction of the *Black Mamba* and the *Iguana* has proven to be a worthy competitor for the *Cheetah*. Infrastructure problems and reduced orders from Northern armies in the peaceful climate of the post-war cycles seemed to take much of the drive out of Northern Gear development, while Southern leaders, on the other hand, felt the technical edge possessed by the North acutely and became determined to take advantage of the peace to bridge the gap. They have done so handily and are ready to introduce Gears that will take them even farther.

4.1.2 FUTURE DEVELOPMENTS

As political tensions increase once more, Northern military planners and manufacturers have predictably begun to move Gear development to the top of the list once again. The competition between Northco and Shaian has cut into their once-exclusive markets, which will likely lead to more advanced designs in the near future. The machines most advanced in their development stem from the standard modernization programs that have been part of Northern Gear development protocols since the beginning of the century. As a result, many of the basic machines of Northern Gear regiments are currently being retooled for an advanced technology version. *Chapter Five: Research and Development Models* includes some of the current prototypes.

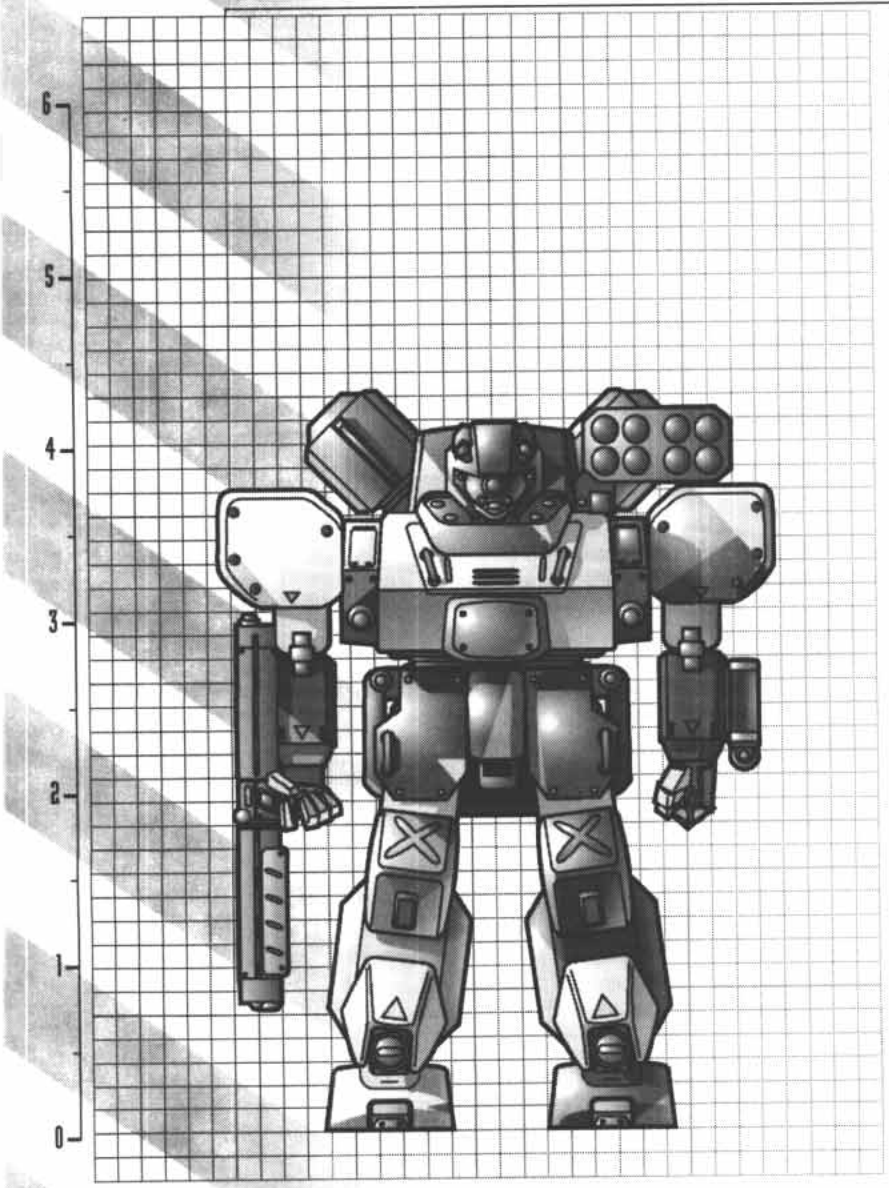
Somewhat less advanced, but still in progress, is a new set of models designed to compete with the established masters. One of those closest to production is the Shaian *Lion*, rumored to be a heavy commando Gear designed to compete with the *Jaguar* and thought to be aimed at the Norlight market. Northco has entered into an alliance with Keimuri Gear, and a new scout model designed to compete directly with the *Cheetah* is thought to be on the horizon. Several Western Gear manufacturers, long outside of the top producers, are also rumored to be retooling the vintage *Wolf* for a renewed foray into the CNCS market.

Bryce Hubbard (order #5318102)

4.2 HACS-01LG-SCT CHEETAH

The *Cheetah* was the first machine to announce the technological superiority of the Northern Hemisphere in the early part of the twentieth century. Designed to surpass the speed and maneuverability of previous scout and reconnaissance Gears such as the *Bobcat* and *Ferret* without utilizing their less flexible movement systems, the *Cheetah* used cutting edge technology on a frame similar to the Northco *Hunter*. The new machine's almost fully humanoid design allowed it to be used in a variety of specialized combat roles, including assault roles that were previously off limits to the combat-shy *Bobcat* and *Ferret*. The *Cheetah* is nonetheless lightly armored, but it relies on outstanding speed and superb maneuverability to give it a defensive edge. Speed is not always an appropriate defense, however, and the scout Gear is still often deployed with heavier Gears when undertaking combat missions. Attempts to increase armor strength have thus far been largely unsuccessful. The Gear is equipped with a variety of hardpoints including a series of waist-level attachments for deployable pack-guns to supplement any shoulder-mounted weaponry. The standard armament consists of a single pack gun, a RP-109 Pepperbox missile pod, grenades and a vibroknife.

The *Cheetah* not only represented the announcement of a clearly definable Northern edge over the outdated *Anolis* and *Basilisk* scout models utilized by the South, but it's release also marked the arrival of Kenema's Shaian Mechanics on the Gear production scene. Previously specializing in actuators and movement sub-systems (see *3.1.6 Shaian Mechanics*, p. 29) the *Cheetah* marked Shain's first independently produce Gear and it's technological superiority sent shock waves through much of the military-industrial complex of the CNCS. In the 35 cycles since the *Cheetah* entered production, Shaian has passed from a sub-contractor of note to one of the "big two" Gear producers in the North and has established itself as one of the centers of the Keneman economy. Despite rumors that Shaian is producing a new line of heavier machines, the *Cheetah* remains its flagship Gear and is featured in almost all the company's advertising.



Vehicle Specifications

Code name:	Cheetah
Production code:	HACS-01LG-SCT
Production Type:	Mass Production
Cost:	468,750 marks
Manufacturer:	Shaian Mechanics
Use:	scout/recon Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5230 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Weapon Payload

Name	Ammunition Payload
M25 Pack Gun	30 shells
RP-109 Pepperbox	24 rockets
M-2A Hand Grenade	4 grenades
HW-VB-1 Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The first production run of the *Cheetah* ran off the newly-built Shaian Mechanics assembly line in Keneman in TN 1888. The first *Cheetahs* were sold to the Northern Guard and first used by the locally stationed "Busybees" (the B Company of the 18th Gear Regiment). This first deployment began a close relationship between the Busybees and Shaian Mechanics that lasts to this day. Dunkan Polson, the 18th's current Duelist, pilots a variant of the *Cheetah* and is the son of a Shaian Mechanics engineer. The Busybees and a few other selected regiments, however, remained the only Northern Guard forces to use the *Cheetah* for a long time. In The early TN 1900s internal tensions led to many of the Northern leagues not wanting to share cutting edge technology and almost all the *Cheetahs* produced between TN 1899 and 1906 were purchased by the Norlight Armed Forces. The Norlight War Department authorized renewed sales to the Northern Guard after TN 1906, but very few sales to the other national armies occurred until the War of the Alliance.

The attempted invasion of Terra Nova by the Colonial Expeditionary Force in TN 1913 provided the *Cheetah* with ample opportunity to prove its worth in battle. Although few combat vehicles could match the combination of speed and firepower presented by the CEF's deadly hovertanks, the *Cheetah* was able to hold its own. Combat-capable scout units gave many Northern forces a critical edge when facing the initial drive of the Earth forces into the United Mercantile Federation and the border territories of the Western Frontier Protectorate. As the command of all Northern forces was centralized, the *Cheetah* came into much wider distribution and many units were transferred to the Mercantile and Western theaters. The war also saw the development of a many variants as the flexibility of the *Cheetah* chassis was pushed almost to the limit. Since the end of the war, the *Cheetah* has secured its place as the premier scout unit among almost all Northern forces, but is most widely used by the Northern Guard forces stationed in the Badlands. The Guard's elite 7th Gear Regiment — the *Cat's Paws* — use a great number of *Cheetahs* and swear by its strengths. The *Paws'* prestige ensures that Shaian's orders remain high.

General Stats

Threat Value:	625
Offensive:	380
Defensive:	800
Miscellaneous:	696
Size:	6
Original Default Size:	9
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	6
Top Speed:	11
Secondary Movement Mode:	Ground
Combat Speed:	8
Top Speed:	15
Maneuver:	+2

Electronics

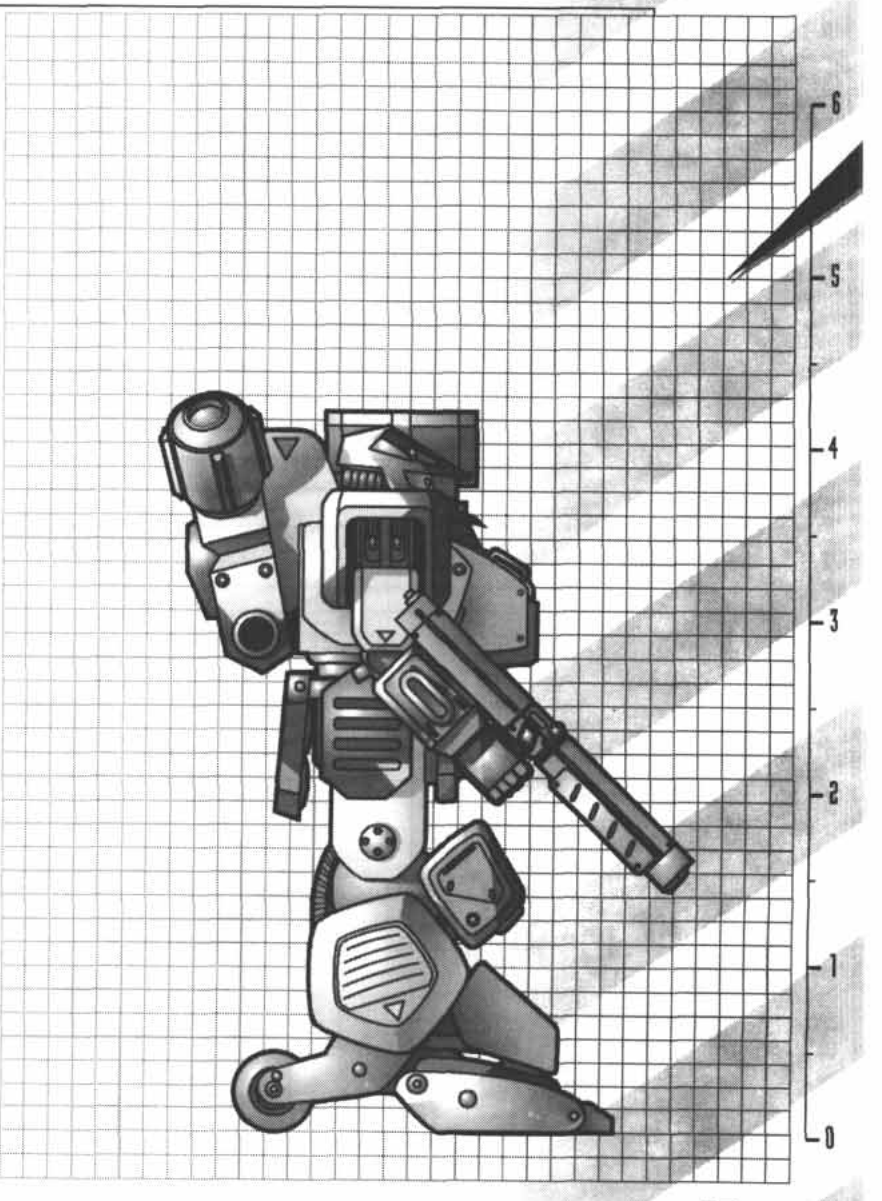
Sensors:	+2
Communications:	+1
Fire Control:	0

Armor

Light Damage:	10
Heavy Damage:	20
Overkill:	30

Vehicle Availability

Availability Threshold:	2
Maximum Number of Units in the Field:	Unlimited



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M25 Pack Gun	DPG	Forward	1	30
RP-109 Pepperbox	LRP/24	Forward	1	24
M-2a Hand Grenade	HG	Forward	4	-
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effects
ECM	3	Offensive Electronic Warfare equipment
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	6	Can punch
Target Designator	2	Used to target Guided weapons

Flaws

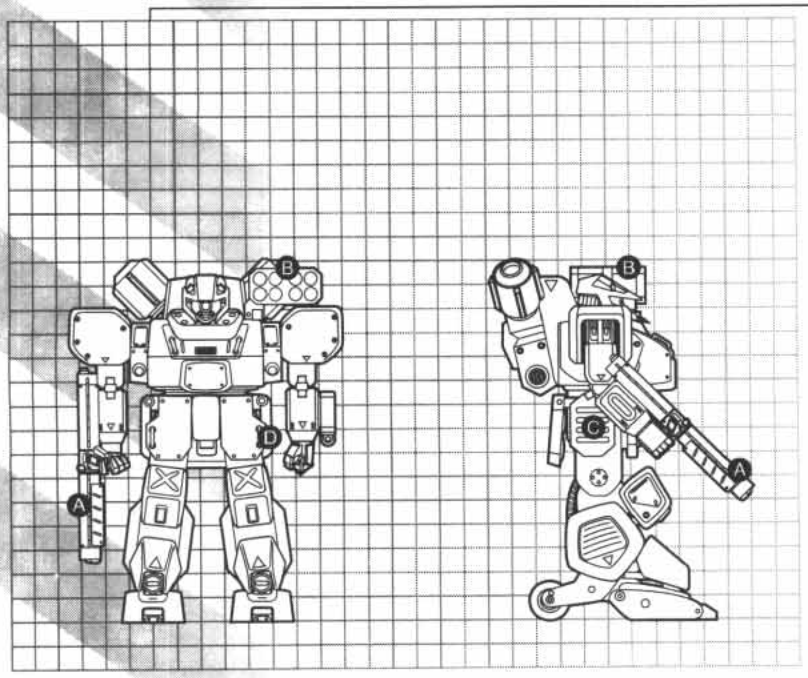
Name	Rating	Game Effects
Annoyance	-	Cramped Cockpit, maximum pilot Build is 0

Defects

Name	Rating	Game Effects
None	-	-

Optional Equipment

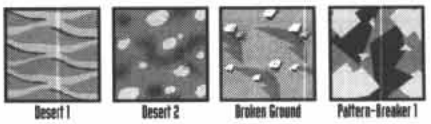
Name	Modified Threat Value
Add Armor Jacket (Reinforced Location Armor:Crew)	641
Add Smoke Launchers (10 shots)	641
Add Camo Netting	641
Add APGL (FF, 6 grenades)	631
Add Light Panzerfausts (x2)	635
Add 3 grenades	636



Weapon Location Diagram

A	M25 Pack Gun
B	RP-109 Pepperbox
C	M-2A Hand Grenade
D	HW-VB-1 Vibroknife (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.2.1 HACS-01LG-AA CHEETAH AIR CLAW

In TN 1922, Shaian Mechanics was asked by Northern Guard High Command to provide a recycling plan for the older *Cheetah* machines of the 74th Heavy Gear Regiment, the *Nova Redriders*. Shaian decided to use this opportunity to try and completely phase out Northco's *Bobcat* by creating a competitor for one of its only remaining active variants, the *Bird Arrow* anti-aircraft model. The result was the *Air Claw*, designed to provide recon/scout squadrons with anti-aircraft capability. *Air Claws* are included singly in regular recon/scout squadrons, with the other units providing ground support for it if need be. Consequently, the *Cheetah*'s RP-109 Pepperbox and M25 pack gun were discarded in favor of an underarm slung Riley AA144 20mm anti-aircraft cannon. The cannon is fitted with a dedicated secondary targeting computer and a laser range finder, allowing it to hit fast moving targets at an impressive distance. Ample ammunition for the cannon is belt-fed from an armored drum mounted under the *Air Claw*'s V-engine.

The *Air Claw* has been relatively slow to enter service. Rumors that the *Nova Redriders* were disappointed in the Gears they received, and that the Northern Guard's conventional anti-aircraft units are loathe to permit their limited supply of excellent Riley light AA guns to be claimed by Gear squadrons, have contributed to the machine's slow distribution. Nonetheless, Shaian stands by their *Air Claw* and it has gained tremendous popularity among several prominent regiments. The relative ease with which technicians can convert *Cheetahs* to *Air Claws*, along with Shaian's offer to do so in the field, makes them an attractive option for units fearing Southern air cavalry. As a result, the *Air Claw* has succeeded in largely displacing the *Bird Arrow*. Although some units have yet to decommission their *Arrows*, sales of new ones have dropped to next to nothing despite the wider angle of fire provided by the *Arrow*'s turret-mounted gun. Industry insiders think that Northco may be behind much of the bad press the *Air Claw* has received and may be laying the ground work for a renewed push into the anti-aircraft marketplace.

Vehicle Specifications

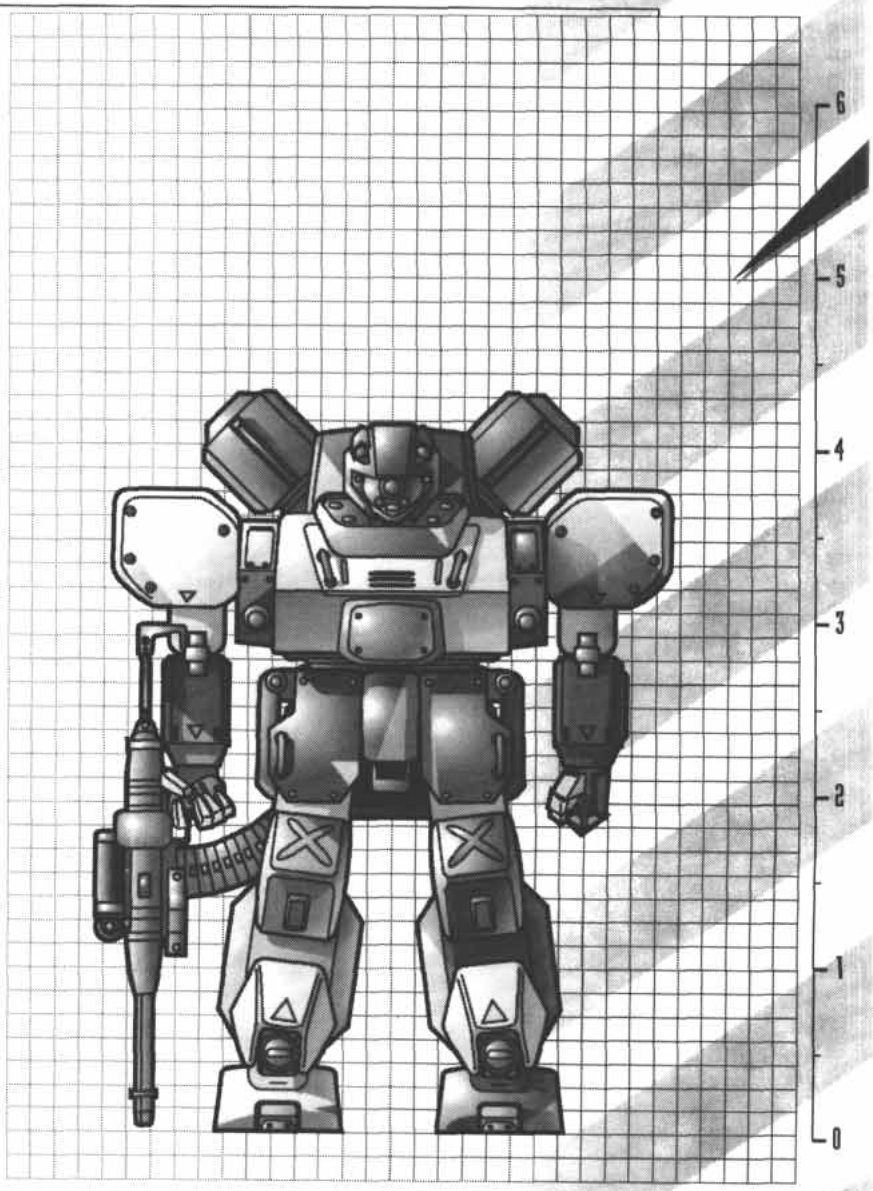
Code name:	Cheetah Air Claw
Production code:	HACS-01LG-AA
Production Type:	Mass Production
Cost:	367,187 marks
Manufacturer:	Shaian Mechanics
Use:	anti-aircraft Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5175 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LAAC (F, 160 shells), Sniper System (LAAC)
Remove:	DPG, LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	551
Offensive:	244
Defensive:	800
Miscellaneous:	609

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5

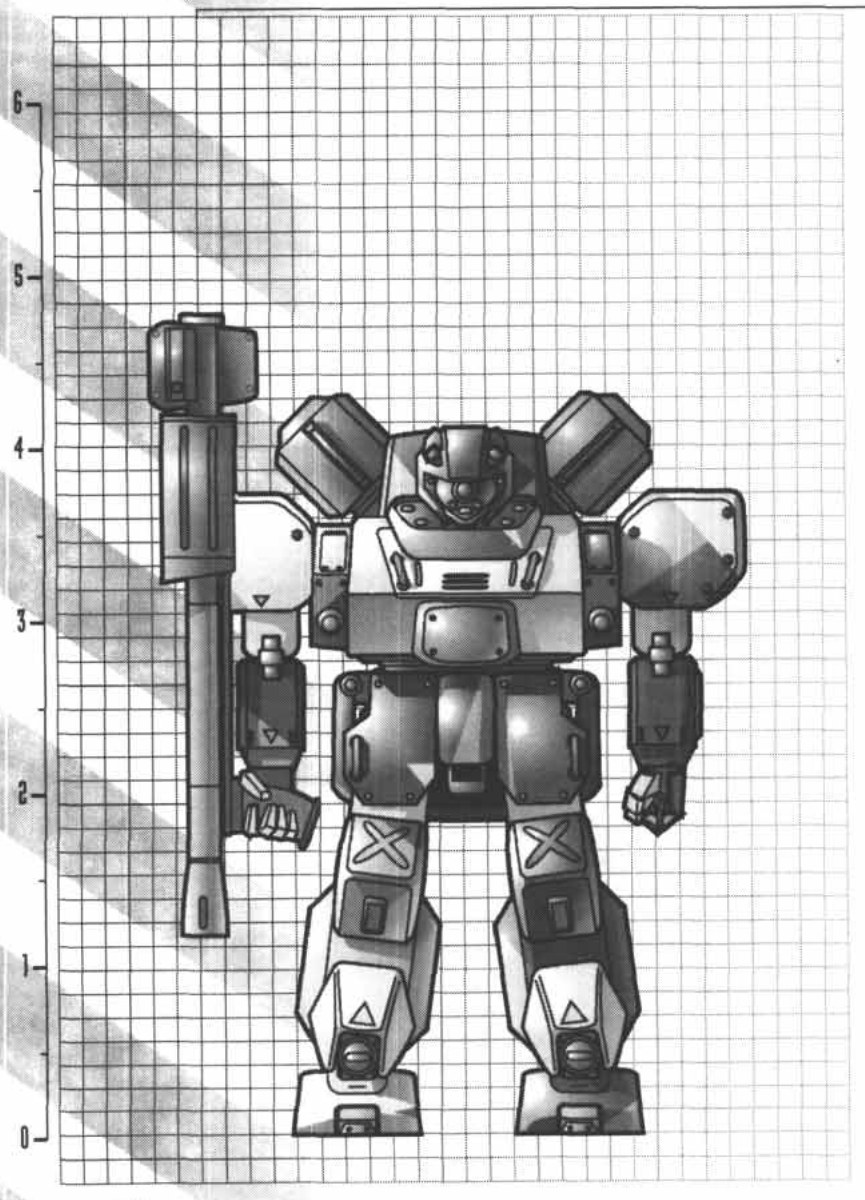


Bryce Hubbard (order #5318102)

4.2.2 HACS-01LG-TH CHEETAH FANG

Introduced in TN 1910 as an anti-armor variant of the *Cheetah*, the *Fang* has been replaced in large part by the more recent and versatile *Strike Cheetah*. It nonetheless remains in service in many less prestigious units of the Northern Guard and some league armies and is even preferred by some pilots and commanders who feel it performs better than the *Strike*. The *Fang* was the first variant to prove that the *Cheetah* had a real future as an assault Gear. The M25 Pack Gun and the RP-109 Pepperbox from the basic *Cheetah* were removed in favor of a Surefire-60 Recoilless Cannon. Shaian's designers felt that the Surefire's range and hitting power would compensate for the *Fang*'s reduced interior ammo storage (only 15 rockets). Tactically, the *Fang* was intended for coordinated use with standard *Cheetahs* during reconnaissance missions, and its assumed role in squadrons was to close with and kill enemy recon vehicles by direct fire. The combination of hitting power combined with great maneuverability made the *Fang* valuable for typical scouting missions as well, including anti-Gear ambushes. Heavier weaponry was often necessary, however, for missions against more heavily armored targets, such as fire-support Gears, striders or tanks.

The *Fang* has been largely phased out by the arrival of the paratrooper-capable *Strike Cheetah*, which introduced the use of Paxton Arms' RFL-2 Soothsayer automatic rocket cannon. This "rapid fire bazooka" allows the *Strike* to pummel armored targets with volleys of rockets while the *Fang* must pick its shots. The actuator modifications for paratrooper duties are expensive, however, and some pilots complain that the Soothsayer's reduced range and smaller rocket size force them into close contact with armored targets, a dangerous situation given the *Cheetah* family's light armor, which explains its continued popularity. Shaian Mechanics has recently announced that it will halt production of *Fang*-related parts in favor of the *Strike*, although it will continue to provide necessary spare parts to units maintaining the "outdated" machine in their arsenal.



Vehicle Specifications

Code name:	Cheetah Fang
Production code:	HACS-01LG-TK
Production Type:	Mass Production
Cost:	344,776 marks
Manufacturer:	Shaian Mechanics
Use:	assault/anti-armor Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	3415 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LBZK (F, 15 shells)
Remove:	DPG, LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	517
Offensive:	326
Defensive:	800
Miscellaneous:	426

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.2.3 HACS-01LG-SEC CHEETAH MP

The *Cheetah MP* is a relatively recent addition to the Military Police arsenal, having being developed from the infantry clearing Gears of the late cycles of the War of the Alliance. The second machine used by the Northern Guard's Military Police, the Cheetah MP is designed for those jobs the larger *Jaguar MP* just cannot tackle. With awesome mobility and a slightly smaller size, the *Cheetah MP* is better suited for many police operations than its larger brother. The Military Police detachment in Valeria received its first five machines in the Spring of TN 1927. Other city-states have since started to receive theirs, though Shaian Mechanics has been notably slow in producing and delivering them. Those units that do have a mix of *Jaguar MPs* and *Cheetah MPs* often deploy the two types of Gears together in joint patrols, making a combination of speed, firepower and electronic warfare capabilities available to the squadron. *Cheetah MPs* are often deployed alone during SWAT-style assaults in confined urban surroundings, where their reduced size and maneuverability is a noted tactical advantage.

The Military Police version of the *Cheetah* differs very little from the standard mass-produced HACS-01LG-SCT. Aside from a new head module and the standard police shield and shotgun, both are remarkably similar in appearance and performance. The *Cheetah MP* trades the *Cheetah*'s large sensor and communications array for a sturdier and simpler one, better capable of withstanding the punishment of close-range combat. The police shield, while somewhat bulky, improves the survival chances of the thin-skinned Gear. To facilitate maintenance and resupply, both the fragmentation cannon and the shield are the same model as those carried by the *Jaguar MP*. Strangely, the complex ECM package of the standard Cheetah has been retained for the police version. While many observers have decried this as an obvious waste of resources — given the *Cheetah MP*'s intended mission — the ECM equipment is well liked by the MPs, permitting them to use a whole new range of tactics when facing down rebellious soldiers or enemy infiltrators.

Vehicle Specifications

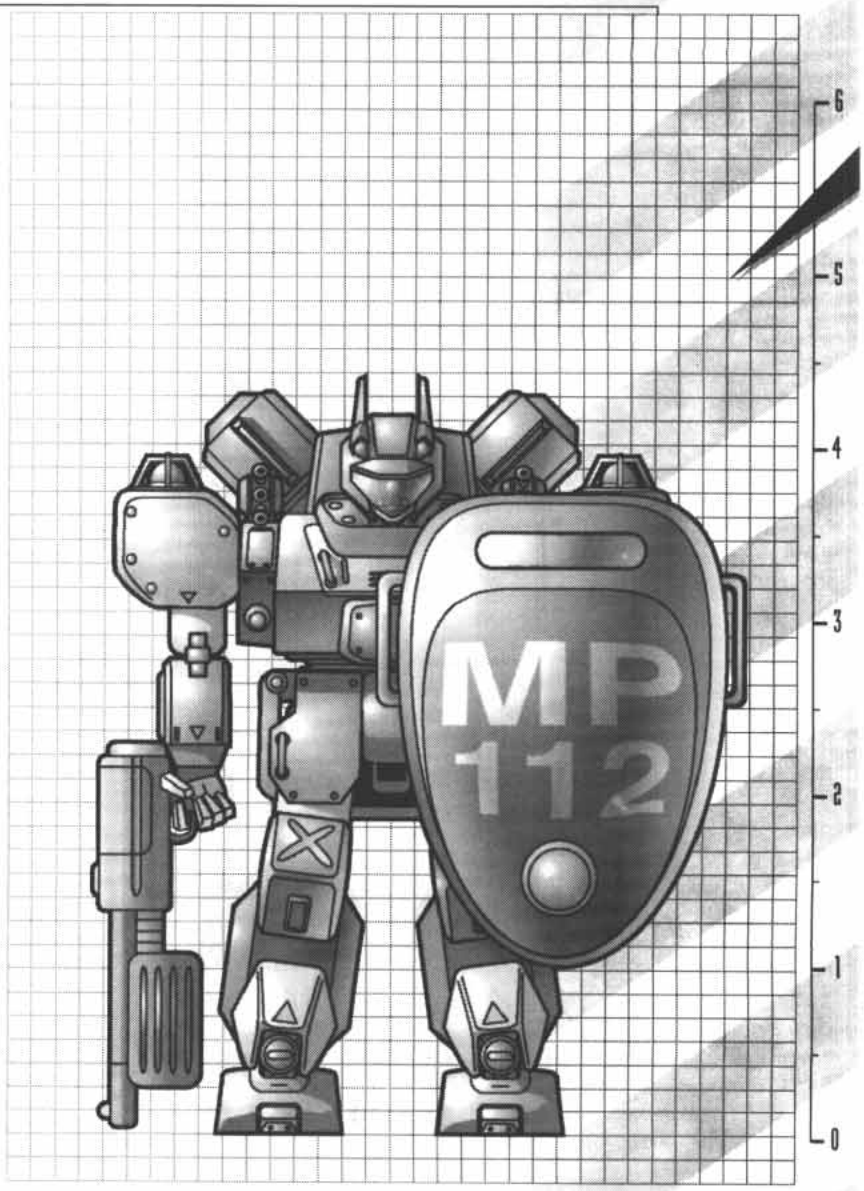
Code name:	Cheetah MP
Production code:	HACS-01LG-SEC
Production Type:	Limited Production
Cost:	1,391,144 marks
Manufacturer:	Shaian Mechanics
Use:	military police Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5830 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (89 kph)
Deployment Range:	220 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	FGC (F, 20 rnds), 2 x APGL (FF, 6 rnds), Backup Sensors, Shield (Rating 2, F/L)
Remove:	DPG, LRP/24, HGs, Target Designator
Change:	Downgrade Deployment Range to 220 km, Sensors to -1/2 km, Communications to -1/10km, Top Ground Speed to 89 kph
Modified Threat Value:	522
Offensive:	280
Defensive:	787
Miscellaneous:	498

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited

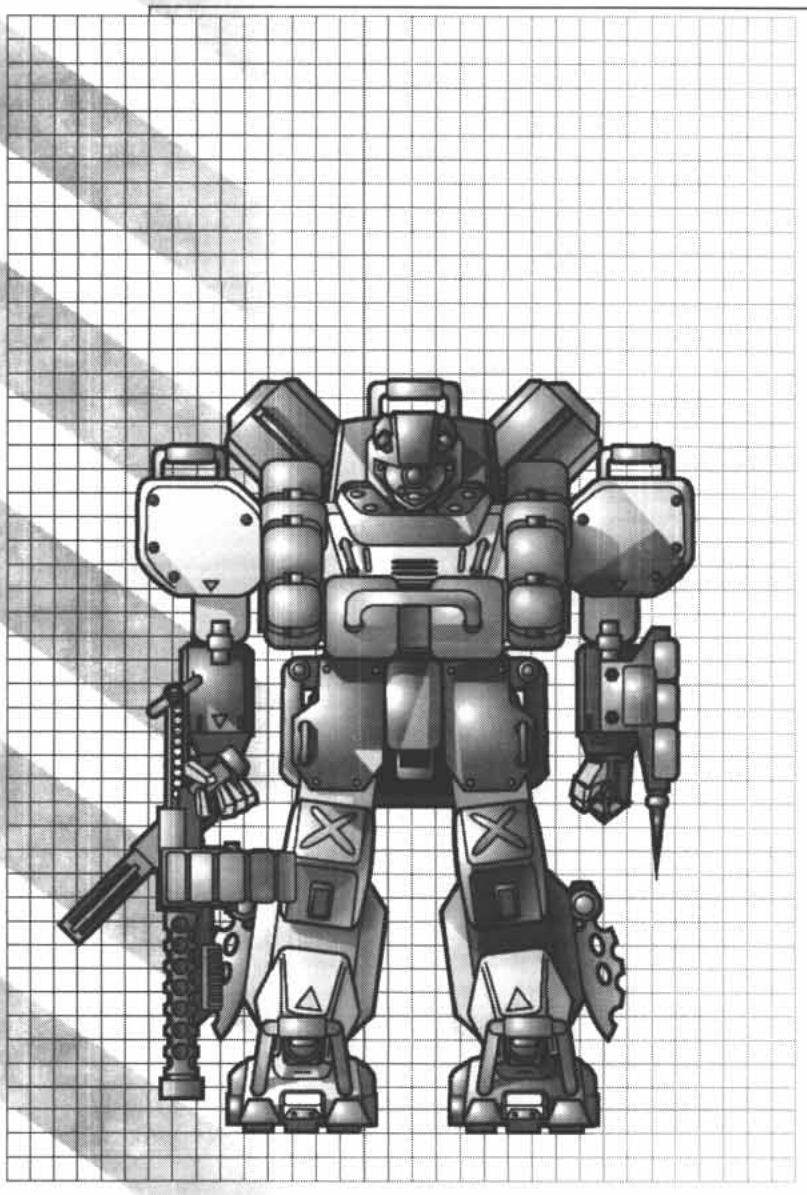


Bryce Hubbard (order #5318102)

4.2.4 HACS-01LG-PARA CHEETAH PARATROOPER

The *Cheetah* was born out of the Northern armies' need for a rapid scout/strike unit that could replace the outdated *Ferret* and *Bobcat* Gears at a reasonable cost. Given the vast distances to cover and the importance of a speedy reaction force, it was inevitable that a specialized *Cheetah Paratrooper* version would see the light of day. One of the first variants of the *Cheetah*, the *Paratrooper* was released in TN 1894 and intended to act as a companion to the *Hunter Commando*. The Gear would go on to inspire several other paratrooper units, including the *Strike Cheetah* and the *Hunter Paratrooper*. The development of the *Jaguar*, with paratrooper capabilities as a standard feature, has unexpectedly meant an increased demand for the *Cheetah Paratrooper* as an airdrop-capable recon unit is often necessary for *Jaguar* squadrons.

Although almost any Gear can be fitted with a parachute harness and thrown out of an aircraft, it takes some specialized equipment to survive the experience in combat-ready shape. With a padded cockpit and a leg suspension system to absorb the shock of five tons of metal hitting the ground, the *Cheetah Paratrooper* is designed to do just that. Other modifications include crashbars fitted over sensitive points in case of unexpected collisions during landing; parasails in a discardable container attached to the shoulders that can be jettisoned in seconds by flipping a switch; and airbrakes mounted on the legs to slow the vehicle to a smooth touchdown during high-speed drops. The airbrakes are the same as those mounted on the *Strike Cheetah*. The *Cheetah Paratrooper*'s armament consists of a M260P Paratrooper rifle: a combination of a 20 mm light autocannon and a drum-fed grenade launcher mounted in sidecar. The M260P is ideal for a paratrooper since it is lightweight and compact while packing devastating firepower at close range. Its main drawback is its high ammunition consumption in automatic fire mode (especially when grenades are involved). Southern observers have noted its similarity to the AK-67 Paratrooper Rifle used by the *Jäger Paratrooper* for over a century.



Vehicle Specifications

Code name:	Cheetah Paratrooper
Production code:	HACS-01LG-PARA
Production Type:	Limited Production
Cost:	2,289,000 marks
Manufacturer:	Shaian Mechanics
Use:	paratrooper/scout Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5010 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (89 kph)
Deployment Range:	600 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LAC (F, 30 rounds), LGL (F, 10 grenades), CR, Airdroppable, Rugged Movement System
Remove:	all weapons
Change:	Downgrade Sensors to +1/2km, Communications to 0/10km, Top Ground Speed to 89 kph
Modified Threat Value:	763
Offensive:	465
Defensive:	787
Miscellaneous:	1035

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.2.5 HMVS-01LG-CP CHEETAH POLIZEI

As part of its move to become one of the guiding forces of the community of Kenema, Shaian Mechanics accepted a contract in TN 1929 to develop a civilian police version of the *Cheetah* capable of safely participating in riot-control and fast-pursuit activities. The result was the *Cheetah Polizei*, largely based upon the *Cheetah MP* variant. Like the *MP*, the *Polizei* uses a rugged and simplified electronics suite and an armored shield for added protection. The standard Northco F23 frag cannon is replaced by a Forge Weapons Co. CG-20 Machine Pistol carried in the Gear's free manipulator. The CG-20 is a belt-fed, anti-infantry chaingun that is issued with low-velocity, rubber bullets for use in crowd-control situations. Tear gas canisters are also standard issue. The *Polizei* is also issued with a combat, anti-personnel grenade launcher and its machine pistol can easily fire standard ammunition, enabling the Gear to use lethal force when necessary.

The *Polizei* is commonplace in Kenema itself, but only a few have found their way to other large city-states of the North, like Valeria or to border communities, who use it as a civil-defense Gear. There have been few complaints with the *Polizei*, although social activists have protested that Shaian has severely downplayed the danger in using such a powerful Gear to handle civilian unrest. In TN 1932, a wildcat strike at Kenema Steel resulted in a small riot and a squad of *Polizei* was called in. One over-anxious police officer opened fire with his machine-pistol on full automatic, killing three rioters and wounding eight others with the shear quantity of rubber bullets pounding into them. The case resulted in the officer — Sergeant Charles Gan — being sentenced to twenty years in a confederate penitentiary and a full review of the training of Keneman police-Gear pilots. Several members of the Keneman Police Officer's Union have stated that Sergeant Gan was no more guilty than the Shaian sales representatives who promised that the risk of accidental death during *Polizei* operations was virtually nil.

Vehicle Specifications

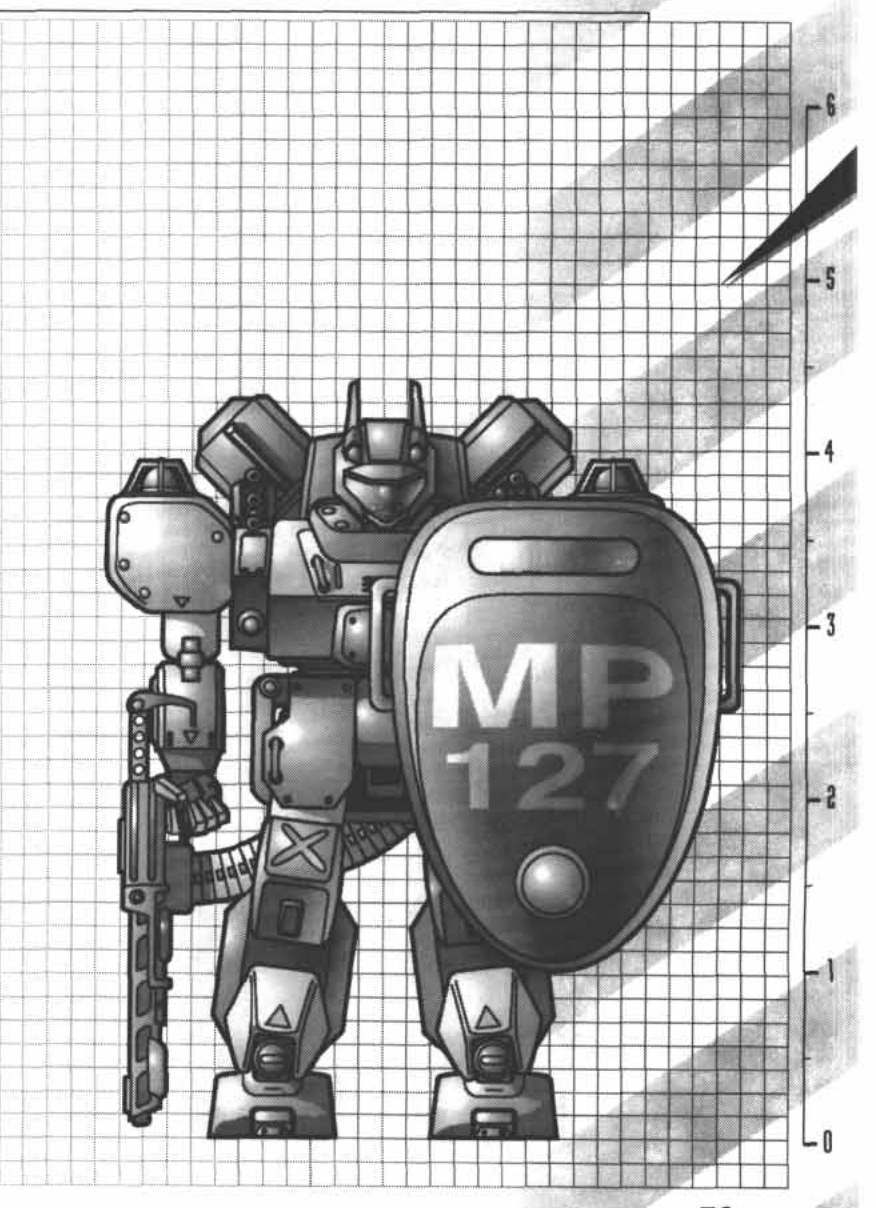
Code name:	Cheetah Polizei
Production code:	HMVS-01LG-CP
Production Type:	Limited Production
Cost:	962, 608 marks
Manufacturer:	Shaian Mechanics
Use:	civilian police Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5850 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (89 kph)
Deployment Range:	220 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	VLMG (F, 500 rnds, Non-Lethal ammo), 2 x APGL (F,R,6 rnds each) Backup Sensors, Shield (Rating 2, F/L)
Remove:	All weapons, ECM, Target Designator
Change:	Increase HGs to 6 (3 Illumination, 3 Non-Lethal), Downgrade Deployment Range to 220 km, Sensors to -1/2 km, Communications to -1/10km, Top Ground Speed to 89 kph
Modified Threat Value:	413
Offensive:	178
Defensive:	787
Miscellaneous:	272

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	Unlimited

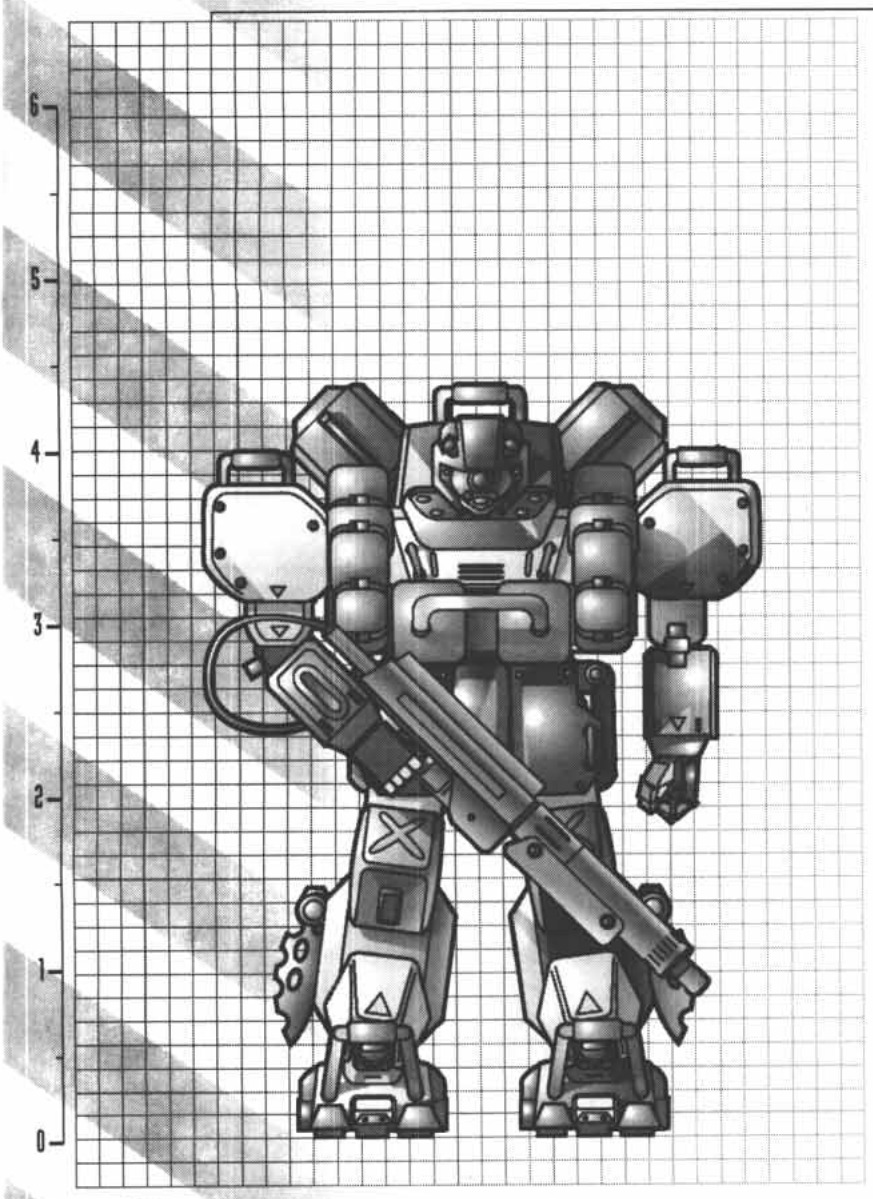


Bryce Hubbard (order #5318102)

4.2.6 HACS-01LG-SNP STALKING CHEETAH

Designed late in the War of the Alliance as a light strike Gear, the *Stalking Cheetah* quickly proved itself a far better dedicated hunter/killer. Equally capable of passing behind enemy lines as it was of lurking in ambush, the dedicated sniper system linked to the already exceptional Sergon Optics A-13 Redeye sniper laser cannon provided the Gear with precision weapons capability, while the *Cheetah*'s excellent maneuverability gave the pilot the ability to quickly exit the target area and avoid any counter strikes. A vehicle of the *Stalking Cheetah*'s talents (and production cost) was not to be wasted on just any target of opportunity, however. The deadly accuracy of the Redeye appealed immediately to the commanders of the Northern Guard's special forces units and they received almost all of the *Stalking Cheetahs* produced during the war years. They continue to account for the lion's share of the units produced.

The *Stalking Cheetah* only served in the last year of the war, and most of the Gear's operational history remains restricted. High Command placed *Stalking Cheetahs* in surgical strike teams and had them modified for airdrops. The documented targets of their deep insertion operations included communication relays, repair stations and fuel depots. Revealed records indicate that these operations were very successful. There are some gaps in the records, however, and the nature of all their covert actions are unknown. For a short time, many *Stalking Cheetahs* wore an unusual kill marker, the silhouette of a head with a red dot in the center. Questions concerning these were deflected with a curt reply of "just a merit badge for exceptional marksmanship," not a particular challenge for the *Stalking Cheetah*. These kill markers disappeared shortly thereafter. Lately with the more cordial relations with Port Arthur, stories of assassinations deep in CEF-held territory, of lasers piercing the night and striking down a Jan-class GREL or other CEF leader without a blip from the guard stations, are being heard. The use of the *Stalking Cheetah* to eliminate selected Southern targets at the height of the war, however, remains among the North's most closely guarded secrets.



Vehicle Specifications

Code name:	Stalking Cheetah
Production code:	HACS-01LG-SNP
Production Type:	Mass Production
Cost:	517,385 marks
Manufacturer:	Shaian Mechanics
Use:	hunter/killer Gear
Height:	4.1 meters
Width:	3.2 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5115 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	SLC (F, 20 shots), Sniper System (SLC), Airdroppable
Remove:	DPG, LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	690
Offensive:	479
Defensive:	800
Miscellaneous:	791

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.2.7 HACS-01LG-SNP/A STALKING CHEETAH RFL

The successful use of the *Stalking Cheetah* during the final cycle of the War of the Alliance created a demand for the complex machine that simply could not be met. Elite units continued to receive priority for the laser-equipped *Stalking* and Sergon Optics could only produce so many of its laser weapons. Despite repeated promises of increased production, the supply of Redeyes could never match the demand. Units received more standard Gears, but the demand for a dedicated, fast-moving sniper Gear remained high. In TN 1923, after a cycle-long effort to sign a deal with Westfellow Technologies to produce the *Stalking*'s laser weaponry fell through, Shaian began to produce a rifle-equipped version of the sniper Gear. The first release of the *Stalking Cheetah RFL* carried the Riley Weapon Systems R235 rifle which matched the penetrating power of the A-13 Redeye, but pilots and commanders complained about the very low ammunition capacity for a paratrooper/infiltration Gear. In TN 1927, the standard weapon became a lighter R229 rifle with a dedicated sniper system.

The *Stalking RFL* has managed to achieve a level of performance very close to that of the standard model, but with the advantage that the supply of ammunition and replacement parts for the rifle is much more reliable and affordable than for the Redeye laser. Nevertheless, the accuracy, range and short-range firepower of the R229 are still inferior to those of the Redeye, although the last variable is of limited value to a sniper unit. Pilots of *Stalking RFL*'s can sometimes make up for these weaknesses with specialized rocket-boosted ammunition, but the expense, unreliability and sparsity of the specialty ammo tends to neutralize the economic and maintenance advantages of the *Stalking RFL*. A friendly rivalry has developed between the pilots of the brother Gears. Those who use laser-equipped *Stalking Cheetahs* — invariably members of elite units — tend to see *Stalking RFL* pilots as "underclassmen," pilots who are just one cut below them in skill and prestige. *RFL* pilots, conversely, see those who use sniper-lasers as a little lazy, as having to rely on technology instead of inherent skill to get the job done.

Vehicle Specifications

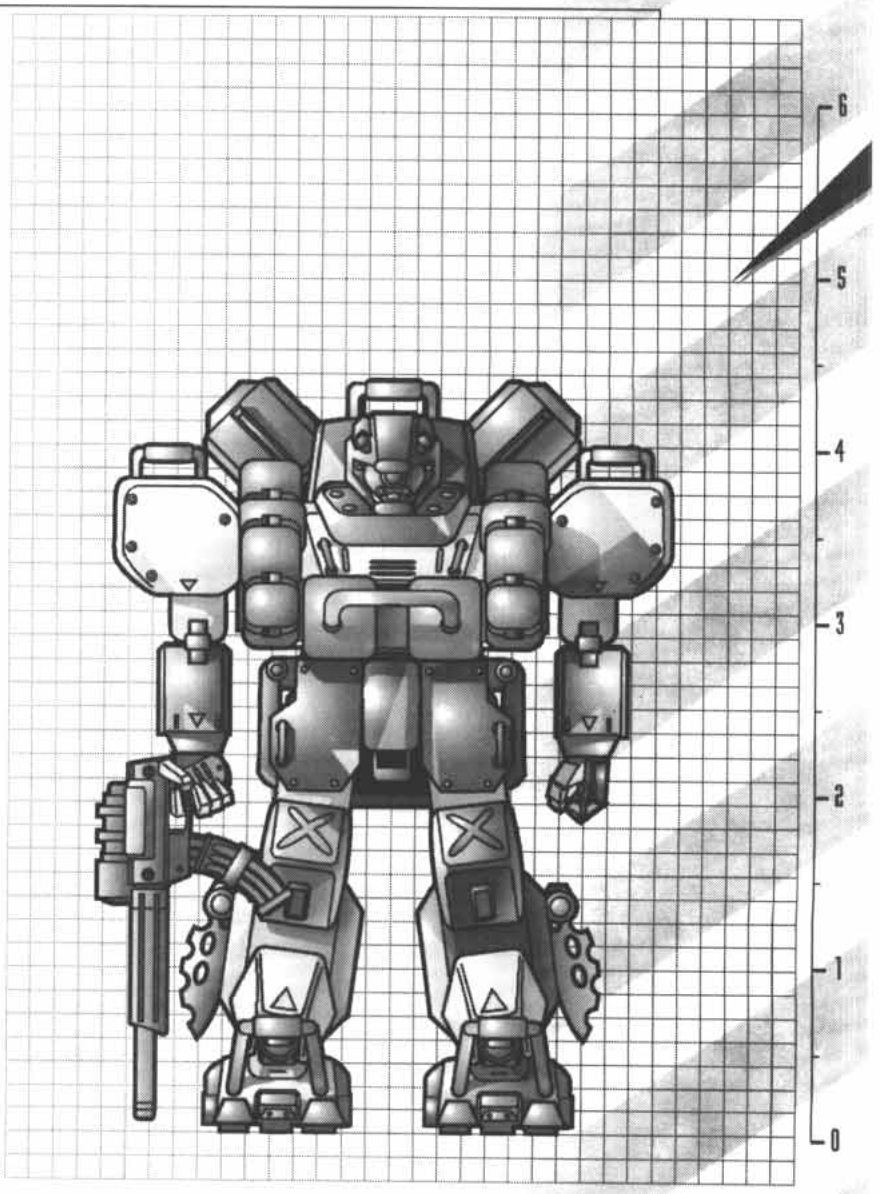
Code name:	Stalking Cheetah RFL
Production code:	HACS-01LG-SNP/A
Production Type:	Mass Production
Cost:	470,860 marks
Manufacturer:	Shaian Mechanics
Use:	hunter/killerGear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5135 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	MRF (F, 75 rounds), Sniper System (MRF), Airdroppable
Remove:	DPG, LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	628
Offensive:	293
Defensive:	800
Miscellaneous:	791

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2

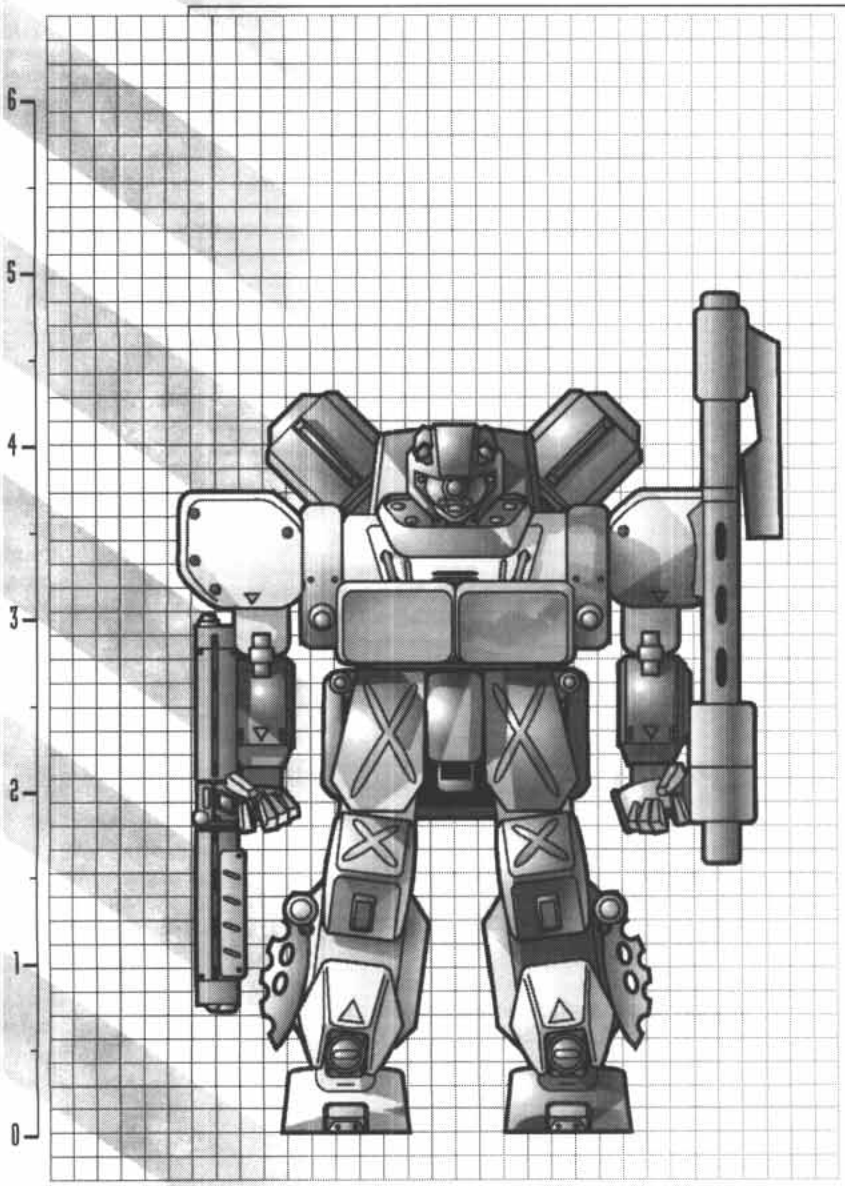


Bryce Hubbard (order #5318102)

4.2.8 HACS-01LG-AST STRIKE CHEETAH

The *Strike Cheetah* first appeared during the War of the Alliance and quickly became one of the most successful *Cheetah* variants in that chassis' short history. The *Cheetah* scout Gear was upgraded to a combat model by adding heavier armor and weaponry, turning it into a light tank hunter. Engine performance was boosted by 8.6%, making the *Strike* able to carry additional equipment and armor while maintaining the same speed. The armor was upgraded with the addition of a thick armor vest; a *Strike Cheetah* can withstand a frontal attack with a 25mm HEAT round with virtually no damage. The *Strike Cheetah* was also equipped with parachute hardpoints, modified shock-absorbers and deployable air brakes for airdrop assaults, giving it a range of mission profiles greater than the *Cheetah Fang* pure anti-armor variant. During the War, *Strike Cheetahs* were often dropped in teams behind enemy lines to attack fortified installations with speed and accuracy.

The *Strike*'s usual armament consists of a Paxton Arms RFL-2 Soothsayer automatic rocket cannon, accompanied by a M25 pack gun, some grenades and a vibroblade knife. The UV spotlights of the standard *Cheetah* were kept, but the ECM forearm pods were downgraded and the target designator removed altogether. Crashbars are quite popular with newer pilots, less so with older veterans. Reactive armor is also a favorite, although the high costs involved mean that it is normally only installed on machines that are to be involved in very intense combat missions. In the opinion of many military experts, the *Strike* version of the *Cheetah* proved to be just as good at armored combat as any other standard combat Gear and has become one of the favorite Gears of elite units such as the 7th Gear regiment, the *Cat's Paws*. After the War of the Alliance, many *Strike Cheetahs* were not returned to their old scout duties and continued to serve in various Northern forces. There are no rumors, as yet, about their replacement. In fact, the *Strike Cheetah* set the stage for the release of other variants based on its airdroppable frame, including the sniper *Stalking Cheetah* and *Stalking Cheetah RFL*.



Vehicle Specifications

Code name:	Strike Cheetah
Production code:	HACS-01LG-AST
Production Type:	Mass Production
Cost:	501,000 marks
Manufacturer:	Shaian Mechanics
Use:	assault/light strike Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	30 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5950 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V840S V-Engine
Horsepower:	450 hp

Modifications

Add:	RFB (F, 60 shells), Airdroppable
Remove:	LRP/24, HGs, Target Designator
Change:	Upgrade Base Armor to 14, reduce ECM Rating to 2
Modified Threat Value:	668
Offensive:	422
Defensive:	1090
Miscellaneous:	493

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.2.9 HACS-01LG-AST/C STRIKE CHEETAH SECCOMM

The *Strike Cheetah* was used repeatedly during the war in long term infiltration missions that required the Gears to either remain out of contact with their regimental commanders or to drag along satellite communications equipment in towed or carried packages. To resolve this problem, the Northern Guard asked Shaian Mechanics to develop a command and communications variant of the *Strike*. The corporation delivered in TN 1923 with the *Strike Cheetah Section Commander*, designed for team leaders (or communications specialists) during paratrooper operations. The *SecComm* lost the offensive firepower of the Soothsayer automatic rocket cannon, maintaining only the M25 pack gun for defense. This made the unit primarily a support Gear in these operations, but the satellite communications array installed in its right shoulder was critical to the success of long-range, deep penetration missions. Reactive armor was added to the *SecComm* to help protect it under fire. The *SecComm* was also provided with signal boosting capabilities so it could pierce through limited electronic warfare interference.

The *Strike Cheetah SecComm* has served well in its duties, but is slated for replacement or upgrade by the Northern Guard. The *SecComm*'s lack of offensive firepower has made it a difficult machine to deploy because of the need for other units to defend it, and the reactive armor can sometimes be a hazard to units in the vicinity. Some pilots have taken to trading in their pack-guns for other weapons, either a M222 autocannon or a M260P Paratrooper rifle. The latter features an integrated grenade launcher and gives the *SecComm* some much needed punch which, if it became standard, would allow the designers to remove the reactive armor. The added weight of these weapons has proven to be damaging in bad-weather drops, however, and a more permanent solution to the *SecComm*'s failings is on the drawing board. One solution proposed has been to mount a satellite uplink on the more lightly armored *Cheetah Paratrooper*, but this may expose the communications link to too much shock to remain operational.

Vehicle Specifications

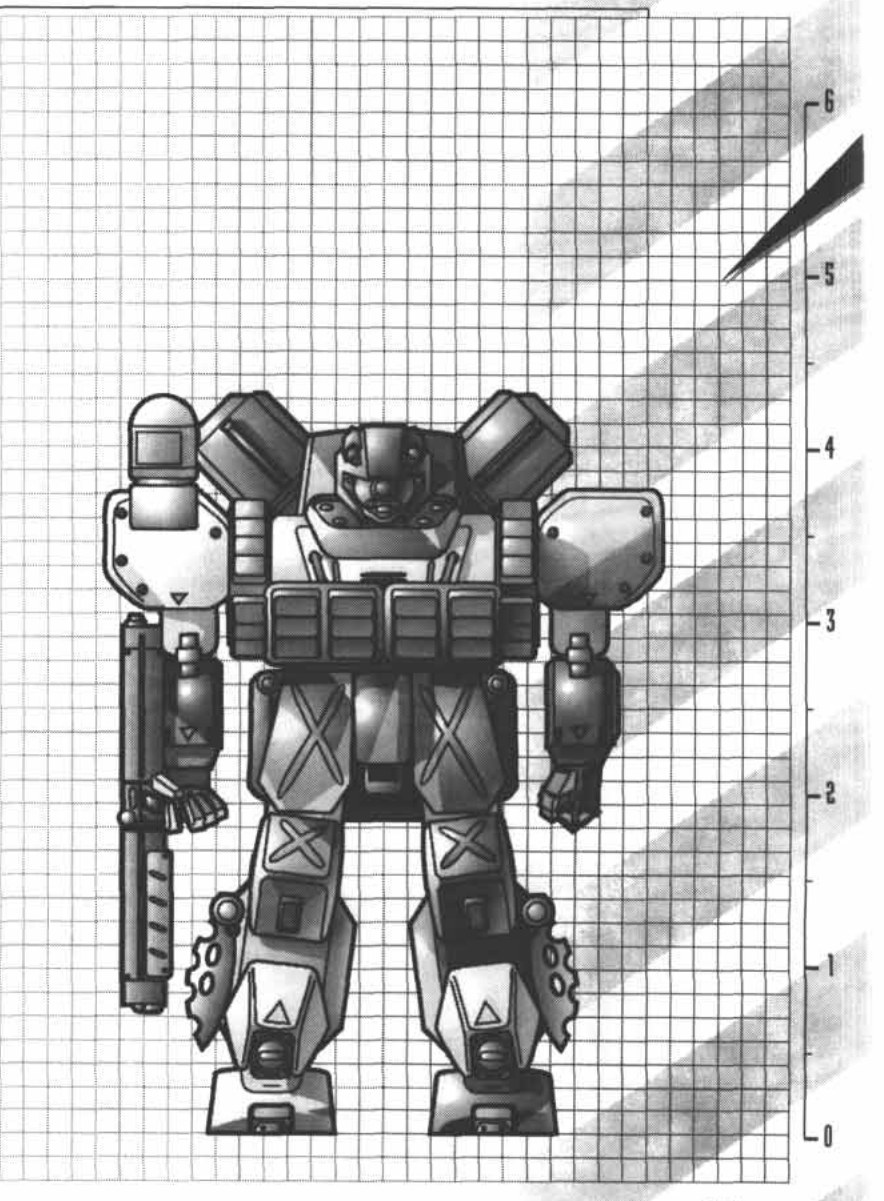
Code name:	Stike Cheetah Seccom
Production code:	HACS-01LG-AST/C
Production Type:	Mass Production
Cost:	533,310 marks
Manufacturer:	Shaian Mechanics
Use:	assault/command Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5775 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V840S V-Engine
Horsepower:	450 hp

Modifications

Add:	Airdroppable, Satellite Uplink, ECCM (Rating 1), Reactive Armor (Rating 1), Exposed AUX System
Remove:	LRP/24, HGs, Target Designator
Change:	Upgrade Base Armor to 14, reduce ECM Rating to 2
Modified Threat Value:	711
Offensive:	97
Defensive:	1088
Miscellaneous:	949

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2

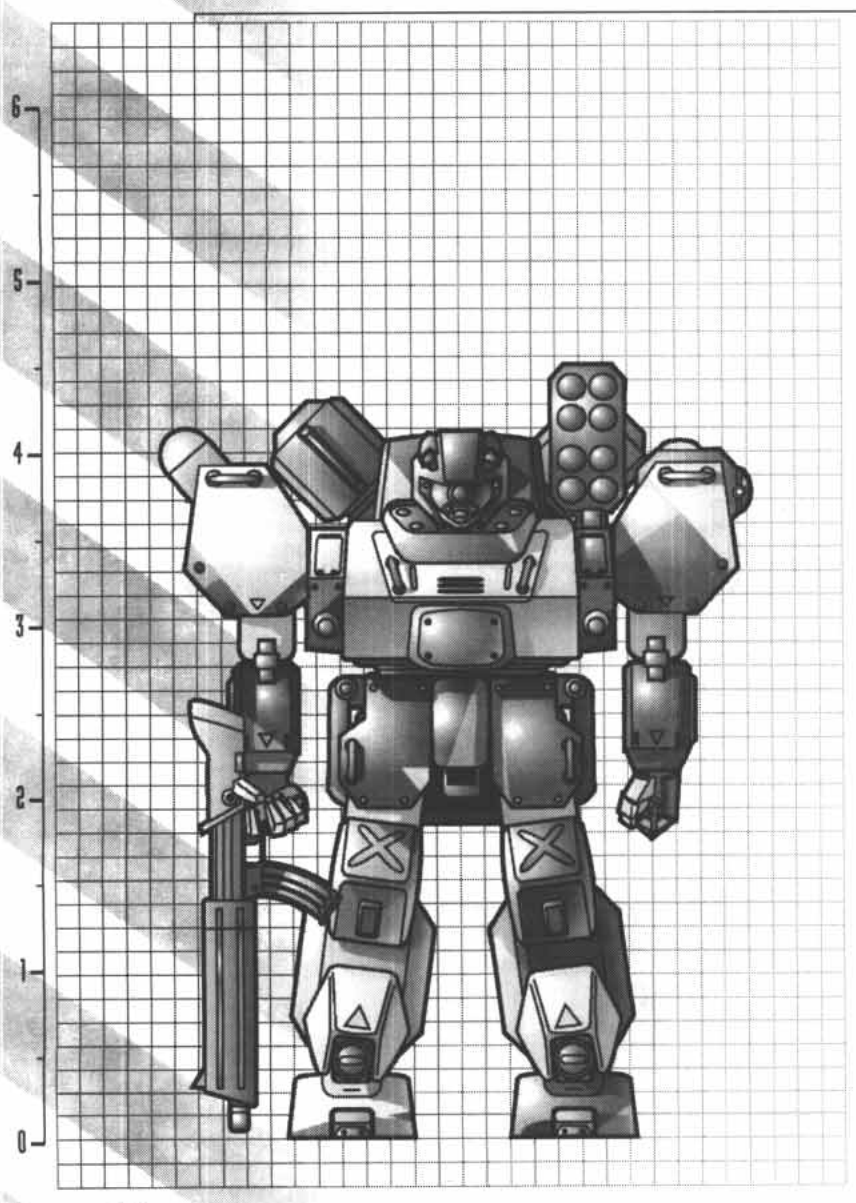


Bryce Hubbard (order #5318102)

4.2.10 HACS-01LG-EW WHITE CAT

The *White Cat*, although nearly identical to the standard *Cheetah* in its structure and general appearance, is used for very different purposes. The Northern military had been using the *Wild Ferret* as their standard EW(electronic warfare) Gear, but this highly specialized machine, although quite effective in its particular field, lacked the adaptability of a fully humanoid shape and showed evidence of its century of service. Its limitations in heavy combat situations soon became obvious as it began to be used in the field. Its high cost did not win it any favors either. After the War of the Alliance, Guard High Command decided that a new battlefield electronic warfare Gear was necessary and tenders were issued for an all-new model. These tenders ultimately led to the development of the *Weasel* by Keimuri Gear. The development of the *Weasel* was slow, however, and Shaian Mechanics proposed using its high-technology *Cheetah* frame to create a "stop gap" electronic warfare Gear. Thus, the *White Cat* was born.

Shaian kept the modifications simple and, technically, the *White Cat* is nothing more than a standard *Cheetah* equipped with a special set of shoulders for the satellite uplink and ECM/ECCM pods, as well as upgraded communication equipment and sensor cameras. The armor was left unchanged so as to not add weight to the machine. The *Cheetah*'s standard weaponry was altered with the M25 pack gun and RP-109 Pepperbox being replaced by the heavier M222 autocannon and the lighter RP-105 with a reduced payload of only eight missiles. The weapon load was chosen to allow the *White Cat* to defend itself, but not with offensive deployment in mind. The vibroblade knife and the grenades were kept as is (though they are sometimes removed to decrease the machine's weight). The *White Cat* was supposed to be a temporary solution to the military's immediate needs, but it has proved its worth. Keimuri's *Weasel* has been plagued by production problems that have kept its costs high, but the corporations recent cooperation with Northco may spell difficult times ahead for the *White Cat* as its competition enters mass production.



Vehicle Specifications

Code name:	White Cat
Production code:	HACS-01LG-EW
Production Type:	Mass Production
Cost:	532,500 marks
Manufacturer:	Shaian Mechanics
Use:	electronic warfare Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5110 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	140 hexes/7 km
Communication Range:	600 hexes/30 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LAC (F, 40 shells), LRP/8 (F, 8 rockets), ECCM (Rating 2), Searchlight (Rating 2), Satellite Uplink, Exposed Auxiliary System, Vulnerable to Haywire Effects
Remove:	DPG, LRP/24
Change:	Upgrade ECM to 4, increase Sensor Range to 7 km, increase Comm Range to 30 km
Modified Threat Value:	710
Offensive:	396
Defensive:	800
Miscellaneous:	933

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	3

Bryce Hubbard (order #5318102)

4.2.11 HACS-01LG-HW LIGHTNING CHEETAH

In an attempt to take advantage of the media storm that surrounds the mysterious duelist Lash, Northco, in conjunction with Shaian Mechanics, has introduced a limited-production *Cheetah* that uses the famous duelist's preferred weapon array. The aptly named *Lightning Cheetah* can make itself the bane of many a poorly insulated Gear with its haywire whip and light grenade launcher loaded with haywire rounds. Despite its origins as a casual showmanship vehicle designed to enhance the prestige of both the manufacturers and the CNCS, the *Lightning Cheetah* has enormous hidden potential, a fact which those in the higher echelons of the Northern armies have not failed to notice. Given the high cost involved in fully shielding a Gear or other fighting vehicle from haywire effects, it is a protection rarely allowed by the bean counters of the military. This has made certain commanders realize that the a maneuverable, fast-moving Gear that can take advantage of this integral weakness is valuable beyond the ability to calculate. The *Lightning Cheetah* has, of course, been well insulated from the effects of its weapons. Apart from its electricity-based armament, the remaining weapon load of the *Lightning* is solid and reliable. A sturdy light autocannon and a single anti-personnel grenade launcher provide a good backup for those few occasions when the opposition is not affected by the discharges of the whip or the grenades.

The few *Lightning Cheetahs* currently in existence are usually used as showpieces by the CNCS government and rotated through the Northern cities' garrisons. Against standard military practice, some are even used for flashy demonstrations, although never in actual live-fire events. The *Lightning* has undergone special field tests involving various captured Southern Gears and has demonstrated its effectiveness, if a bit too "dramatically" for proper battlefield use. The speed and agility of the *Cheetah* chassis, combined with the relatively long range and dramatic effect of the haywire grenades have sold the design to many of the brass, and contracts which will make the *Lightning Cheetah* available as a standard choice for succesful military duelists should not be long in coming.

Vehicle Specifications

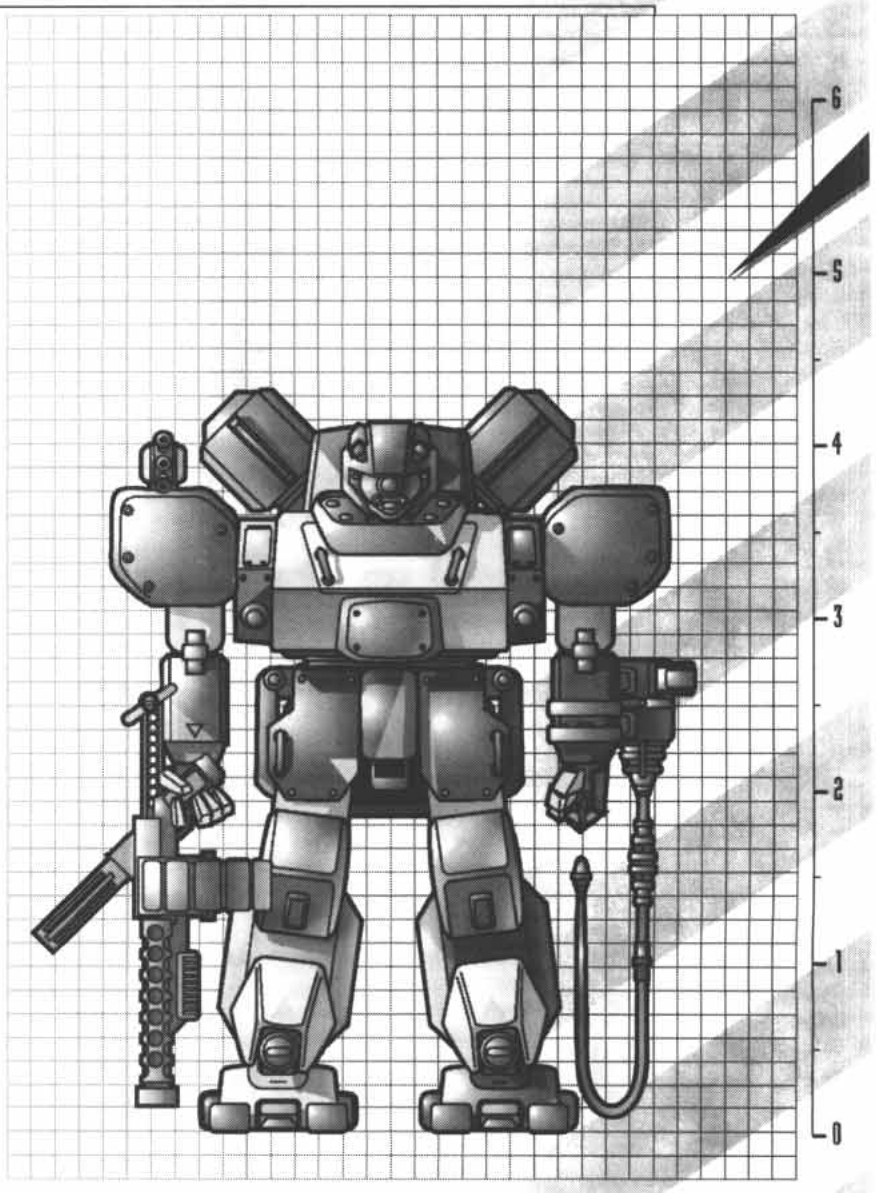
Code name:	Lightning Cheetah
Production code:	HACS-01LG-HW
Production Type:	Limited Production
Cost:	2,146,620 marks
Manufacturer:	Shaian Mechanics
Use:	haywire Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5225 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LGL (F, 10 Haywire grenades), APGL (FF, 6 grenades), HWP (F, 12 charges), LAC (F, 30 rnds), Haywire Resistant
Remove	DPG, LRP/24, Target Designator, ECM
Change	n/a
Modified Threat Value	716
Offensive	779
Defensive	800
Miscellaneous	568

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	1

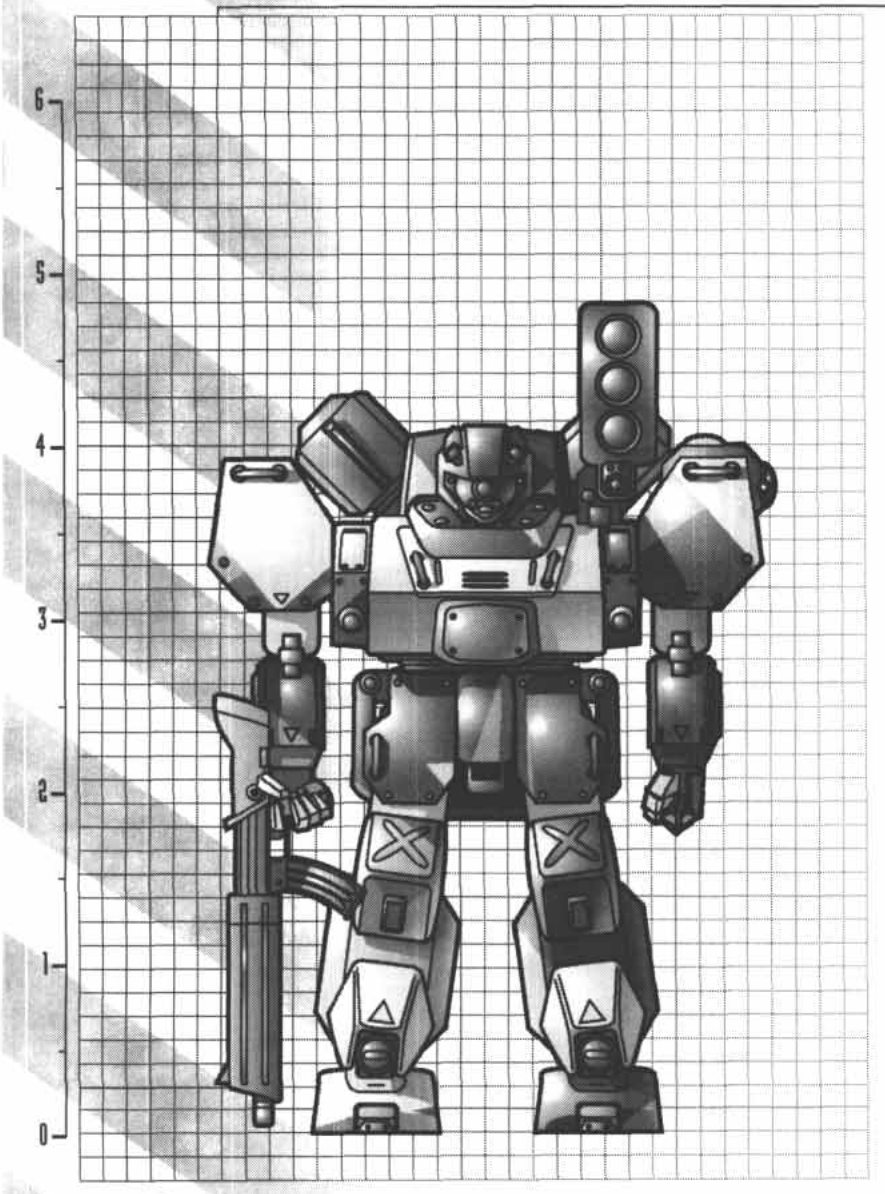


Bryce Hubbard (order #5318102)

4.2.12 HACS-01LG-EWH WHITE CAT EWH

While the *White Cat* and its recent *Silver Cat* variant are designed primarily for offensive electronic warfare, with a secondary use in defensive electronic warfare, Northern Guard high command has become increasingly worried about the danger from Southern electronic warfare units such as the *Chatterbox*. A program is underway to develop a Gear dedicated to eliminating these enemy units, and the *White Cat* has formed the basis of this program, leading to the development of the *White Cat Electronic Warfare Hunter* or *White Cat EWH*. The new model uses an upgraded electronic counter-counter-measures pod able, in the hands of a skilled operator, to consistently defeat the ECM package employed by the *Chatterbox*. The mission profile of the *EWH* is not only to counter Southern ECM efforts, but to destroy the units responsible. To this end, the *White Cat*'s usual light rocket pod has been replaced by a sealed launch bin containing three DiMaean Raptor-9 radiation-homing missiles. These missiles relentlessly home in on units employing emission-based electronics, including active sensor sweeps, communications, ECM jamming and ECCM signal boosting. When ECM coverage begins, the *White Cat EWH* can launch a missile almost blind, confident that it will home in on the strongest signal on the battlefield: the jamming noise. The *EWH* also retains its own ECM capabilities and a target designator for guiding in other munitions.

The field testing of the unit during TN 1932 proved extremely successful, granting Northern forces a very noticeable electronic warfare edge which translated into victory on the battlefield. The DiMaean missiles and other parts of the *White Cat* system remain quite rare, however, and despite the fact that it is now a standard model, very few *EWHs* are currently in service. The Guard is trying to reach an agreement with Shaian to increase production in the face of rising hostilities. DiMaean Missile Systems is the weakest link in the chain and may be unable to meet production requirements, so insiders predict a Shaian buy-out of the Norlight weapons manufacturer in the near future.



Vehicle Specifications

Code name:	White Cat EWH
Production code:	HACS-01LG-EWH
Production Type:	Limited Production
Cost:	4,596,979 marks
Manufacturer:	Shaian Mechanics
Use:	electronic warfare hunter Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5300 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (91.6 kph)
Deployment Range:	600 km
Sensor Range:	140 hexes/7 km
Communication Range:	600 hexes/30 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add:	LAC (F, 40 shells), AGM (F, 3 missiles, Sensor Homing Ammo), Ablative Armor (Rating 3, 4 arcs), ECCM (Rating 4), Searchlight (Rating 2), Exposed Auxiliary System, Vulnerable to Haywire Effects
Remove:	DPG, LRP/24
Change:	Upgrade ECM to 4, increase Sensor Range to 7 km, increase Comm Range to 30 km
Modified Threat Value:	1254
Offensive:	2314
Defensive:	800
Miscellaneous:	648

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.2.13 HACS-01LG-EW/A SILVER CAT

White Cats have been deployed closer to the forefront of battles than the designers originally intended, exposing the sensitive units to damage from heavy enemy fire. The Gear's armor protection is considered weak for a frontline vehicle. Shaian Mechanics has addressed this complaint by creating a *White Cat* with 30% more armor, called the *Silver Cat*. Originally the design called for reactive armor, but the blowback from the charges tended to damage the Gears in the immediate vicinity and the very systems the armor was supposed to protect, so the chassis was redesigned more economically, and securely, with composite armor inserts. The inserts are only apparent on the front torso, where room had to be made for the armored panels in front of the cockpit. Though a bit slower and less maneuverable than the *White Cat*, the *Silver Cat* is considered one of the most balanced designs in current production. *Silver Cats*, which entered production in TN 1932 and are so far only in limited distribution, are most often assigned to dedicated front-line electronic warfare teams of the Northern Guard.

The armor of the *Silver Cat* and its still considerable (but reduced) speed and maneuverability has given the units who possess it the ability to safely and effectively bring powerful electronic warfare capabilities to the front line and even into the enemy's midst. While the dedicated electronic warfare team is the current deployment of choice for the *Silver Cats*, some commanders are experimenting with a different tactical use. Using *Silver Cats* in conjunction with strike Gears such as the *Assault Grizzly* and *Strike Jaguar*, Northern commanders feel they can mount a successful drive through enemy forces targeting command and control systems. The ECM screen established by the *Silver Cat* and the heavy fire-power of the assault units may well be able to cut a swath through enemy formations — especially if several such units can be fielded simultaneously. Colonel Selene Münschtradler of the 33rd Heavy Gear regiment — the *Roving Guns* — is rumored to be readying a test of this new attack procedure on unsuspecting Southern forces.

Vehicle Specifications

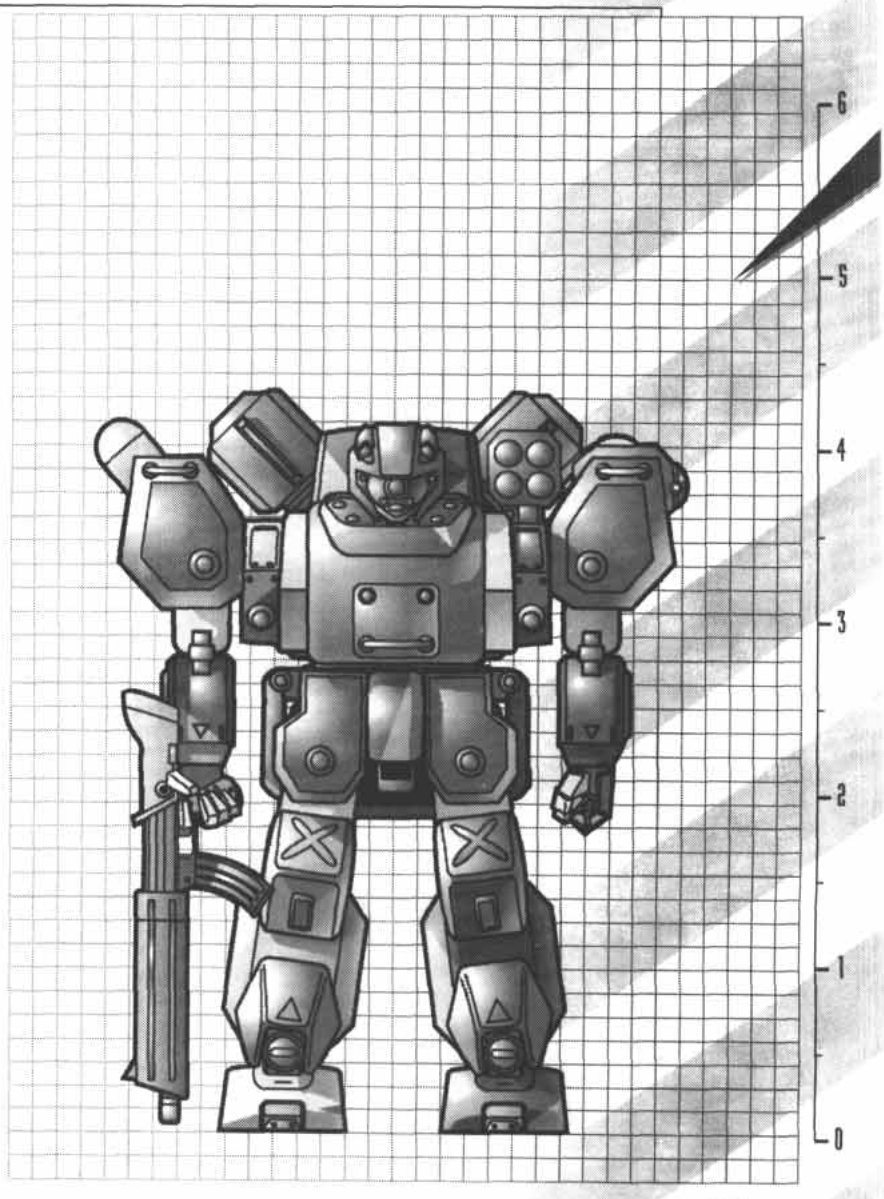
Code name:	Silver Cat
Production code:	HACS-01LG-EW/A
Production Type:	Limited Production
Cost:	1,347,424 marks
Manufacturer:	Shaian Mechanics
Use:	electronic warfare Gear
Height:	4.1 meters
Width:	3.3 meters
Average armor thickness:	20 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5710 kg
Primary Movement Mode:	Walk (55 kph)
Secondary Movement Mode:	Ground (78 kph)
Deployment Range:	600 km
Sensor Range:	140 hexes/7 km
Communication Range:	600 hexes/30 km
Powerplant:	S-V820S V-Engine
Horsepower:	425 hp

Modifications

Add	LAC (F, 40 shells), LRP/8 (F, 8 rockets), ECCM (Rating 2), Searchlight (Rating 2), Satellite Uplink, Exposed Auxiliary System, Vulnerable to Haywire Effects
Remove	DPG, LRP/24
Change	Upgrade ECM to 4, increase Sensor Range to 7 km, increase Comm Range to 30 km, upgrade Base Armor to 13, downgrade Top Walker Speed to 55 kph, Top Ground Speed to 78 kph, downgrade Maneuver to +1
Modified Threat Value:	500
Offensive:	396
Defensive:	425
Miscellaneous:	830

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	3

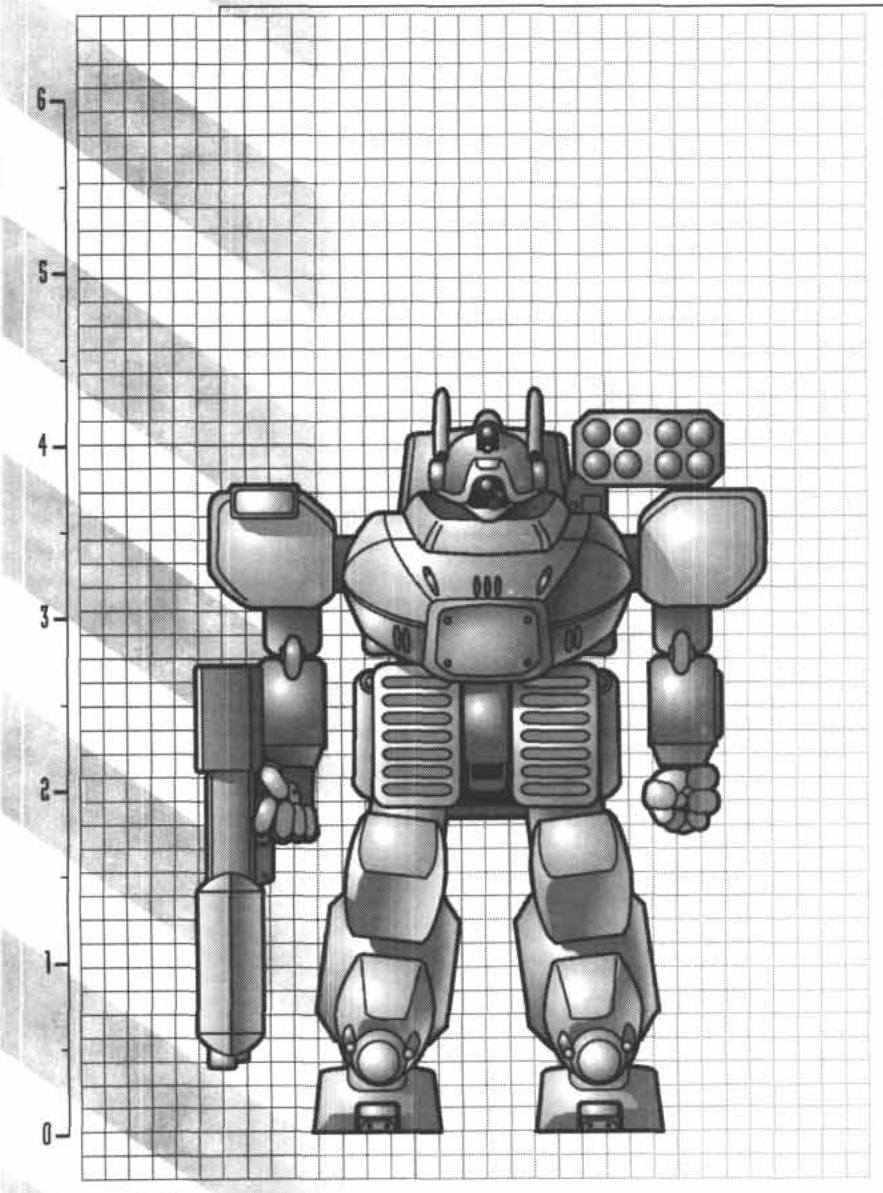


Bryce Hubbard (order #5318102)

4.3 HACS-01LG-STH BLACK CAT

Probably one of the most mysterious machines presently in use in any Terranovan army, the *Black Cat*'s history is shrouded in secrecy. The tale began in the last days of the War: the allied forces of Terra Nova needed a fast, discreet Gear to infiltrate Earth's few remaining defense lines — all of them under heavy surveillance — and either report on enemy activity or conduct raids. The machine had to be light, maneuverable and very adaptable. The modern *Jaguar* proved to be relatively too slow and cumbersome for the job, though its armor afforded at least a decent amount of protection. Next in line for consideration was the *Cheetah*: it could run quite fast (65kph) and was considered one of the most agile Gears in service. Mobility won over brute strenght and it was decided to fund a crash development program that would start with the *Cheetah* frame and create the required raider/recon unit. From the start, it was decided that the new Gear would feature some of the best stealth technology available in that field. If it could not carry heavy armor, at least it would not be exposed to enemy fire as much.

Shaian Mechanics set out to build the new machine's frame, while Hyperion Werks handled the Gear's stealth systems and outer covering. Racetech, a well-known tire company, supplied the numerous high grade rubberized parts required by the design, even though they did not know much about the project. The *Black Cat*'s body panels were slightly more angular than its forebears' and their relative lack of surface features hid a remarkebly complex composite structure. The exact nature of the materials used for the body panels remains jealously guarded by Hyperion Werk's engineers and the Northern military command, even cycles after the end of the War. Rumors have it that it would be a radar absorbing variant of the armoplast material already widely used by Terranovan manufacturers, but no one is talking. The final head module was totally different from the one sported by the *Cheetah*, with new and updated sensors. A superconductive battery, which can be recharged via a small gas turbine, furnishes the energy, allowing nearly complete stealth if necessary.



Vehicle Specifications

Code Name:	Black Cat
Production code:	HACS-01LG-STH
Production Type:	Limited production
Cost:	2,418,000 marks
Manufacturer:	*Shaian/Hyperion/Racetech*
Use:	stealth Heavy Gear
Height:	4.1 meters
Width:	2.9 meters
Average armor thickness:	20 mm
Armor material:	secret
Standard operational weight:	4930 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (92 kph)
Deployment Range:	250 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	*GT1009 Gas turbine w/batteries*
Horsepower:	415 hp

Weapon Payload

Name	Ammunition Payload
MS225 Autocannon	40 rounds
RPS-107 Stealthbox	16 rockets
M-2S Hand Grenade	4 grenades
HW-VB-3S Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

Most of the operations conducted by *Black Cats* during the War remain secret, buried in the files of some shadowy Northern intelligence service department. What few reports came to the public ear were always spectacular tales of daring, and the reputation of the *Black Cat* grew steadily, even though the total number of people that could claim to have actually seen one from close by is probably in the low hundred. Stories were often told by soldiers sitting around campfire, of how their unit, stranded in hostile ground and taking heavy incoming fire, was suddenly rescued by a lone black Heavy Gear. It would jump out of nowhere, dancing around the deadly barrage of tracers of the enemy forces, then proceed to cut them down where they stood with autocannon fire and vibroknife slashes. Then it would vanish once more into the night. Such tales were often the fabulations of war-weary spirits, but there is certainly some elements of truth behind them. It was confirmed, long after the War, that some *Black Cat* pilots had used their machines' special characteristics to conduct such raids.

The *Black Cat* does officialy exists, but its use is shrouded in secrecy, especially since the end of the War. *Black Cats* are deployed in remote bases with heavy security, and no one is allowed to step even remotely near. Defenses are rumored to include even deadly minefields, but no one has made it this far: they are always warned off by pleasant but firm guards. Some outraged citizens are accusing the government of a continual cover up, but few people listen to them, especially when they declare that the never-seen *Black Cats* must surely be guarding a captured alien spacecraft or some such. The *Black Cat* is suspected by *serious* military sources of being used as a very specialized search and destroy unit for various black operations, but no formal proofs of such operations ever being done in the South territories has been found yet. There are no officially acknowledged variations on the *Black Cat* chassis, though military observers and enthusiasts alike can point out to a dozen potential configurations for the machine. Very few pilots are assigned Black Cats; they are usually veterans who have a very high security clearance.

General Stats

Threat Value:	806
Offensive:	415
Defensive:	802
Miscellaneous:	1200
Size:	6
Original Default Size:	9
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	6
Top Speed:	11
Secondary Movement Mode:	Ground
Combat Speed:	8
Top Speed:	15
Maneuver:	+2

Electronics

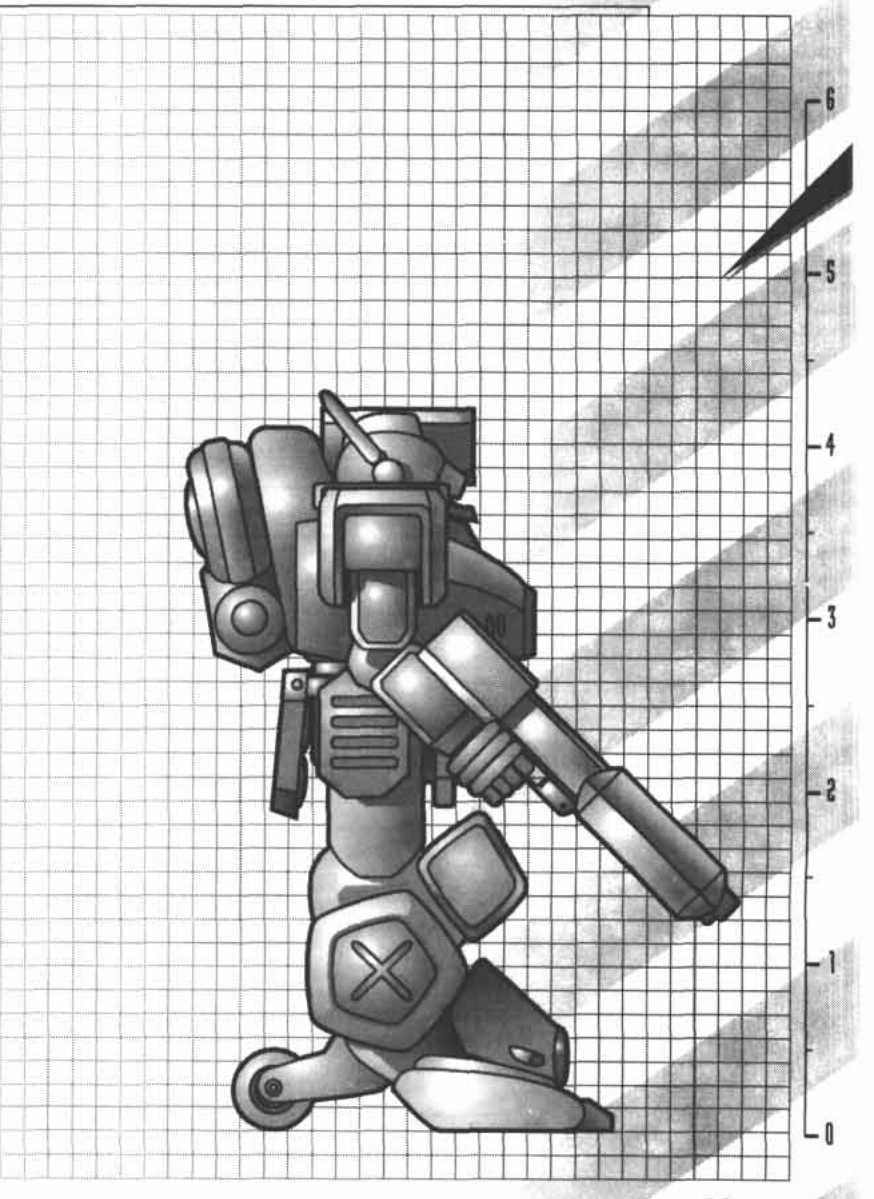
Sensors:	+2
Communications:	+1
Fire Control:	0

Armor

Light Damage:	10
Heavy Damage:	20
Overkill:	30

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
MS225 Autocannon	LAC	Forward	1	40
RPS-107 Stealthbox	LRP/16	Forward	1	16
HW-VB-3S Vibroknife	VB	Forward	1	-
M-2S Hand Grenade	HG	Forward	4	-

Perks

Name	Rating	Game Effect
ECM	2	Jam enemy sensors and communications
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	6	Can punch
Stealth	6	Add to concealment
Target Designator	2	Designate targets for guided weapons

Flaws

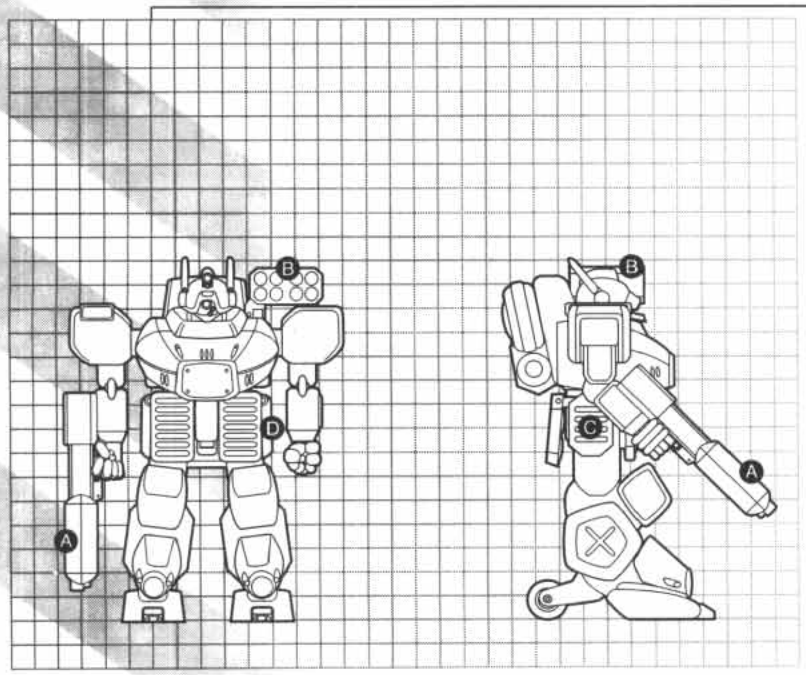
Name	Rating	Game Effect
Annoyance	1	Cramped cockpit; maximum pilot Build is 0
Exposed Aux. System	-	Damage is one step worse

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

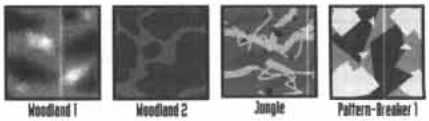
Name	Modified TV
Add Smoke Launchers	828
Add Autopilot	927
Add APGL (FF, 6 grenades)	812
Add two grenades	813



Weapons Location Diagram

A	MS225 Autocannon
B	RPS-107 Stealthbox
C	M-2S Hand Grenade
D	HW-VB-3S Vibroknife (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.3.1 BLACK CLAW

Although *Black Cats* are usually configured for the particular tasks of each mission, one particular variant is so effective against personnel targets at long range that it has been standardized and codified under the appellation "Black Claw." The entire project has the highest security clearance, and few know that some of the *Black Cats* in existence are registered in the most secret northern archives as deadly snipers. Though no known frontline unit operates one, Northern Intelligence is rumored to possess three of these machines. Most people "in the know" just assume that the reports or rumors concerning a light stealth sniper have to do with standard *Back Cats* out on a special mission. The operational capabilities of the *Black Claw* thus remain pure speculation, though experts agree that they are probably quite similar to those of the standard *Black Cat*.

The *Black Claw* special operation vehicle is based around a highly powerful and accurate rifle. Striking from as far as 1500 meters away, the *Claw* is deadly accurate in undercover field operations. The Riley MS225 Autocannon and the RPS-107 Stealthbox have been replaced by a gyro-stabilized Riley RP497 Sniper Rifle with a special Sharpe PSE-5B external sensor pod for increased accuracy over long range. The pod is exposed on the side of the gun barrel, making it prone to damage; even some normal operating shocks may slightly jar it out of alignment, forcing the pilot to do some manual adjustments. The rifle is covered with stealth materials, like the original *Black Cat*'s MS225 Autocannon, so as not to break up the Gear's low signature. The RP497 can load a large variety of ammunition types and is capable of penetrating most armored vehicles to strike at its targets. Boosted shells are certainly used when extreme range is required, and compressed penetrator alloy shells have been ordered several times by the Northern Guard from a manufacturer in Valeria. Investigators invariably lose traces of such shipment in a series of warehouse on the outskirt of town; the shipments are written off as lost or stolen.

Vehicle Specifications

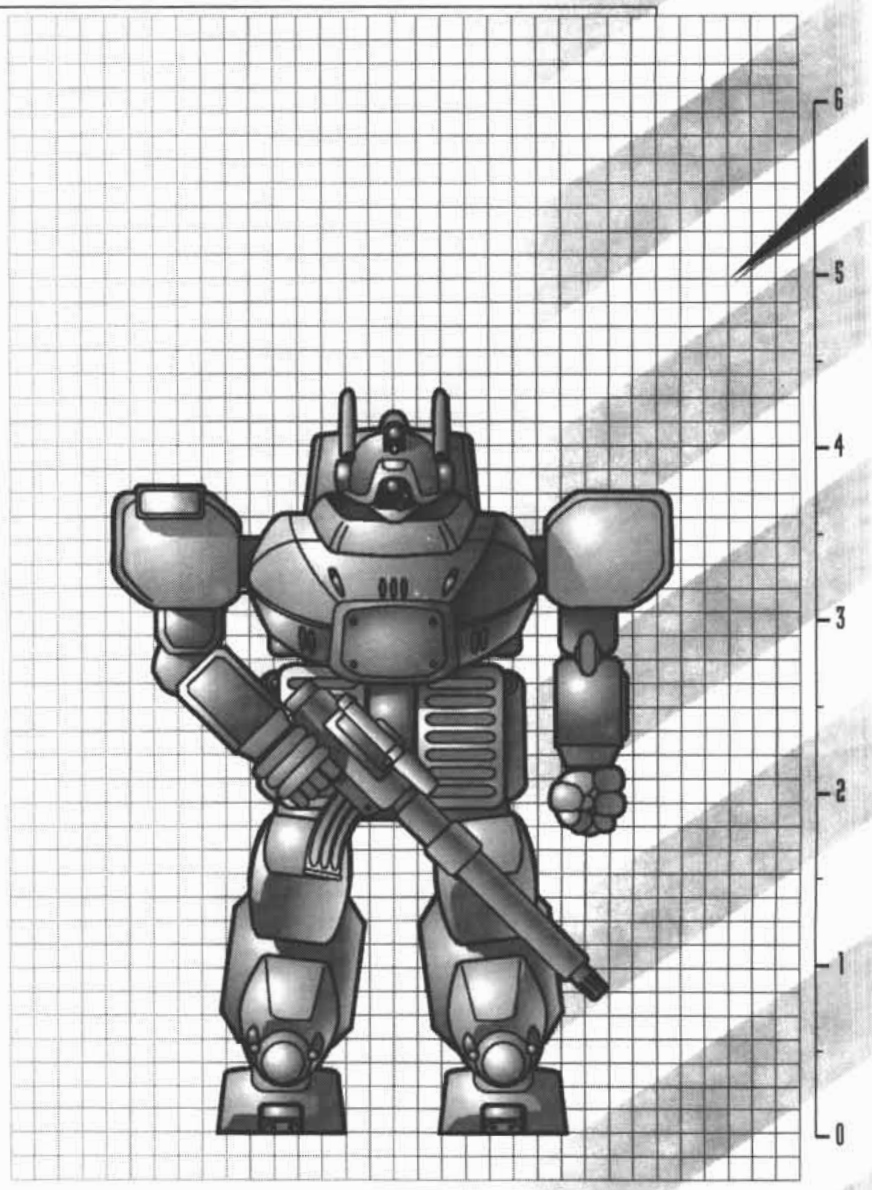
Code Name:	Black Claw
Production code:	HACS-01LG-STH/SNP
Production Type:	Limited production
Cost:	2.534,081 marks
Manufacturer:	Shaian/Hyperion/Racetech
Use:	stealth sniper Gear
Height:	4.1 meters
Width:	2.9 meters
Average armor thickness:	20 mm
Armor material:	secret
Standard operational weight:	4820 kg
Primary Movement Mode:	Walk (65 kph)
Secondary Movement Mode:	Ground (92 kph)
Deployment Range:	250 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	GT1009 Gas turbine w/batteries
Horsepower:	415 hp

Modifications

Add:	HRF (F, 40 shells), Stabilizer mount (HRF), Sniper Systems (HRF), Exposed Fire Control System
Remove:	LAC, LRP/16
Change:	n/a
Modified Threat Value:	689
Offensive:	321
Defensive:	800
Miscellaneous:	945

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	1

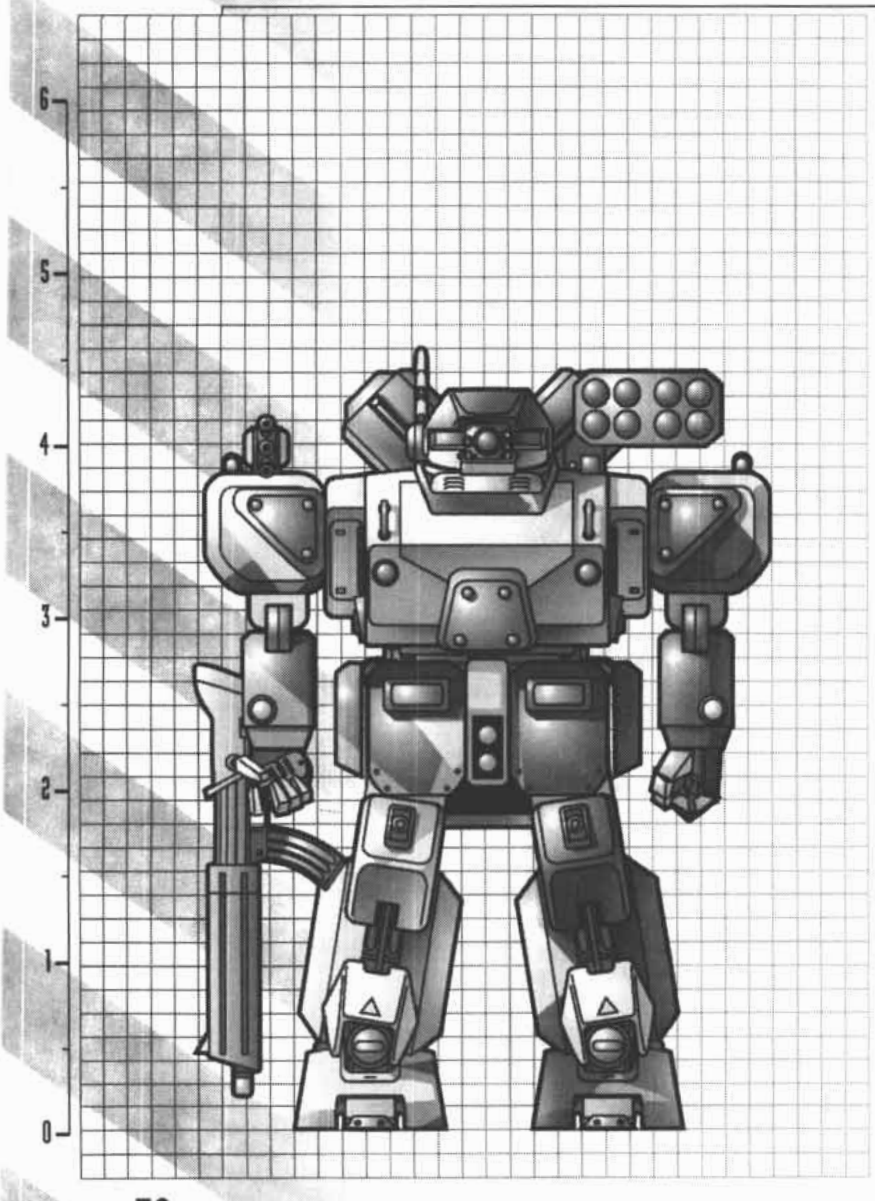


Bryce Hubbard (order #5318102)

4.4 HACS-01MG-MP HUNTER

The *Hunter* Gear is the first exclusively military walker machine on Terra Nova. The father of all the subsequent designs of the North, the "old man" of the Gear world remains among the most commonly seen Gear designs in active military service. In its 250 cycles of service the *Hunter* chassis has been refitted several times to keep it competitive with more recent designs, but its greatest strength has always been its versatility and simplicity of design. Created when there were no scout/recon or fire-support Gears, the *Hunter* had to manage all by itself or in conjunction with more traditional armored or infantry forces. Although a great challenge to create, the *Hunter* was designed to be relatively easy to maintain and upgrade, allowing it to remain in service for decades without being refit. The simplicity of design has also meant a proliferation of specialized variants designed to excel at specific combat tasks. The standard *Hunter* (actually the Mark II, introduced in TN 1852) remain in wide usage, however, even in the face of more advanced machines.

In its standard configuration, the *Hunter* Mark II serves as a "general purpose" or trooper Gear. Its field of duties mimic all those of standard infantry as well as some tasks traditionally entrusted to armored units. These tasks include short to medium-range patrol, defending territory and rapid assault. There are Gears and other units better suited to individual tasks, but the *Hunter* remains versatile enough to handle them all and so is often used in uncertain circumstances. Typically the *Hunter* will be used for patrol and light assault duties, often in conjuncture with some scout and fire-support units. The standard armament of the *Hunter* reflects its generalized military duty. A Riley M222 autocannon rifle acts as the primary weapon, providing a good combination of firepower and range against other Gears and light-armor targets, while a RP-109 Pepperbox provides added punch and limited indirect fire capabilities. Mark IV anti-personnel grenade launcher provides additional defense against infantry, while several Gear-scale M-2A hand grenades and a vibroknife allow the *Hunter* to enter close combat when necessary.



Vehicle Specifications

Code Name:	Hunter
Production code:	HACS-01MG-MP
Production Type:	Mass Production
Cost:	221,590 marks
Manufacturer:	Northco
Use:	trooper Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6627 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Weapon Payload

Name	Ammunition Payload
M222 Autocannon rifle	60 rounds
RP-109 Pepperbox	24 rockets
MK IV Grenade Launcher	6 grenades
M-2A Hand Grenade	3 grenades
HW-VB1 Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

Without a doubt, the *Hunter* has seen more action than any other Northern combat Gear. First deployed during border conflicts between the expansionist United Mercantile Federation and the other major Northern leagues, the *Hunter* first encountered its Southern counterpart (the *Jäger*) during the Merchant War of TN 1686 and TN 1688. It was the Southern success in that war, using a greater number of Gears in specialized regiments, that cemented the belief that the *Hunter* — and later other models — would form one of the important centers of the Northern military complex. As the Confederated Northern City-States was formed, the *Hunter* spread to the other Northern leagues and soon could be found across the hemisphere. The devastating battles of St. Vincent's War were also fought by the *Hunter* and the wide-scale warfare saw the machine begin to spread into the Badlands. By the time the Northern economy had rebuilt itself, many desert communities had acquired salvaged Gear and a new market for Northco had opened up. The Gear was modernized and renamed the *Hunter* Mark II in the TN 1850s in response to the redesign of the Southern *Jäger*.

In the cycles before the War of the Alliance, many analysts were claiming that the *Hunter*'s days were numbered. The *Jaguar* and *Cheetah* had been introduced and were ushering in a new standard for military walker performance. The hard times of the war, however, proved the endurance of the "old man" of Northern Gears. Expensive spare parts and complex repair procedures limited the availability and service of the more sophisticated machines and the *Hunter* continued to shine. Simplicity in design and the familiarity of the machine to almost every military technician on the planet made the *Hunter* very popular with units strapped for supplies. The success of the *Hunter* showed that high-performance vehicles and low-maintenance ones can coexist in a military force and Northco is currently examining the possibility of creating a *Hunter* Mark III which would feature both qualities. Even if the *Hunter* is eventually phased out of elite units, it will have a home with civil defense and Badlands militias. There are many communities that will welcome this time-tested design to ensure their protection against Rovers.

General Stats

Threat Value:	380
Offensive:	450
Defensive:	298
Miscellaneous:	392
Size:	6
Original Default Size:	7
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	4
Top Speed:	7
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	12
Maneuver:	0

Electronics

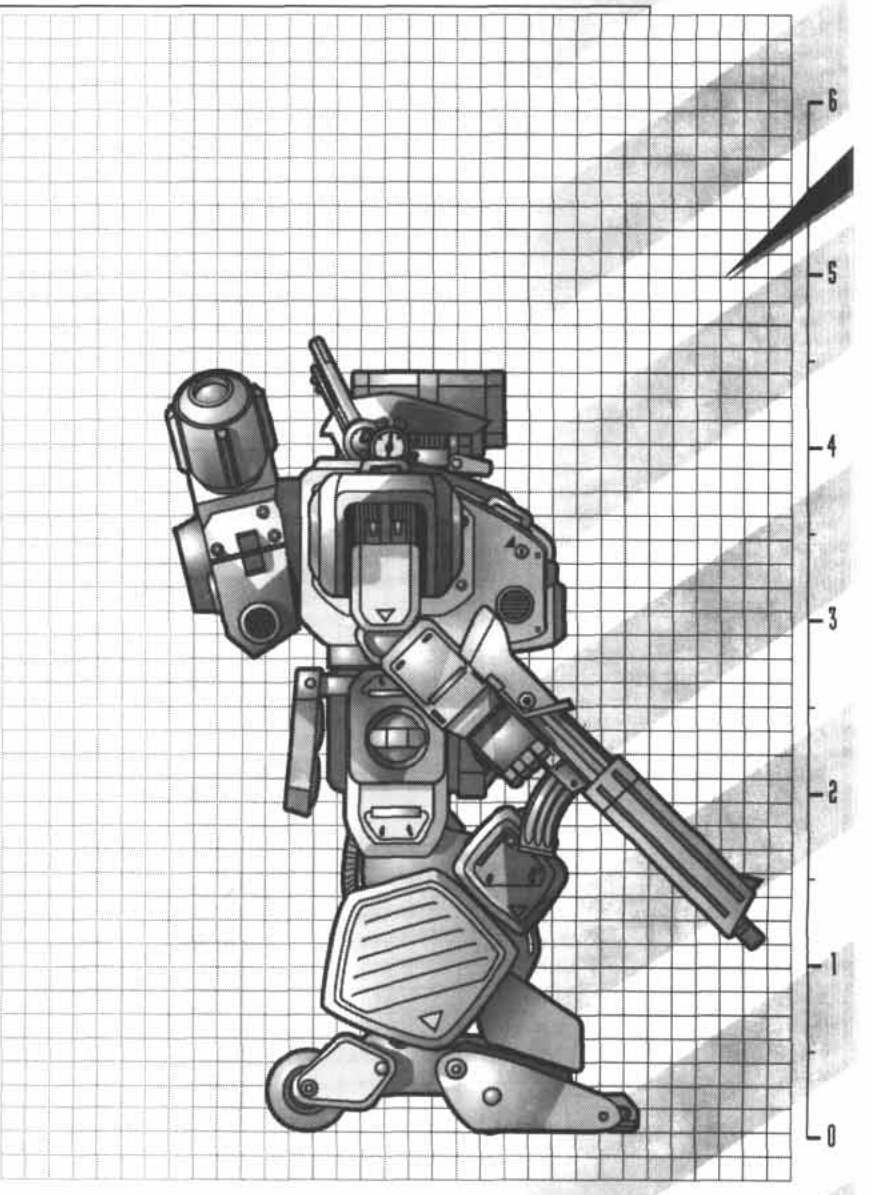
Sensors:	0
Communications:	0
Fire Control:	0

Armor

Light Damage:	15
Heavy Damage:	30
Overkill:	45

Vehicle Availability

Availability Threshold:	1
Maximum Number of Units in the Field:	Unlimited



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	QTY	Ammo
M222 Autocannon Rifle	LAC	Forward		60
RP-109 Pepperbox	LRP/24	Forward	1	24
MK IV Grenade Launcher	APGL	Fixed Forward	1	6
M-2A Hand Grenade	HG	Forward	-	3
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effect
Easy to Modify	-	+2 to Repair and Modify rolls
Hostile Environment Protection	-	Desert
2 x Manipulator Arm	6	Can punch

Flaws

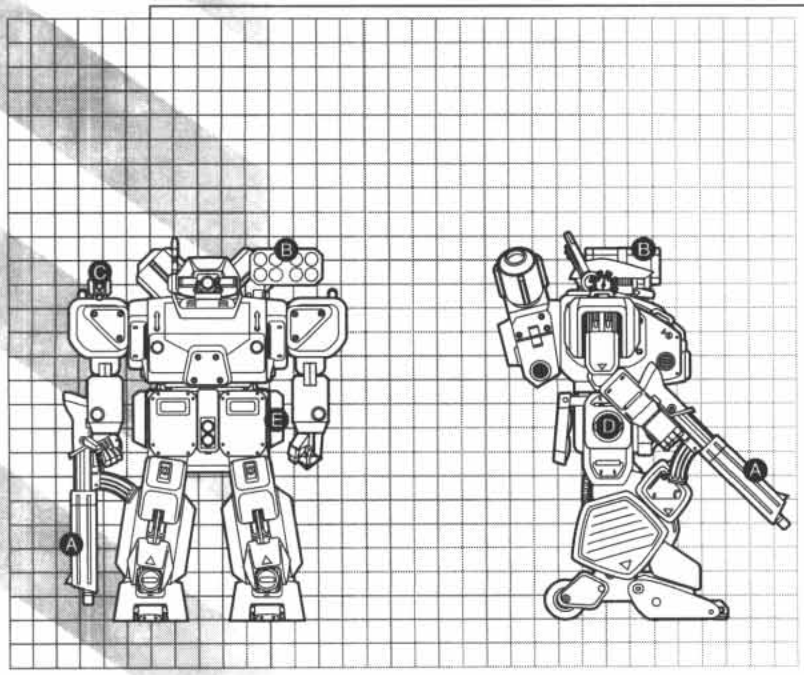
Name	Rating	Game Effect
None	-	-

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

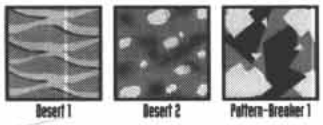
Name	Modified TV
Add Armor Jacket (Reinforced Location Armor 2: Crew)	392
Add 3 hand grenades	391
Add Smoke Launchers	392
Add Camo Netting	392
Add Pack Gun (F, 30 rounds)	401
Add 2 Light Panzerfausts (F)	389



Weapons Location Diagram

A	M222 Autocannon rifle
B	RP-109 Pepperbox
C	MK IV Grenade Launcher
D	M-2A Hand Grenade
E	HW-VB1 Vibroknife

Typical Camouflage



Bryce Hubbard (order #5318102)

4.4.1 HACS-01MG-FU ARMORED HUNTER

The "Full Armor" *Hunter*, also known as "the armored can," is one of the rarest *Hunter* variants of all. The FU program was an attempt to create a new type of *Hunter* that would be able to survive anything short of the firepower of a tank. Although the resulting armored shell was fairly impervious to Gear-class weaponry, the machine proved to be about as agile as the average herding springer. Its poor performance was a reflection of the extreme weight of its armor. The torso and lower legs were covered with plating that almost doubled in thickness, compared to the old *Hunter* plates. Both shoulders and generator housings received armored covers, and the skirts were elongated and thickened. A cast metal "helmet" was fitted on the head. The resulting machine was well protected, but it could barely move about. In recalibrating the actuators to support the higher load, the engineers were forced to slow them down to provide the required torque, severely hampering performances. The weapons were also traded for armored versions, namely the M226 armored autocannon and the RP-109A Iron Pepperbox.

The machine was developed in TN 1702, relatively soon after the regular *Hunter*, and was intended for frontline duties. It was to be assigned to officers when they would spearhead line-breaker attacks, but the high officer casualty rate confirmed that it would make a better sentry machine once equipped with the appropriate weapon payload. Even if it achieved operational status, the FA was almost never used in large-scale battles. It was considered a failure and was retired soon after it entered service. The remaining Armored Hunters are now used as sentinels for quiet outposts or supply depots or as trainers. Because of their lack of combat experience, examples these machines with evolving NNets are often considered "dumb" by experienced pilots and often have multiple "bad habits" picked up from countless rookies. Veterans prefer to stay clear of these machines. Only a few *Armored Hunters* still exist in their original condition; most were converted to the more useful *Bearhunter* configuration. In the end, many just simply ended up as spare parts.

Vehicle Specifications

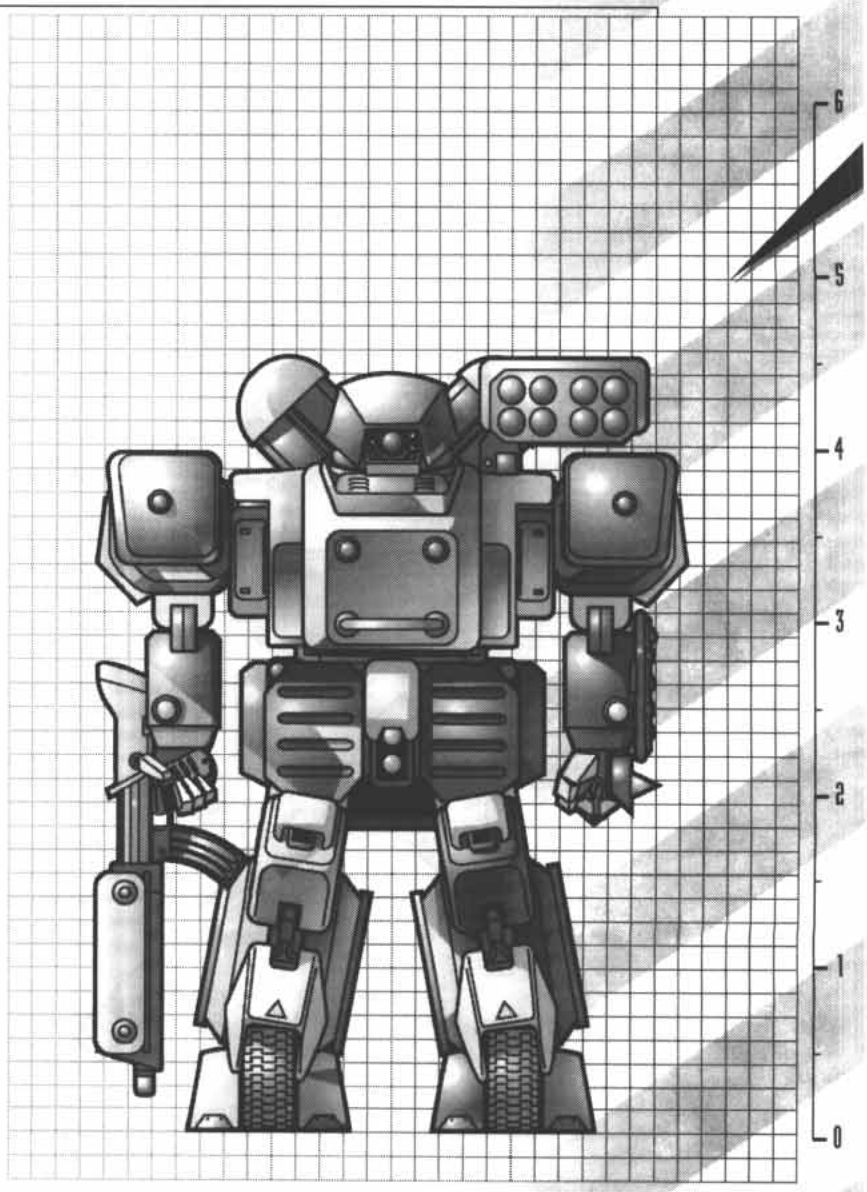
Code Name:	Armored Hunter
Production code:	HACS-01MG-FU
Production Type:	Mass Production
Cost:	174,000 marks
Manufacturer:	Northco
Use:	assault Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	8307 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (66 kph)
Deployment Range:	480 km
Sensor Range:	30 hexes/1.5 km
Communication Range:	160 hexes/8 km
Powerplant:	S-V950B V-Engine
Horsepower:	450 Hp

Modifications

Add:	High Towing Capacity (double), Shielded Weapons, Chassis Reinforcement, APM (FF, 6 rnds)
Remove:	Easy to Modify
Change:	Armor to 17, Top Ground Speed to 11, Top Walker Speed to 6, Sensors to 0/1.5km, Communications to -1/8 km, Maneuver to -1, Deployment Range to 480 km
Modified Threat Value:	348
Offensive:	465
Defensive:	230
Miscellaneous:	350

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5

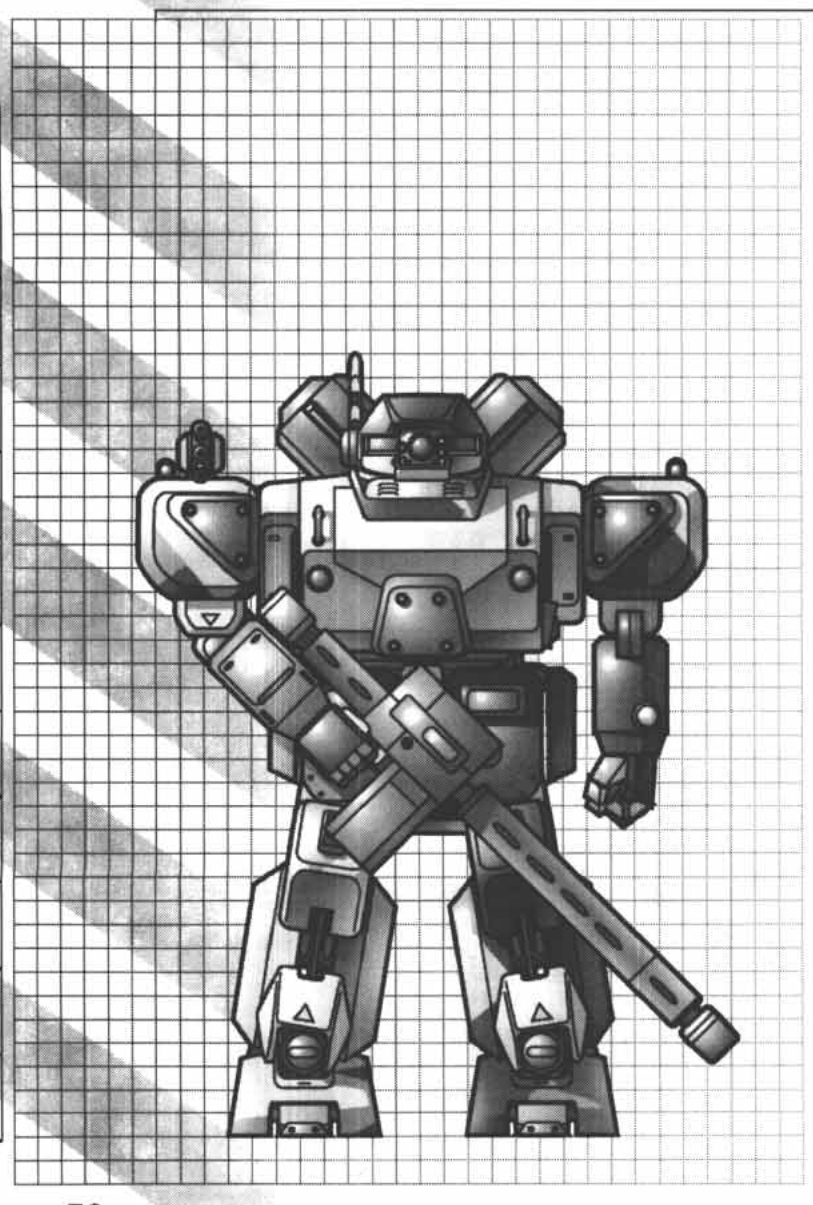


Bryce Hubbard (order #5318102)

4.4.2 HACS-01MG-AST ASSAULT HUNTER

The *Assault Hunter* is in almost every way a standard *Hunter*-class Gear, with only a simple change in weapons load. In some ways, however, it is a direct successor to the venerable *Hunter Commando*. Too costly to continue production during the dark days of the War of the Alliance, the *Commando* had its production stopped after the sixth manufacturing run. The Terranovan military infrastructure was bearing the brunt of the Terran assault, and could not afford to waste what little high technology they had on an older design; the expensive parts the *Commando* required were instead used on state-of-the-art machines, such as the *Jaguar*. Still, a machine carrying high firepower was required for anti-armor activities and it needed to be fielded quickly. If it could not deliver it through pinpoint accuracy, it would have to do it by brute force.

Somewhat simpler to manufacture (i.e. cheaper) than its predecessor, the *Assault Hunter* saw its M222 autocannon and RP-109 rocket pod were replaced by a 106 mm LGPC Snub Cannon, which packed sufficient firepower to take on even a main battle tank. A three-shell clip, containing both propellant and ammo, was slung under the barrel of the weapon. . Some rare machines, especially the ones that were commissioned for frontline assaults, had reactive armor laid on their torso. The armored jacket, a standard feature on many strike models, was rarely used. Although not as powerful or versatile as the *Hunter Commando*, the Assault Hunter proved to be quite useful during the War of the Alliance and is now more common than its sibling. Many of the *Hunters* in service today are *Assault* variants, serving as heavy weapon gunners in Gear squadrons. The most annoying flaw of the design is the extremely limited ammunitions supply and many pilots have taken to supplementing the standard load with a second three-round clip attached to the armor skirt (despite dangers of a devastating detonation) or bringing along a M25 pack gun as a back-up weapon. A more permanent solution is provided by the *Assault Hunter AC* variant.



Vehicle Specifications

Code Name:	Assault Hunter
Production code:	HACS-01MG-AST
Production Type:	Mass Production
Cost:	290,042 marks
Manufacturer:	Northco
Use:	assault Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6525 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	SC (F, 3 shells)
Remove:	LAC, LRP/24
Change:	n/a
Modified Threat Value:	435
Offensive:	615
Defensive:	298
Miscellaneous:	392

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.4.3 HACS-01LG-AC ASSAULT HUNTER AC

The *Assault Hunter Ammunition Carrier* was designed to operate alongside the basic *Assault Hunter*, filling ammunition resupplying duties in combat zones. Internal ammunition capacity for the Snub Cannon on basic *Assault Hunters* is only 3 rounds, and intense combat will deplete it quickly. Additional clips can be carried externally, but many vehicles were lost due to premature ammo detonation caused by a stray enemy hit. The *Assault Hunter AC* is in fact a basic *Hunter* chassis with internal armor reinforcement. A specialized armored container is attached to the back of the machine (gaining the affectionate name of a "butt-pack"), fitted with special internal ammunition storage compartment. The ammunition containment system diverts any explosion away from the cockpit in the event of an accident or damage to the ammunition storage. The pack contains twelve clips, enough to supply a tank-hunting team. To keep the hands of the machine free, the usual Snub Cannon has not been issued to the *Assault AC* and it uses a M25 pack-gun for defensive purposes. Standard operating procedure is to deploy one *Assault AC* as part of one or two-squadron teams of *Assault Hunters*.

Though their tasks are necessary, pilots do not relish assignment to *Assault Hunter AC* Gears, complaining that the *Assault AC*'s pack gun provides insufficient firepower for operations on the forward edge of the battle zone. Military observers have pointed out that the Ammunition Carriers are always surrounded by Gears toting snub cannons, and that these companions should be sufficient protection. Military psychologists realize that much of the complaining comes from the elite warrior culture of tank-hunting teams. To be relegated to a field support duty while squadron-mates rack up the kills (or worse meet their end in combat) is a very difficult duty for a combat pilot to accept. The duty is often rotated among all the pilots for the good of the unit. Current records show that about one in ten *Assault Hunters* is of the AC variant, though production has stopped nearly ten cycles ago. There have been discussions about bringing back the model into production, but the costs of refitting the production lines has so far been a deterrent.

Vehicle Specifications

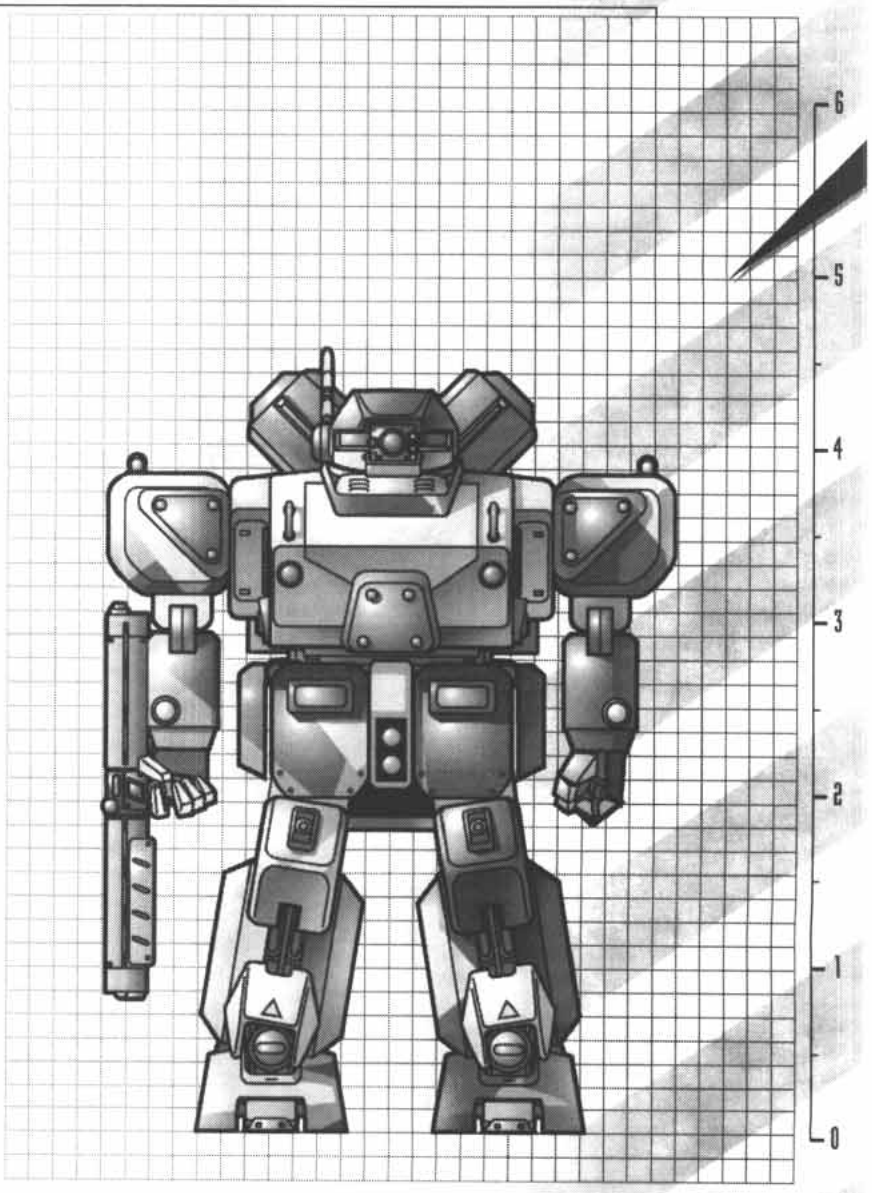
Code Name:	Assault Hunter AC
Production code:	HACS-01MG-AC
Production Type:	Mass Production
Cost:	332,442 marks
Manufacturer:	Northco
Use:	soldier use Heavy Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6917 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	DPG (F, 30 shots), Ammo Storage (80 pts; 12 x 3-round Snub Cannon clips), Ammunition/Fuel Containment System
Remove:	LAC, LRP/24
Change:	Base Armor to 16
Modified Threat Value:	499
Offensive:	223
Defensive:	329
Miscellaneous:	944

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	10

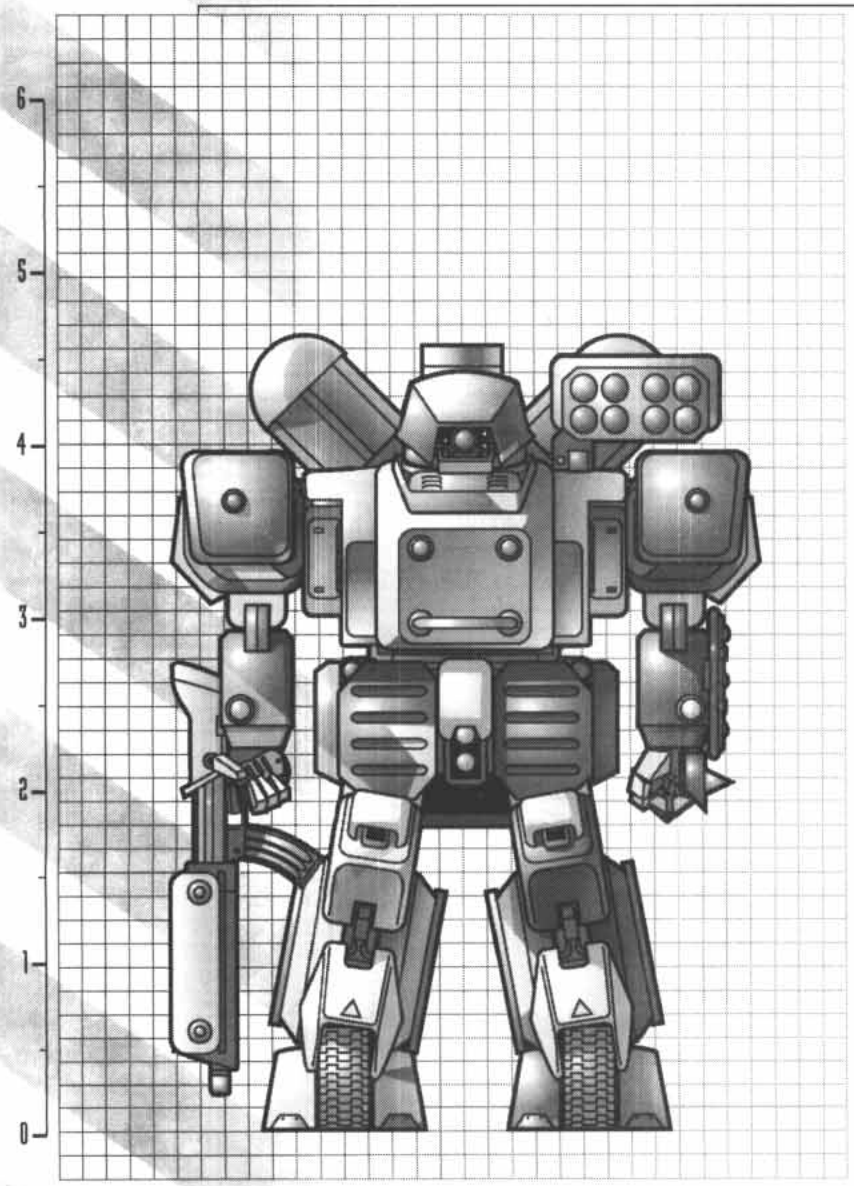


Bryce Hubbard (order #5318102)

4.4.4 HACS-01MG-FU/A BEARHUNTER

Ever since the arrival of the *Armored Hunter*, the armorers of the 33rd HG regiment had been trying to tackle the problem of the high pilot casualty rate. Their *Armored Hunters* were performing poorly, and more than one mission was scrubbed because of "sudden equipment failure." Most officers just shrugged; relieved at not having to send men out to die in underpowered tin cans, they just grabbed the nearest requisition sheet and tried to get new machines for the umpteenth time. The *Armored Hunter* was just far too heavy for its S-V950B engine. The powerplant performed well with the recalibrated actuators, but just could not provide enough power for fast, agile movements. Without the extra power, the *Armored Hunter* was a suicidal machine to pilot, so slow that it could be picked off by enemy Gears despite increased armor and could barely mount a counter-attack. As is often the case with military design flaws, the solution to the problem was discovered by coincidence and in the field.

During a brief exercise with another unit, one of the technicians of the 33rd happened to work on a *Bear* fire support Gear. He was startled to discover that the engine, while a bit larger, had a very similar layout to the S-V950B. Power lines were close by and drive shafts at about the same diameter. After talking it over with the chief tech, the 33rd's commander, Allan Gutarn, arranged to have an S-V790T powerplant requisitioned. The physically larger but more efficient engine, stripped from a decommissioned *Bear*, was hastily bolted into one of the 33rd's Armored Hunter. The consequent improvement in performance was startling, and the *Bearhunter* was born. The S-V790T is larger than the engine compartment would permit, so new engine cowlings had to be designed. Many Bearhunters go around the problem by using the entire Bear backpack assembly. Unfortunately, the new *Armored Hunters* now suffer from the same engine shutdown problems as their *Bear* predecessors. *Bearhunter* pilots consider this a minor flaw. The modified machines of the 33rd HG regiment are now prized by their pilots.



Vehicle Specifications

Code Name:	Bearhunter
Production code:	HACS-01MG-FU/A
Production Type:	Mass Production
Cost:	230,813 marks
Manufacturer:	Northco
Use:	soldier use Heavy Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	8900kg
Primary Movement Mode:	Walk (50 kph)
Secondary Movement Mode:	Ground (78 kph)
Deployment Range:	480 km
Sensor Range:	30 hexes/1.5 km
Communication Range:	160 hexes/8 km
Powerplant:	S-V790T V-Engine
Horsepower:	780 Hp

Modifications

Add:	APM (FF, 6 rnds), CR, HighTowing Capacity (Double), Shielded Weapons, Random Shutdown (Rating 1)
Remove:	Easy to Modify
Change:	Armor to 17, Top Ground Speed to 13, Top Walker Speed to 8 Maneuver to -1, Sensors to 0/1.5 km, Communications to -1/8 km, Deployment Range to 480 km
Modified Threat Value:	396
Offensive:	464
Defensive:	389
Miscellaneous:	334

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	10

Bryce Hubbard (order #5318102)

4.4.5 HACS-01MG-ENG BRICKLAYER

The *Bricklayer* is a specialist engineering unit derived from the *Hunter* military walker. It was first introduced in TN 1738 to gradually replace the older *Prairie Dog* and *Groundhog* civilian work Gear still being used by the Northern military. Although more expensive than its predecessors, the *Bricklayer* is a much more efficient machine with greatly improved electronics and actuator systems. Since most of the basic structure and electronic package has been derived from the popular and versatile *Hunter*, spare parts are plentiful. The *Bricklayer* did undergo some visually obvious changes, however. The engineering vehicle has no canopy or head assembly, and features a reduced sensor system (about half the signal processors and databuses have been removed, compared to the *Hunter*'s system). These costly subsystems were removed because of the *Bricklayer*'s support role, which does not require combat ready sensors. The pilot sits slightly higher than in the *Hunter*, but is protected by a sturdy steel roll cage. The reduced sensor array is mounted directly in front of the Gear torso, just under the cockpit, and is protected by two small crashbars.

The legs of the *Bricklayer* are also fitted with crashbars to give them better protection against the risks of damage inherent to construction work. All armor on the arms and lower body has been removed to save weight, and the *Hunter*'s engine has been replaced by the more powerful S-VI010P. The standard *Bricklayer* is delivered with two standard humanoid arms and a back-mounted crane, but many other options are available, including forklift arms and jackhammers. A number of special features were added after the initial release, among them warning lights, directional blinkers, two manually directed spotlights and a loudspeaker. The *Bricklayer*'s standard factory color is zinc chromate (yellow-green), but many of them are repainted in the traditional orange-yellow color associated with construction work. *Bricklayers* in service with military units in the field adopt whatever camouflage is used by the unit to which they are attached. The *Bricklayer* was developed especially for military use but is now widely available in the civilian market as well.

Vehicle Specifications

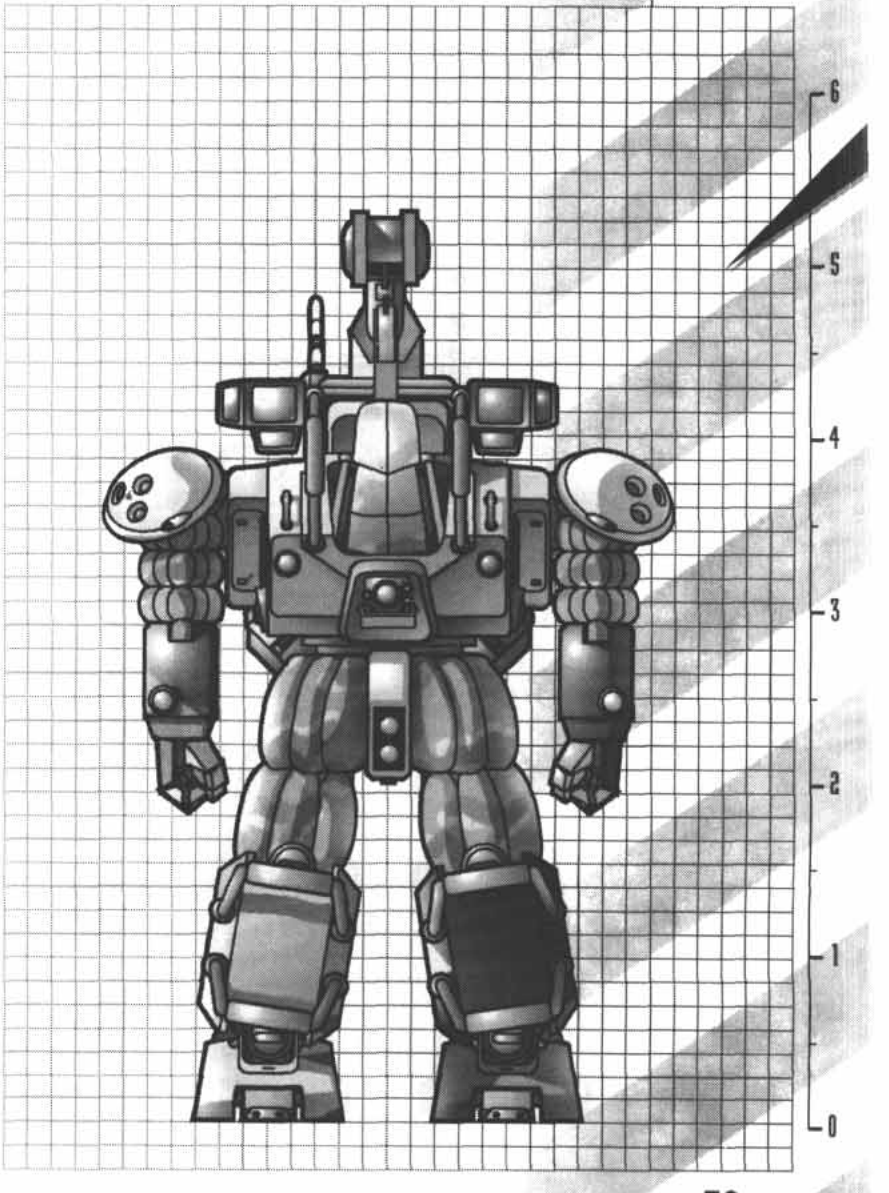
Code Name:	Bricklayer
Production code:	HACS-01MG-ENG
Production Type:	Mass Production
Cost:	184,071 marks
Manufacturer:	Northco
Use:	soldier use Heavy Gear
Height:	4.3 meters (5.4 w/Crane)
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6246 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	None
Deployment Range:	600 km
Sensor Range:	20 hexes/1 km
Communication Range:	100 hexes/5 km
Powerplant:	S-V1010P V-Engine
Horsepower:	625 Hp

Modifications

Add:	Tool Arm (Rating 8, crane), High Towing Capacity (Triple), Exposed Crew Compartment, Large Sensor Profile (Rating 1)
Remove:	all weapons, Secondary Movement Mode
Change:	Top Walking Speed to 6 MP, Deployment Range to 600 km, Downgrade Sensors to -1/1 km, Downgrade Communications to -1/5km, Downgrade Fire Control to -1, Base Armor to 12.
Modified Threat Value:	316
Offensive:	9
Defensive:	147
Miscellaneous:	790

Vehicle Availability

Availability Threshold:	2
Maximum Number of Units in the Field:	Unlimited

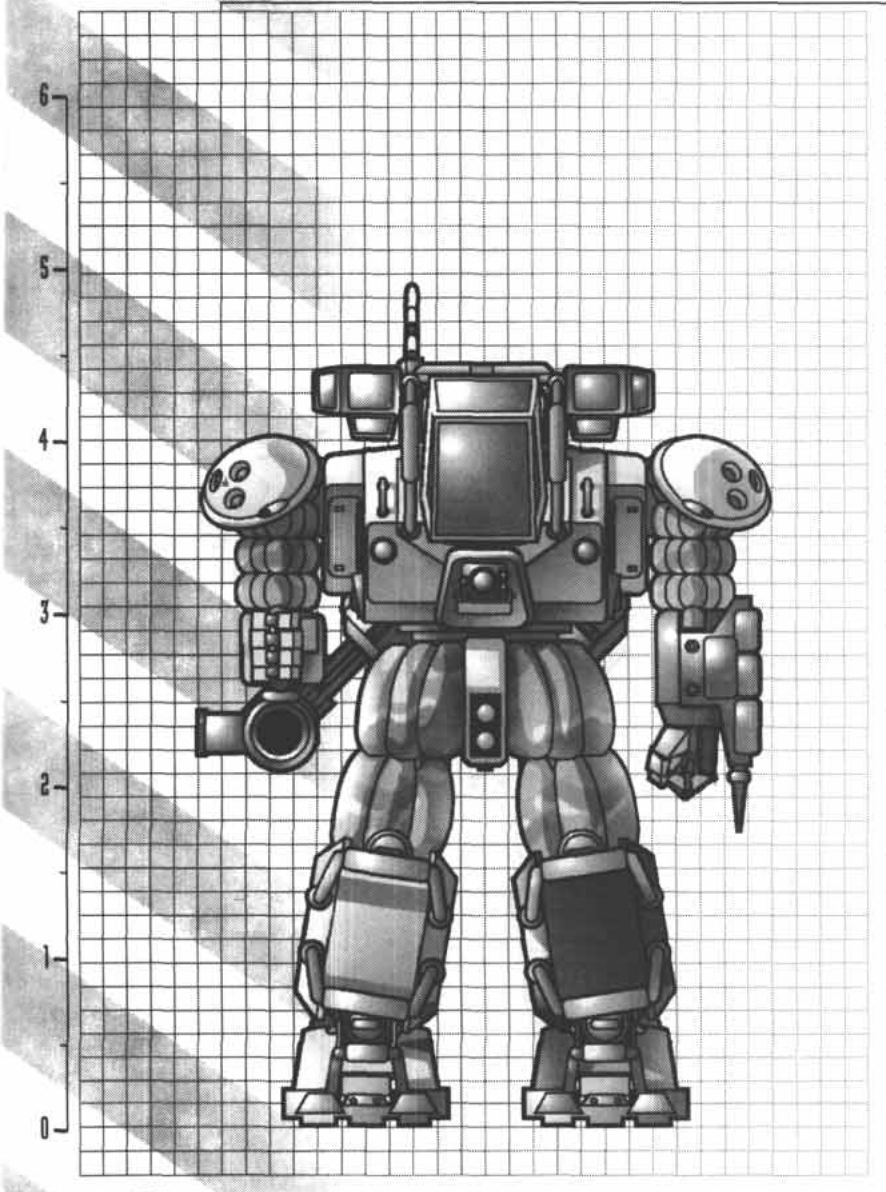


Bryce Hubbard (order #5318102)

4.4.6 HACS-01LG-DEM DEMOLISHER

Developed by the Elementech subsidiary of Northco in TN 1750, the *Demolisher* is a dedicated demolitions Gear aimed specifically at the military model. Northern units taking over neutral or enemy territory often need to take down fortifications quickly and efficiently, while others may need to destroy bridges and other communications links. The *Demolisher* is designed to undertake these tasks efficiently and under fire if necessary. The major modification of the *Demolisher* as compared to the *Bricklayer* — the other *Hunter*-derived combat engineering model — is the elimination of the central crane unit and the addition of a large underslung Riley DE40 demolition gun. Fifty demolition charges are stored in the chassis of the Demolisher. The massive weight and recoil of the DE40 requires that the *Demolisher* brace itself before firing and its feet feature cleats for this purpose. The weight of the demolition gun also reduces the *Demolisher*'s speed by 33% as compared to the *Bricklayer*. A Forge Weapon Co. VDS-30 variable-diameter spike gun has been added for punching holes to facilitate demolition charge placement. To ensure the security of the pilot deployed in a combat situation, the canopy has been sealed , although the forward mounted sensor array of the *Bricklayer* has been maintained. their weight of the canopy and DE40 make the Gear somewhat fuel inefficient, so it is usually transported upon Gear-carriers to its area of operation.

The *Demolisher* has served with distinction in the cycles since its introduction and has gained a mystique all its own. Often deployed side by side with assault troops and leaving a retreat zone after all other forces, the pilots of the *Demolisher* have come to be known for great daring and for laughing at enemy fire. Known for heavy drinking and loud music, they are called "mad men" by their fellow soldiers. The *Demolisher* served especially well during the War of the Alliance, although the CEF hovertanks were usually unaffected by destroyed roads or even bridges. The "mad men" however convinced high command that they could make most urban terrain completely impassable and turned several venerable city-sates into heavy blockades.



Vehicle Specifications

Code Name:	Demolisher
Production code:	HACS-01MG-DEM
Production Type:	Mass Production
Cost:	366,887 marks
Manufacturer:	Northco
Use:	soldier use Heavy Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6890 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	None
Deployment Range:	60 km
Sensor Range:	20 hexes/1 km
Communication Range:	100 hexes/5 km
Powerplant:	S-V1010P V-Engine
Horsepower:	625 Hp

Modifications

Add:	SC (F, 20 shots), SKG (F, 50 shots), Double Towing Capacity, Large Sensor Profile (Rating 1), Ammunition Containment, Fuel Inefficient, Ammo Storage (50 demo charges)
Remove:	all weapons, Secondary Movement Mode
Change:	Top Walking Speed to 6 MP, Deployment Range to 600 km, Downgrade Sensors to -1/1 km, Downgrade Communications to -1/5km, Downgrade Fire Control to -1, Base Armor to 12.
Modified Threat Value:	550
Offensive:	630
Defensive:	142
Miscellaneous:	874

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.4.7 HACS -01MG-DT/TH DESERT TANKHUNTER

Despite the officially assigned HACS-01MG-DT/TK identification code, the *Desert Tankhunter* is not a standard Northern war machine. Rather it is a variant based on the largely decommissioned *Desert Hunter* which was developed in the Badlands by rovers and militias using the older machines. The *Tankhunter* uses the chassis of the *Desert* but with an anti-armor weapons layout, including a Paxton Surefire-60 recoilless cannon. The *Tankhunter* is in fact very close in design to the classic *Hunter Zerstörer* Mk I anti-armor variant of the *Hunter*. Nevertheless, the *Tankhunter* is a patchwork job and benefitted from none of the targeting upgrades that were featured in the *Zerstörer*, much less the generalized upgrade of the *Zerstörer* Mk II. Consequently, the battlefield effectiveness of the *Tankhunter* is very limited when compared to the more modern machines featured in polar armies. For a Badlands homesteader or a rover bandit, however, the *Tankhunter* can make all the difference.

The *Desert Tankhunter* received an official Northern identification during the War of the Alliance because it was a mainstay of the guerrilla armies that formed in the Badlands to harass Colonial Expeditionary Force troops. Although many Badlanders had little choice but to surrender, a large number decided to go into the dunes and fight it out. Rover bands, homesteaders and caravan traders all cooperated to form a rear-guard force for the Terranovan defenders. In TN 1916 Paxton Arms dropped its front of neutrality and fielded the Peace River Army, which regrouped many of these independent guerrillas. The *Desert Tankhunter* was a common sight in PRA units. Paxton Industries, as part of its maintenance contract for the *Desert Hunter* also offers upgrades to the *Desert Tankhunter*. In the post-war cycles, caravan traders have come to know the *Tankhunter* well for it has become a favored weapon of ambitious rover gangs. Using the firepower of the Surefire-60, they can eliminate any caravan escort with ease and make easy pickings of the spoils of desert commerce. This, of course, suits Paxton very well, since it drives caravan owners to purchase weapon systems of their own.

Vehicle Specifications

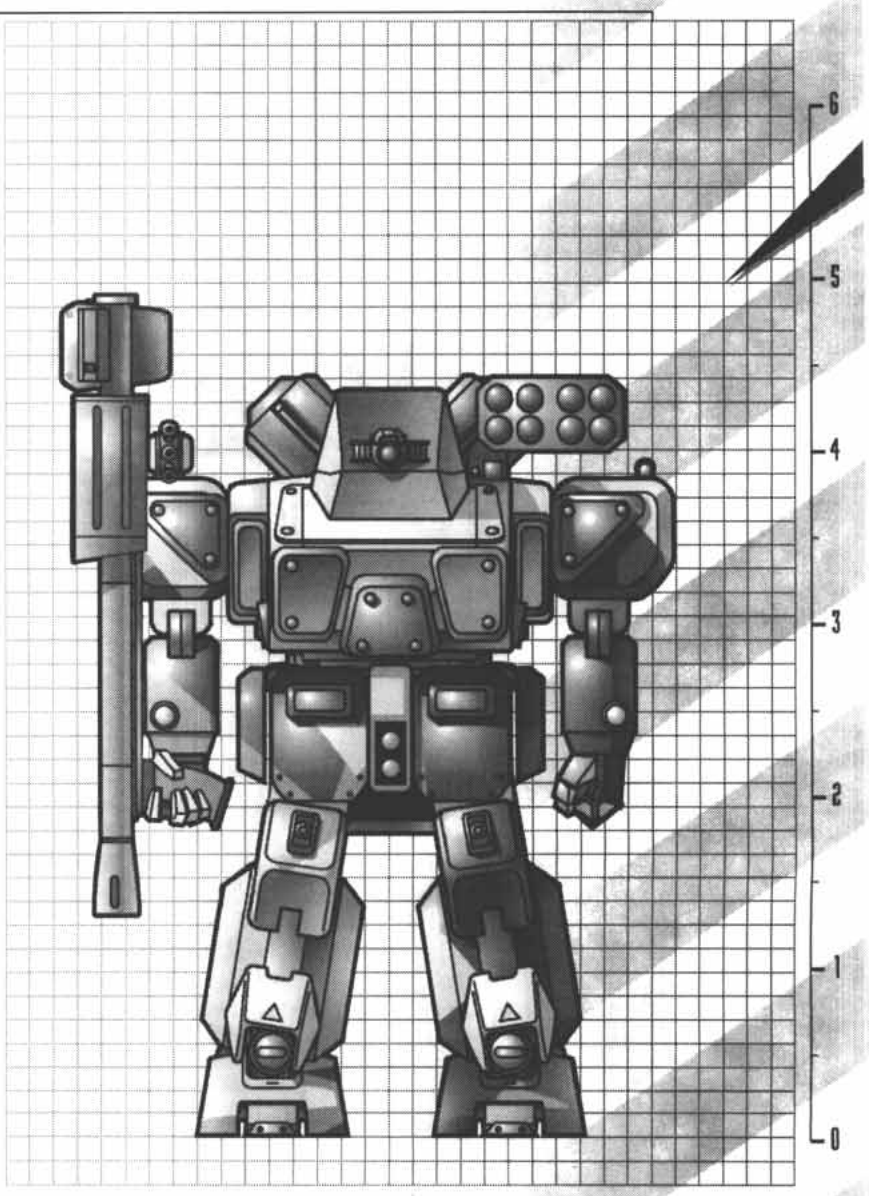
Code Name:	Desert Tankhunter
Production code:	HACS-01MG-DT/TK
Production Type:	Mass Production
Cost:	124,719 marks
Manufacturer:	Northco
Use:	soldier use Heavy Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6515 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (69 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	LBZK (F, 20 rounds), Reinforced Location Armor: Crew (Rating 1))
Remove:	LAC
Change:	Downgrade Sensors, Communications, Maneuverability and Fire Control to -1, Base Armor to 14, Ground Speed to 11.
Modified Threat Value	249
Offensive	230
Defensive	175
Miscellaneous	343

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	10

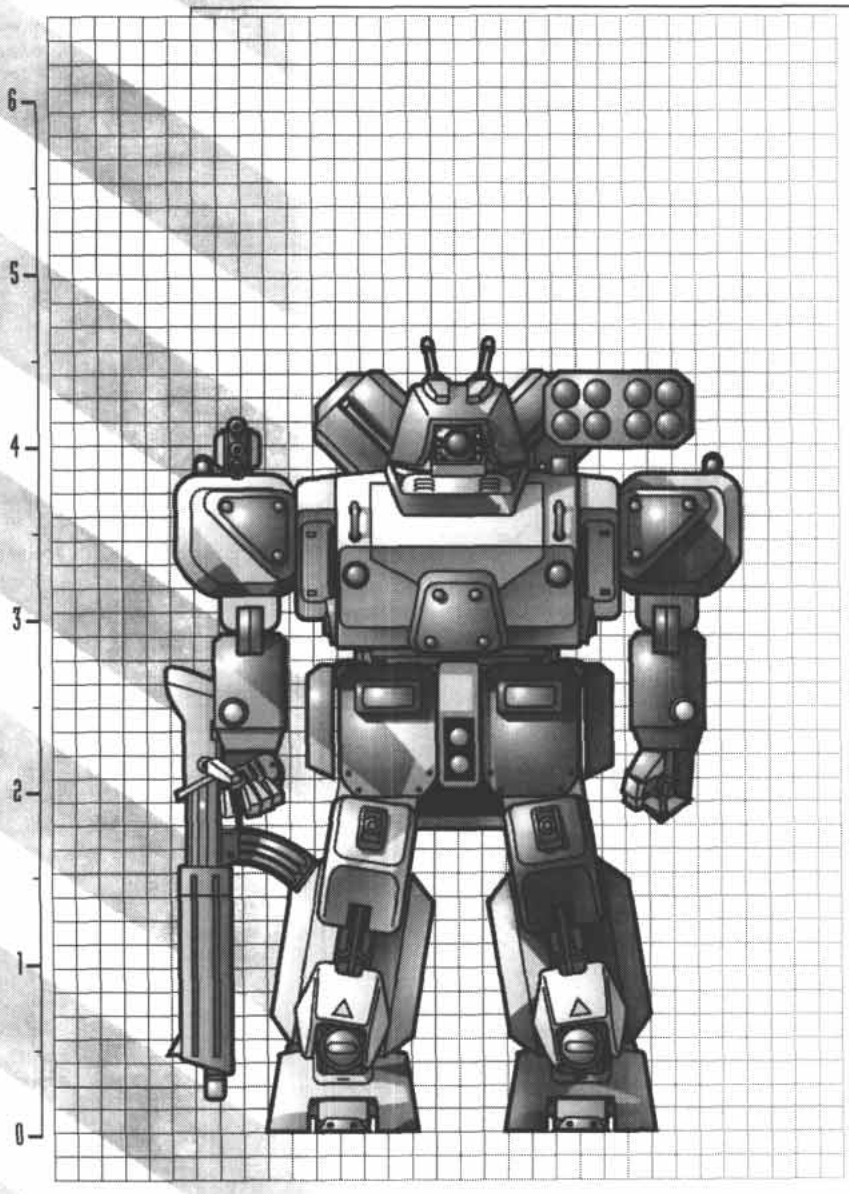


Bryce Hubbard (order #5318102)

4.4.8 HACS-01MG-C HEADHUNTER

The *Headhunter* was one of the first combat variants of the *Hunter*, appearing in TN 1687, the second cycle of the Merchant War between the United Mercantile Federation and the Allied Southern Territories. Designed to lead teams of *Hunters* on the field, the new machine was fitted for this purpose with a boosted communications array. The original *Headhunter*, based on the *Desert Hunter* frame, featured a tall armored antenna on to of the large head turret of the Gear. When the *Hunter* was updated and its successor, the *Hunter MK II*, was introduced in TN 1852, the *Headhunter* was among the first of the many variants to be refitted with the new systems and to be redesigned. The new *Headhunter* featured an enlarged canopy fitted with two whip antennae on the top rear of its head and multiple sensor cameras. The square armored helmet protecting the electronics of the *Headhunter* would ultimately inspire the recent remolding of the head modules of the *Hunter*, *Cheetah* and *Jaguar* according to new specifications. The adoption of a head module based on the *Headhunter* design is hardly surprising, since the *Headhunter* has long served as the testing ground for many of the modifications eventually introduced into the *Hunter* itself. Many veterans, however, still like to ride traditional *Headhunters* because of their older, more "experienced" neural nets. Rookies also find that they are more "docile" models compared to the regular *Hunter* trainers, something that still baffles Gear Support at Northco.

The *Headhunter* has been in service for almost as long as the standard Hunter. Just like its predecessor, it is being slowly replaced by a command version of the *Jaguar*, the newest Gear in service in the northern military. The *Command Jaguar* was designed with a similar philosophy as the *Headhunter* and features simply an enhanced communication array. Even the standard *Jaguar* has been replacing the *Headhunter*, however. Still not that numerous, the *Jaguar* is often used as a squadron command Gear. The *Headhunter* will likely continue to serve with second-line units, veteran officers and NCOs.



Vehicle Specifications

Code Name:	Headhunter
Production code:	HACS-01MG-C
Production Type:	Mass Production
Cost:	228,667 marks
Manufacturer:	Northco
Use:	field command Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6627 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add	n/a
Remove	n/a
Change	upgrade Communications to +1/15 km
Modified Threat Value:	392
Offensive:	450
Defensive:	298
Miscellaneous:	429

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.4.9 HACS-01MG-HC HUNTER COMMANDO

The *Hunter Commando* is one of the most recognizable of the *Hunter* variants. It was designed as the first Northern Gear to be fully airdroppable — not requiring a specialized shock-absorbing pallet — and given the task of undertaking commando raids deep within enemy territory. The conversion for paratrooper duty involved adding reinforced struts and crashbars to the legs and replacing the knee, ankle and hip actuators with improved models. Baffle plates were also added to the shoulders and air-brakes to the lower legs. The *Commando*'s mission profile involved the change in the weaponry for heavier models. The Riley M222 autocannon was replaced by a ATL-70 bazooka as the Gear's primary direct-fire weapon and a heavier RP-209 rocket pod replaced the classic RP-109. Together this weapons load gave the *Commando* the ability to take down a wide variety of armored targets during its raids, including tanks. To protect it against the opposition it could expect, the *Commando*'s cockpit armor was slightly thickened and the front armor skirts are extended. Many *Commandos* also have an armored jacket, an accessory that became standard for many of the assault/commando Gears that followed. A "jackhammer" spike gun was added on the left forearm as a last ditch/demolition hand weapon. The radio and sensory equipment of the *Commando* was also slightly upgraded with a wider array of antenna for a better range. To compensate for additional weight, the standard Hunter engine is replaced by the visually identical but more powerful S-V1000C.

The *Hunter Commando* first saw action in the line of duty during a commando operation deep inside Southern territory in TN 1782. Of the 18 machines produced for that specific mission, only the one known as "Bowser" — featuring a very evolved neural net — remains in working order. From that first production run on, the *Hunter Commando* performed its duties well and remained among the elite of Northern Gears until the introduction of the *Jaguar*. The *Commando* had its production halted during the war because of elevated expense, but is still used in airborne units.

Vehicle Specifications

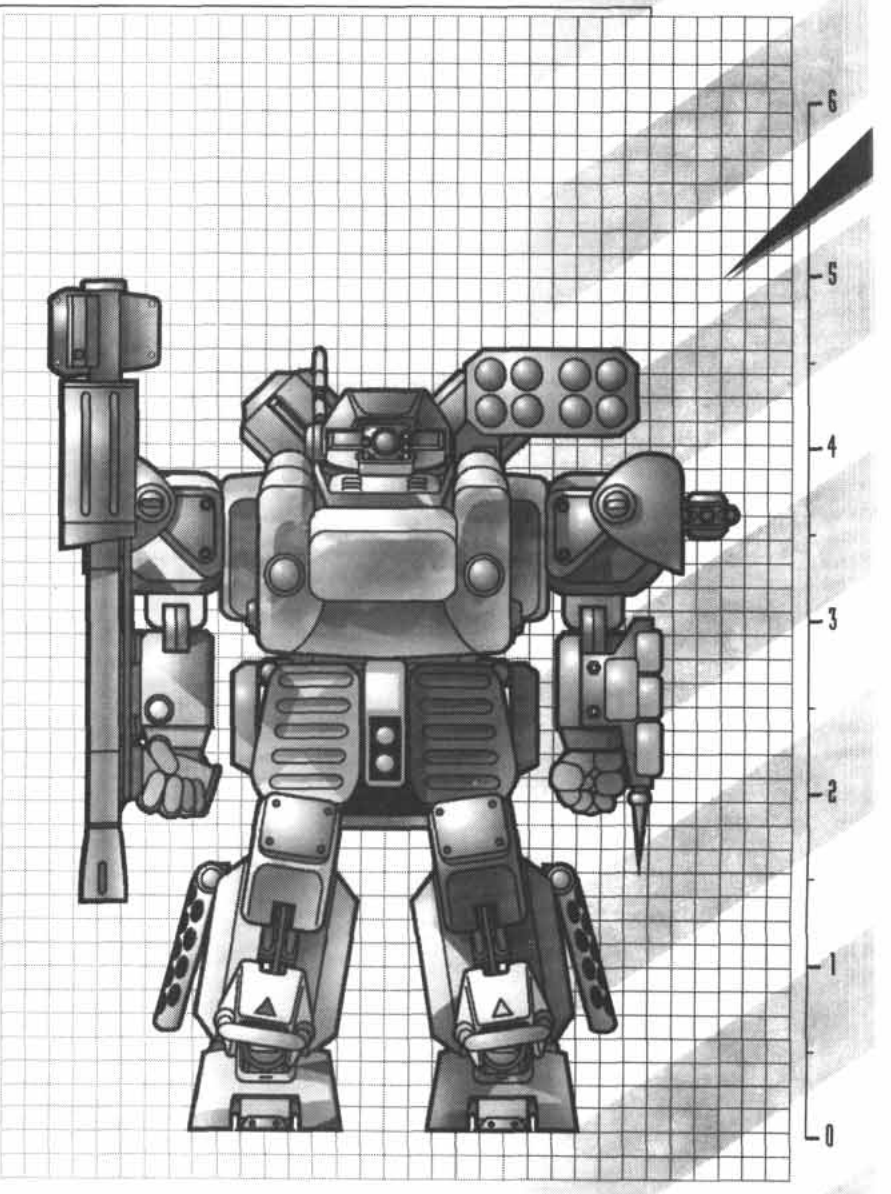
Code Name:	Hunter Commando
Production code:	HACS-01MG-HC
Production Type:	Mass Production
Cost:	402,132 marks
Manufacturer:	Northco
Use:	commando Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6720 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (76 kph)
Deployment Range:	500 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add	LBZK (F, 30 shells), MRP/18 (F, 18 rockets), SKG (5 spikes), Airdroppable, Reinforced Armor (Forward, Rating 2)
Remove	LAC, LRP/24
Change:	Increase Top Speed to 13 MP, decrease Deployment Range to 480 km, increase Sensor Range to 3 km, increase Communication Range to 15 km
Modified Threat Value:	603
Offensive:	879
Defensive:	302
Miscellaneous:	629

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	10

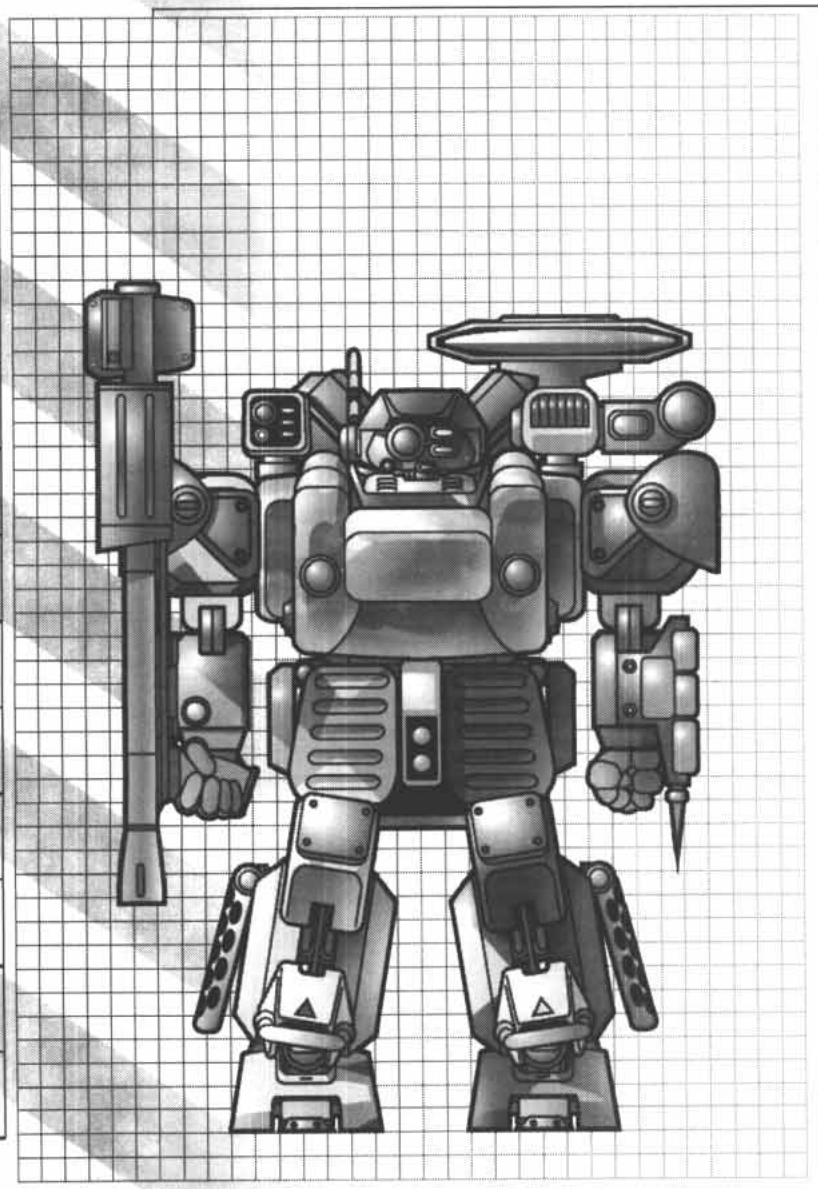


Bryce Hubbard (order #5318102)

4.4.10 HACS-01MG-HC/EW HUNTER COMMANDO EW

The *Hunter Commando EW* was developed shortly after the basic *Commando* to provide electronic warfare coverage and countermeasures to deep-insertion paratrooper teams. The *Commando EW* began as a field modification initiated by the technicians of the Northern Guars' 1st Airborne division, who cannibalized the electronic warfare pods from *Wild Ferret* electronic warfare Gears for their use. The use of these pods allowed commando teams both to knock out the command and control systems of the enemy units they were targeting — rapidly paralyzing a whole defensive sector on at least one occasion in TN 1832 — and to maintain inter-unit communications when faced with enemy electronic warfare tactics. To make room for the pod, the standard *Commando* was stripped of its RP-209 rocket pod and grenade launcher, but maintained all its other weapons and reinforcements. This made it a deadly opponent as well as a specialist machine. As the *Hunter* line has been upgraded, so has the electronics package of the *Commando EW*. In TN 1928, the standard ECM/ECCM pod was changed for the Terringer 5615 DA pod developed for the *Weasel*, whose production had been delayed. Some pilots, however, prefer to use pods captured from enemy *Chatterbox* Gears.

While the standard *Hunter Commando* is slowly disappearing because of the introduction of the cheaper *Assault Hunter* and more effective *Strike Jaguar* during the war cycles, the hundreds of *Commandos* still in existence have been being slowly converted to the *Commando EW* configuration. One of the only airdroppable electronic warfare units, the *Commando EW* still has a long life ahead of it and is welcome in most paratrooper and commando units. Northco has proposed that the *Jaguar* be fitted with an electronic warfare pod to serve this function, but military commanders have been very satisfied with the *Commando EW*'s performance and see no reason to invest in all-new machines when the venerable *Commando* can be revived by a relatively inexpensive EW conversion. Military historians appreciate the new lease on life given a classic model.



Vehicle Specifications

Code Name:	Hunter Commando EW
Production code:	HACS-01MG-HC/EW
Production Type:	Mass Production
Cost:	469,164 marks
Manufacturer:	Northco
Use:	electronic warfare/comand Gear
Height:	4.3 meters
Width:	3.2 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6700 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (76 kph)
Deployment Range:	480 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	LBZK (F, 30 shells), SKG (5 spikes), Airdroppable, Reinforced Armor (Rating 2), ECM (Rating 3), ECCM (Rating 2)
Remove:	LAC, LRP/24, APGL
Change:	increase Top Speed to 13 MP, decrease Deployment Range to 480 km, increase Sensor Range to 3 km, increase Communication Range to 15 km
Modified Threat Value:	626
Offensive:	386
Defensive:	302
Miscellaneous:	1189

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.4.11 HACS-01MG-MLV HUNTER MINELAYER

The versatility of the *Hunter* has seen it pressed into a wide variety of combat and combat-engineering rolls. The *Hunter Minelayer* is one such example. First developed during the final cycle of the devastating St. Vincent's War (and later upgraded with the *Hunter* Mark II program), the *Minelayer* is designed to rapidly lay a mine field, usually to be used against enemy Gear units. Tracked minelaying vehicles can usually carry a great deal more mines that the *Hunter Minelayer*, but its walker system often allows it access to areas unattainable by MLVs based on the chassis of a light tank. In these types of terrain, *Hunter Minelayers* are often more effective than infantrymen. One or more *Minelayers* can often be found in the support company of a Northern Gear regiment, while more are usually tied to a brigades engineering regiment. Wheeled and tracked minelaying vehicles remain far more common in non-Gear units, where their increased laying speed and varying capacity is deemed more valuable than walker design.

The *Hunter Minelayer* uses a Forge Weapons Co. VDS-30 variable-diameter spike gun mounted on its forearm to drill holes for the mines. the mines themselves are stored in an armored casing along with an automatic arm-mounted laying system. This latter includes a small digging system which can be used instead of the spike-gun when laying mines in sand or dirt. Other armament has been removed and the mechanism space and ammunition stowage is used for mine storage. A special blast containment system forces the blast upward if the mines in storage should detonate. The *Minelayer* can lay 20 mines a minute in the hands of a skilled pilot. The first *Hunter Minelayers* retained their armament, but the modifications were formalized during the military restructuring after St. Vincent's War, and the armament was removed in favor of more mine capacity. This decision has meant that the *Minelayer* is deployed as a pure support unit rather than as a mixed support/combat unit. Pilots pressed into minelaying duties while under enemy fire often complain about the "defenseless" nature of the *Minelayer*.

Vehicle Specifications

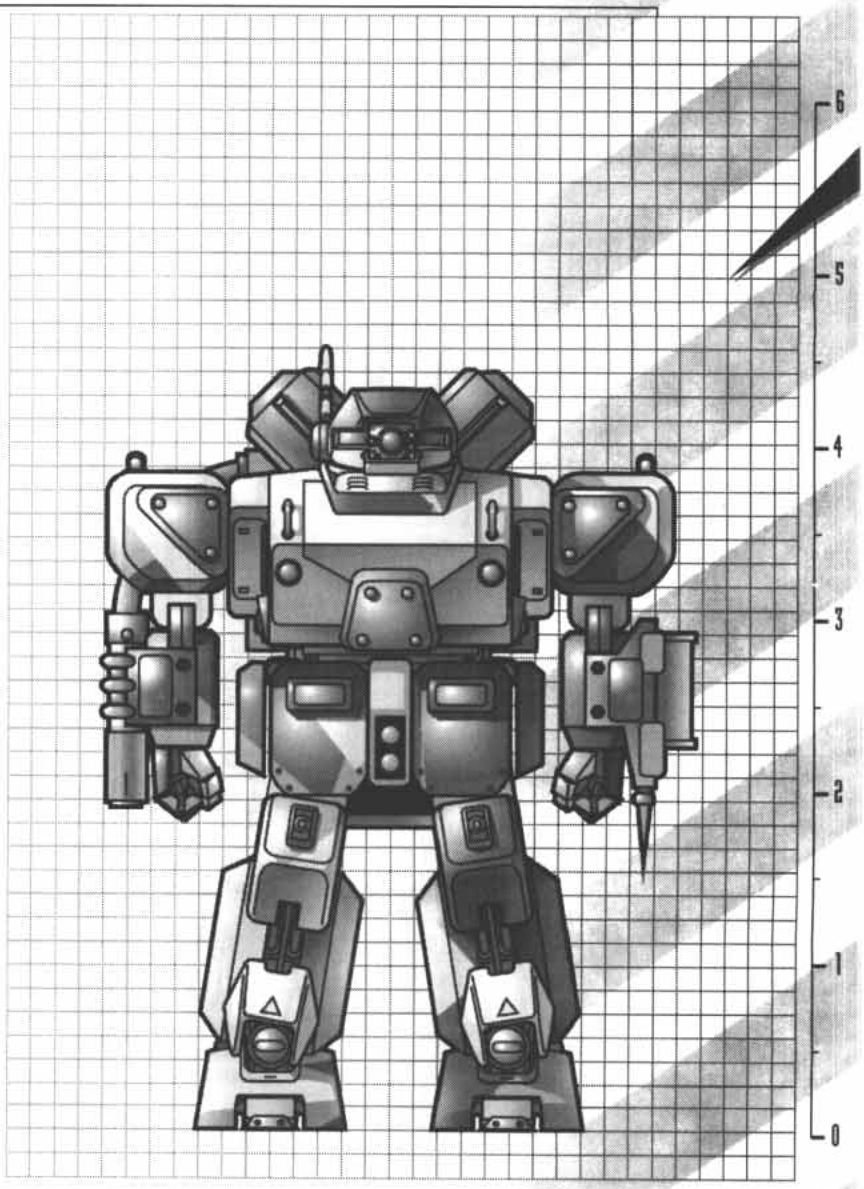
Code Name:	Hunter Minelayer
Production code:	HACS-01MG-MLV
Production Type:	Mass Production
Cost:	237,298 marks
Manufacturer:	Northco
Use:	minelaying Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6517 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add	SKG (F, 30 charges), Minelaying Equipment (holds 30 TV worth of mines), Ammunition/Fuel Containment System
Remove	All weapons
Change	n/a
Modified Threat Value:	407
Offensive:	91
Defensive:	298
Miscellaneous:	832

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	5

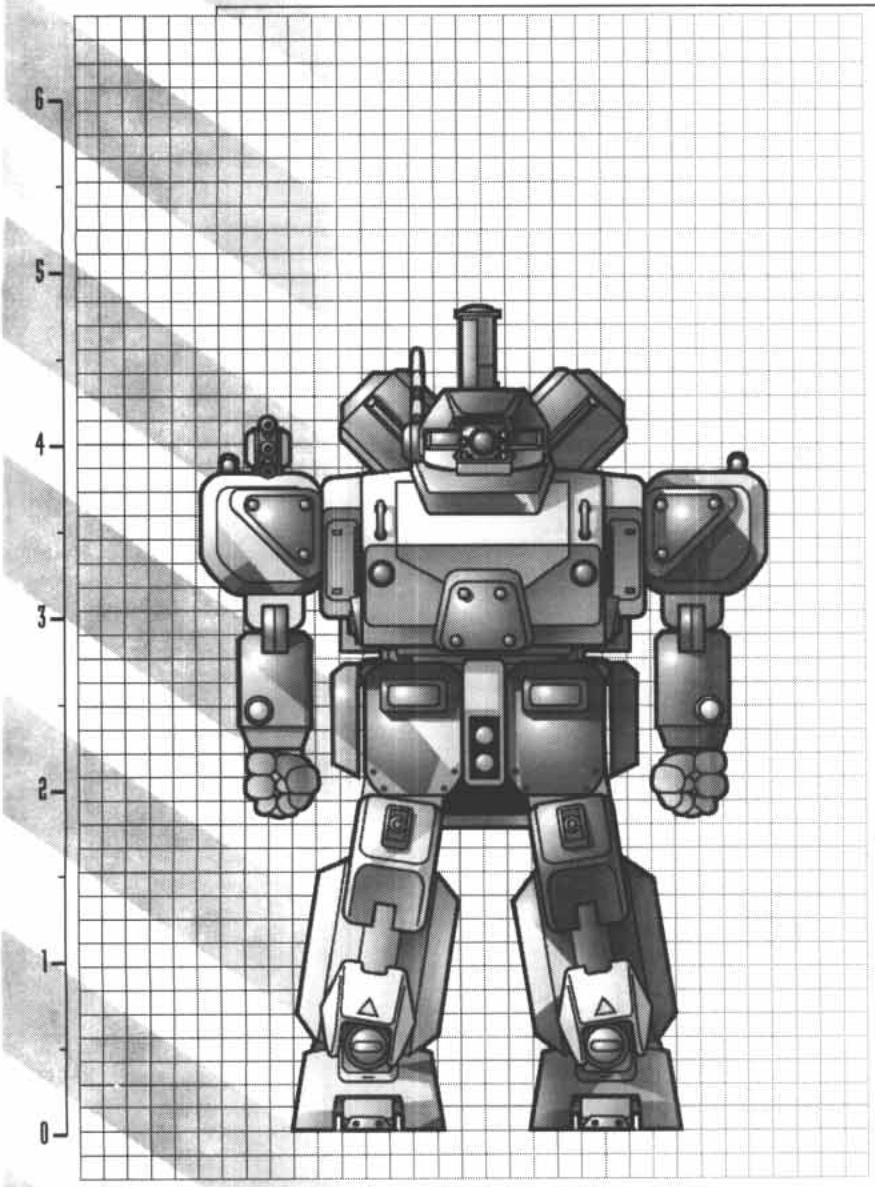


Bryce Hubbard (order #5318102)

4.4.12 HACS-01MG-NBC HUNTER NBC

Nuclear, biological and chemical (NBC) weapons are officially banned by the Rothchilde Accords of TN 1843 and several other treaties, but several major powers receive partial exemptions from the Accords or have continued covert development programs. The *Hunter NBC*, affectionately known by its pilots and technicians as the "Roach Hunter," is fully equipped to operate on a NBC battlefield in case these illegal arsenals are ever used. Like many other such vehicles, the *Hunter NBC* was developed during the madness of St. Vincent's War. As the child-killer St. Vincent's Plague spread across the globe, fears of NBC warfare and rumors that the plague was engineered by the South led to the creation of a whole family of vehicles capable of operating on such a battlefield. The modifications to the *Hunter* required to ensure such endurance were extensive. The whole electronic system had to be replaced with a heavily insulated system featuring multiple back-up systems designed to resist the electro-magnetic pulse (EMP) blackout effect resulting from a thermonuclear detonation. The pilot cockpit was fitted with a complete air-seal system allowing the *NBC* to operate in clouds of poison gas or in biologically infested areas without endangering the pilot.

According to Southern analysts and specialists, the *Hunter NBC* can also be almost instantly modified to become a chemical or biological weapons delivery vehicle. Indeed, the *NBC* sports a 60mm Riley GM-60R guided mortar placed on a back mount, which necessitated the removal of the *Hunter*'s M222 Autocannon rifle and RP-109 Pepperbox. This armament allowed the *Hunter NBC* to complement the North's arsenal of truck-borne and APC chassis mortars, since it is capable of penetrating terrain where the others could not go. The *Hunter NBC* could be used to deliver smaller, more precise chemical strikes, sometimes in conjunction with *Hunter Commandos* or other target designator teams. A laser designator has been installed in the vehicle's head using the space liberated by the tracking sensors of the former two weapons, allowing a team of *Hunter NBCs* to operate alone without fear of contamination.



Vehicle Specifications

Code Name:	Hunter NBC
Production code:	HACS-01MG-NBC
Production Type:	Mass Production
Cost:	719,969 marks
Manufacturer:	Northco
Use:	chemical battlefield Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6801 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	LGM (F, 20 shells), Target Designator (Rating 3), Ammunition/Fuel Containment System, Haywire Resistant, Limited Life Support
Remove:	LAC, LRP/24
Change:	n/a
Modified Threat Value:	864
Offensive:	510
Defensive:	298
Miscellaneous:	1784

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.4.13 HACS-01MG-PARA HUNTER PARATROOPER

The *Hunter Paratrooper* first appeared at the end of the War of the Alliance. It is a highly modified standard model which includes some features from the *Hunter Commando MK2*, such as the air brakes and the "puncher." Several modifications were made to the standard *Hunter* to transform it into an efficient airdroppable unit. Crashbars were welded on the back, torso, shoulders, lower legs and feet, and parachute hardpoints were installed on the torso. The legs also were also fitted with deployable airbrakes. Both the parachutes and the brakes could be ejected and land upon via explosive bolts. The weapons chosen for the *Hunter Paratrooper* were virtually identical to those employed by the *Cheetah Paratrooper*, namely a M260P Paratrooper rifle, which mounts both a 20 mm autocannon and a barrel-fed 60 mm grenade launcher in the same assembly. Rugged and wielding significant firepower, the M260P has been the darling of *Paratrooper* pilots since its introduction.

When it was first imagined, the *Paratrooper*'s role had been clearly defined: to drop behind enemy lines and give assistance and cover to the recon/scout paratroopers. They would also provide cover during extraction missions. Paratrooper duties had previously been assured by the *Hunter Commando*, the more recent *Cheetah Paratrooper* and the *Jaguar*. None were available in sufficient numbers to suit the needs of a global conflict such as the War of the Alliance. Northern Guard high command ordered that a *Hunter* variant be developed exclusively for paratrooper duties. At first, *Assault Hunters* were suggested for the job, but since the machines would need structural reinforcements, it was decided that it would be faster to build machines from the ground up rather than tinker endlessly. The resulting machine was very close to the specifications of the Southern *Jäger Paratrooper* to which Northern engineers had access during the war years. The *Hunter Paratrooper* is still used as the standard machine for extraction missions, but it will probably be replaced in the coming cycles by the more advanced *Jaguar* as that Gear comes into ever wider distribution in the Northern armies.

Vehicle Specifications

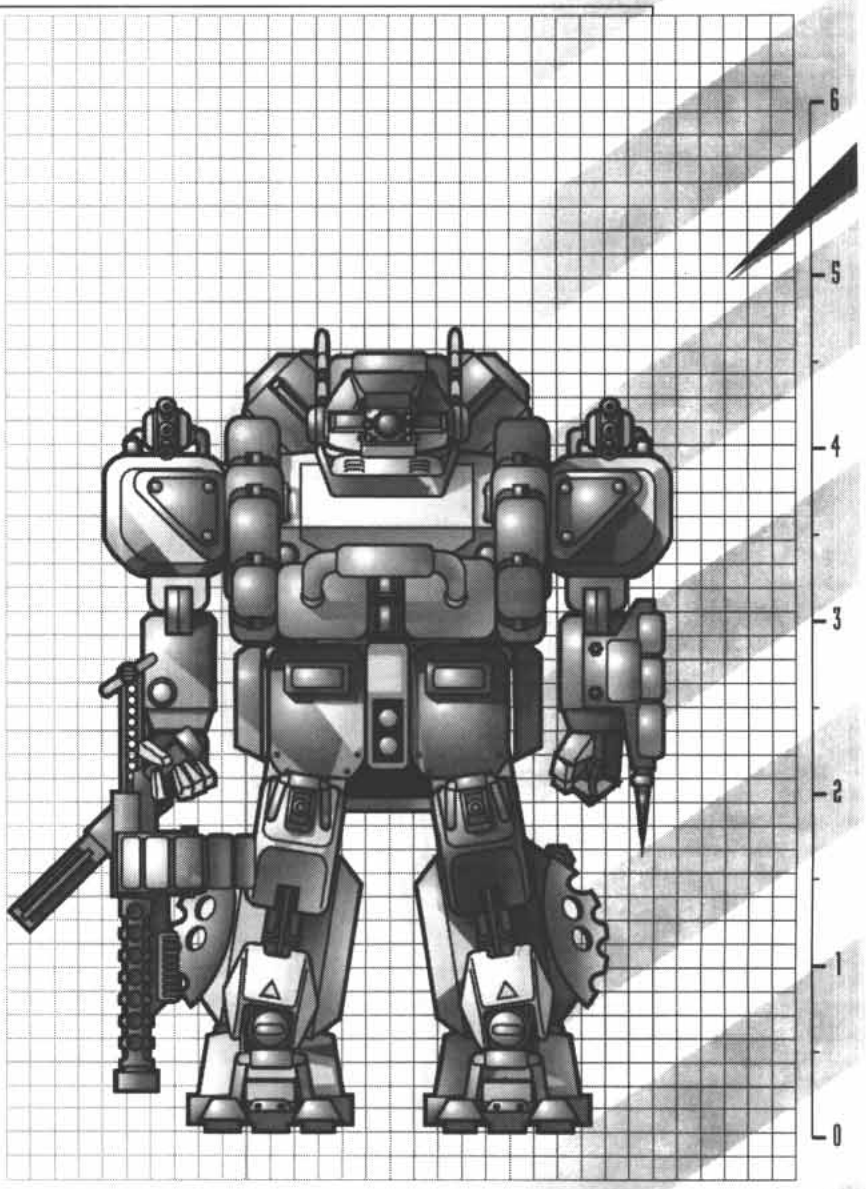
Code Name:	Hunter Paratrooper
Production code:	HACS-01MG-PARA
Production Type:	Mass Production
Cost:	350,686 marks
Manufacturer:	Northco
Use:	airdroppable Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6520 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	LGL (F, 10 grenades), 2 x APGL (FF, FR, 5 grenades), CR, Airdroppable, Rugged Movement System
Remove:	All weapons except LAC
Change:	Reduce LAC ammo to 30
Modified Threat Value:	526
Offensive:	501
Defensive:	298
Miscellaneous:	779

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	Unlimited

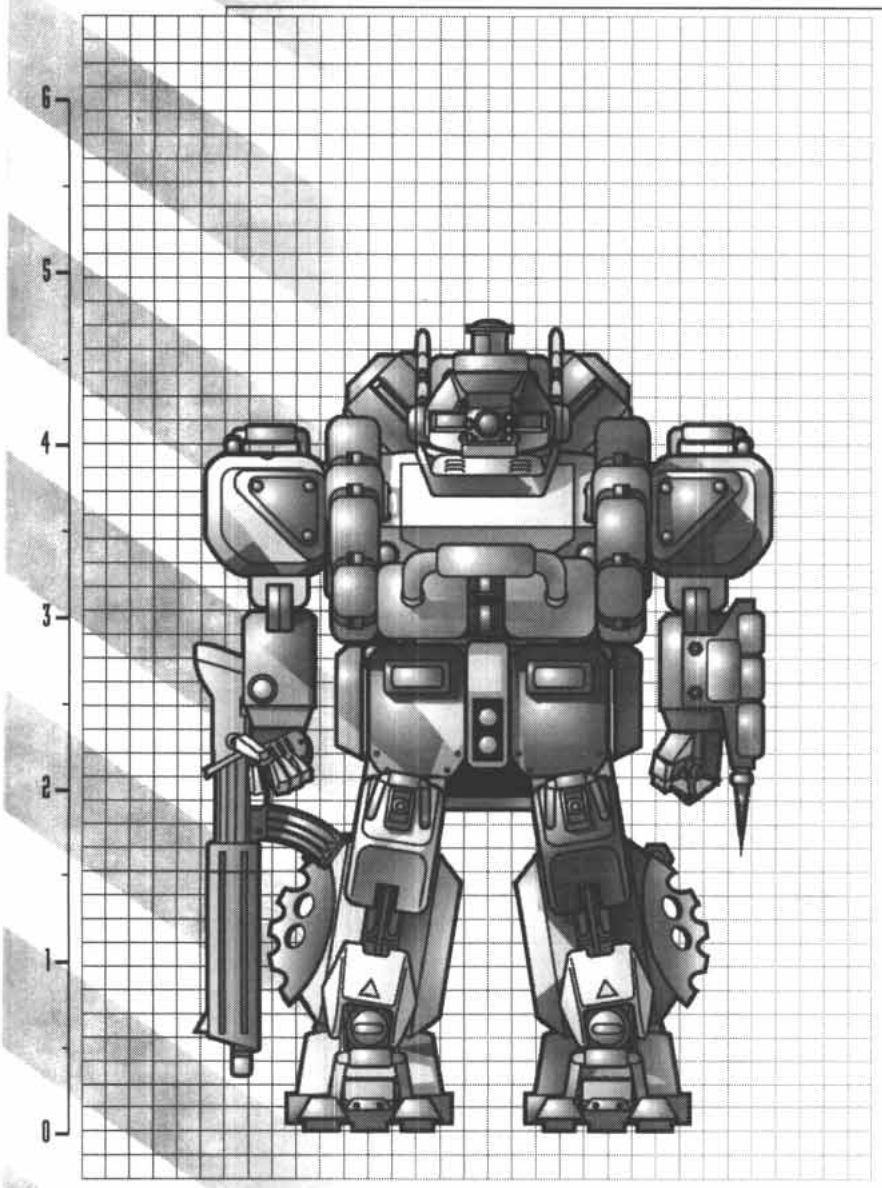


Bryce Hubbard (order #5318102)

4.4.14 HACS-01MG-PARA/FS HUNTER PARA-MORTAR

Historically, infantry and Gear paratrooper units have been outgunned by the troops they face on the ground. After the War of the Alliance, as the *Hunter Paratrooper* entered standard service in airborne Gear units not fully equipped in *Jaguars*, unit commanders began to search for a way to bring significant firepower to play. The *Fire Jaguar* had been one solution, but its availability was limited and another solution had to be found. Riley weapon systems answered the call with a reinforced unguided UBM-22 90 mm mortar system that could be attached to the back of the *Paratrooper*. The weight of the weapon and its ammunition necessitated a lighter weapons load for the *Para-Mortar* and the M260P Paratrooper rifle was replaced by the standard *Hunter*'s classic Riley M222 autocannon. The placement of the mortar required that the parachute packets be displaced slightly and the decision was made to eliminate the twin MK II anti-personnel grenade launchers to help ensure a clear opening of the new chutes. The biggest problem with the *Para-Mortar* — and shared by its cousin the *Hunter Paratrooper* — is a low ammunition supply (20 mortar shells) given the extended length of extraction missions. Frequent resupply has been necessary during intense bombardments, sometimes precipitating hazardous impromptu ammunition drops.

Relatively few *Hunter Para-Mortars* have been commissioned by the Northern Guard because of the competition of the *Fire Jaguar*. While *Jaguars* are still not as common as they might be among the whole of the Guard, airborne units are almost always considered elite forces and receive priority treatment for resupply. Consequently their supply of *Jaguars* and *Jaguar* variants is far greater than average units. The superior firepower of the twin GH-16 rocket pods carried by the *Fire Jaguar* make it the favored machine. The *Para-Mortar*'s weapon nonetheless has a better range than the GH-16s and a greater area of effect. Some technicians have experimented with replacing the UBM-22 with a Riley GM-60L guided mortar system. Although less powerful, the GM-60L could carry more ammunition and benefit from laser targeting.



Vehicle Specifications

Code Name:	Hunter Para-Mortar
Production code:	HACS-01MG-PARA/FS
Production Type:	Mass Production
Cost:	397,131 marks
Manufacturer:	Northco
Use:	airdroppable/fire support Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6691 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 HpModifications

Modifications

Add:	LFM (F, 20 shells), CR, Airdroppable, Rugged Movement System
Remove:	All weapons except LAC
Change:	n/a
Modified Threat Value:	596
Offensive:	710
Defensive:	298
Miscellaneous:	779

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.4.15 HACS-01MG-SKT HUNTER RECON

The *Hunter Recon* was one of the first variants of the *Hunter*, developed in TN 1687 at the beginning of the Merchant War. The *Recon* was an attempt at making a scouting and light assault unit by removing most of the Hunter's arm and leg armor plates. This would lighten the vehicle and allow it to reach higher speeds by reducing the strain on the engine and actuators. *Hunter Recons* were manufactured in great numbers and served extensively during the early cycles of the Heavy Gear era. When newer, better adapted scout models entered service, most Recons were phased out to second line units and militia troops. During the War of the Alliance, many were pressed into active service as artillery spotters and couriers.

The *Hunter Recon* design involved the removal of the durasheet armored casings of the upper arms and thighs to be replaced by lightweight ballistic cloth. The cloth, while not as durable as the standard composite plates, is still tough enough to stop light shells and most shrapnel fragments. The classic square shoulder blocks of the Hunter are now replaced by a sturdy bumper plate somewhat similar to the one used to cover the shoulder actuators of engineering units such as the Bricklayer. The resulting lower overall mass did help to get more speed out of the various actuators of the *Desert Hunter* from which it was originally derived. When the *Hunter* line was upgraded in Winter TN 1852, the *Recons* received a similar treatment. The improved speed performance of the basic *Hunter* and the lighter version of durasheet composite used as armor took away many of the speed advantages of the *Recon*. Despite slightly reduced armor protection, the *Recon* now moves only about 5 kph faster than other *Hunters*. It is, however, much cheaper to build because it carries less armor and a single weapon, most often in a rifle-like hand-held mount. The Recon originally carried the same 20 mm autocannon as the basic *Hunter*, but many were later upgraded to carry a more powerful 30 mm autocannon to provide an added punch without sacrificing very much weight.

Vehicle Specifications

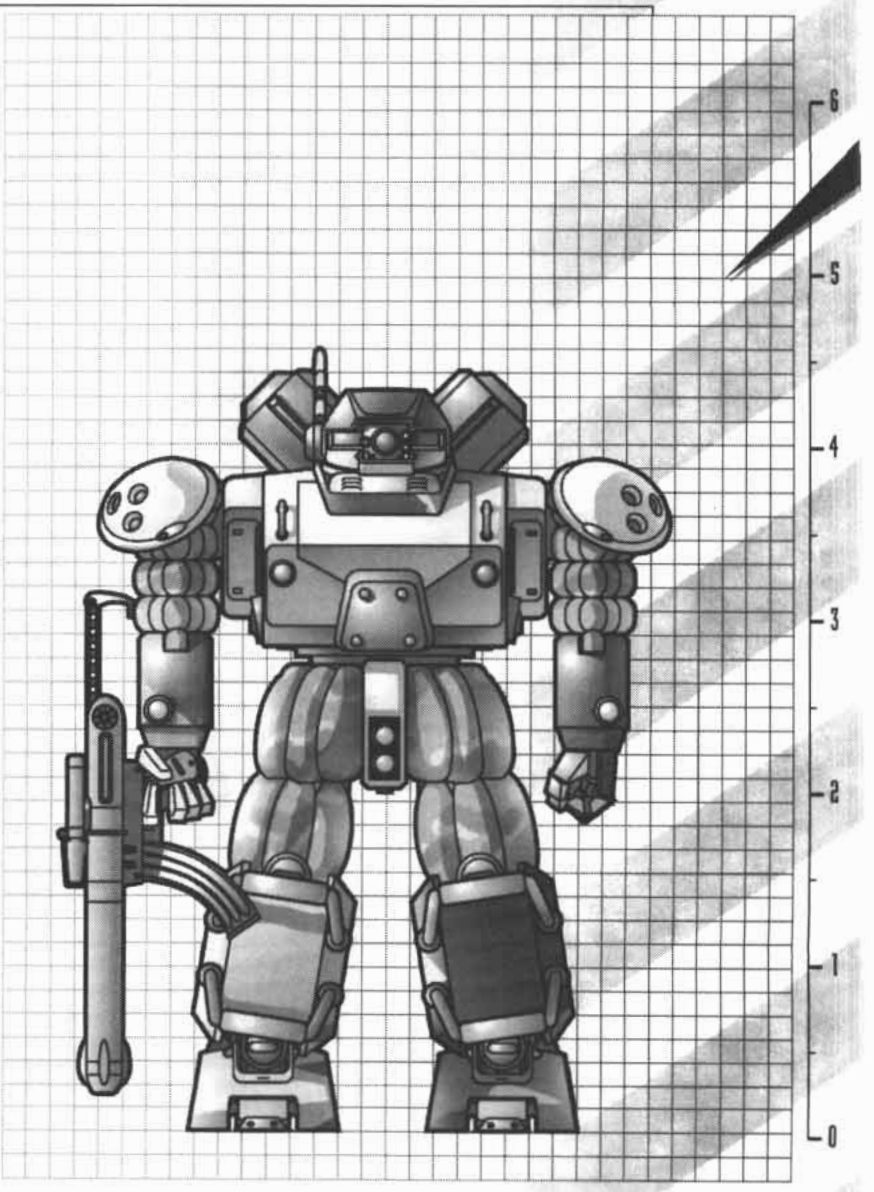
Code Name:	Hunter Recon
Production code:	HACS-01MG-SKT
Production Type:	Mass Production
Cost:	116,500 marks
Manufacturer:	Northco
Use:	reconnaissance Gear
Height:	4.3 meters
Width:	2.9 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	5600 kg
Primary Movement Mode:	Walk (47 kph)
Secondary Movement Mode:	Ground (77 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	MAC (F, 40 rnds), Exposed Fire Control, Exposed Movement System
Remove:	all weapons
Change:	Increase Walker Top Speed to 8 (47 kph), Ground Top Speed to 13 (77 kph), Deployment Range to 600 km, reduce Armor to 14
Modified Threat Value:	233
Offensive:	201
Defensive:	287
Miscellaneous:	211

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited

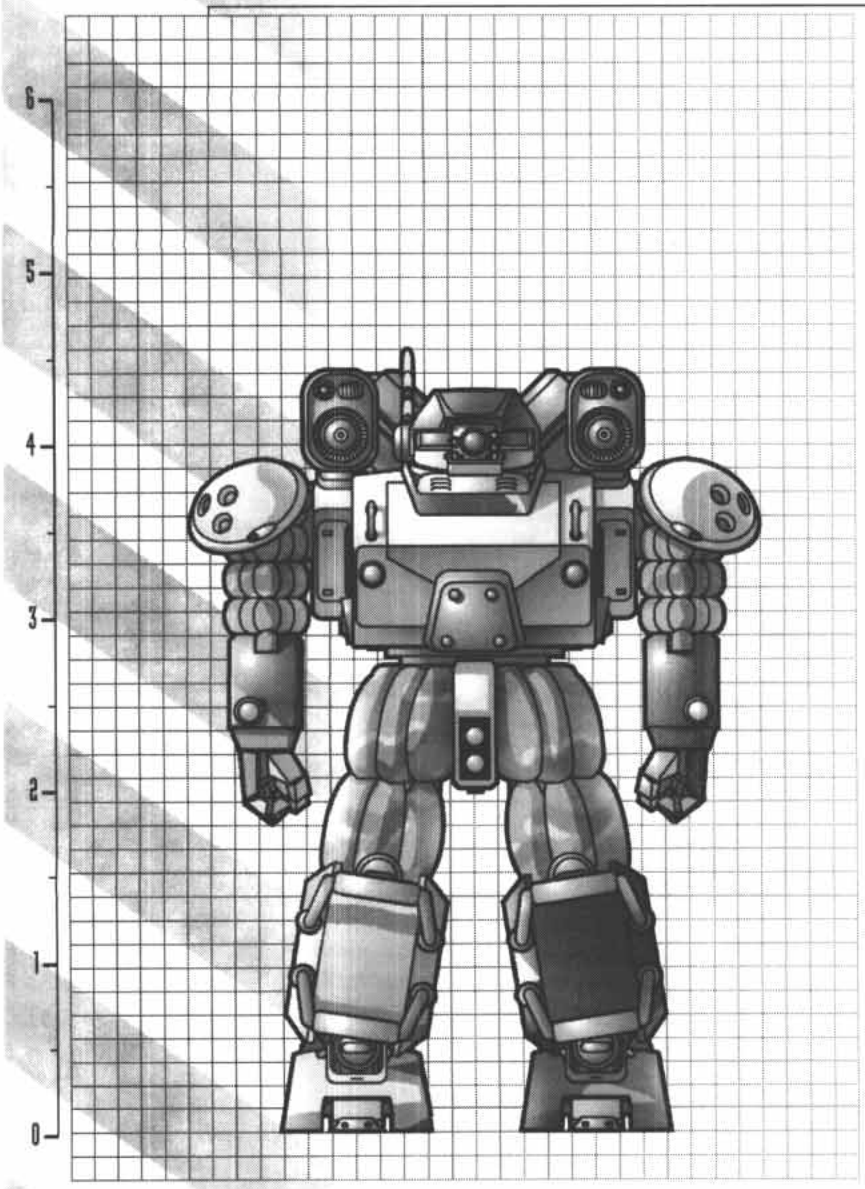


Bryce Hubbard (order #5318102)

4.4.16 HACS-01MG-L/TH HUNTER RECON AG

The Western Frontier Protectorate Army has always believed in an efficient combination of speed and firepower as key to their tactical situation. With a distinct lack of natural obstacles to invasion or assault from the south and a national organization based around three fortified city-states, rapid reaction forces that could inflict serious damage have long been a key element in their forces. This philosophy was at the base of the development of the *Bobcat AG* which armed a light recon Gear with a heavy rifle, but near the beginning of the TN 1890s this model was beginning to show its age. The WFPA hoped to replace its *Bobcats* with the more combat efficient *Cheetahs*, but political tensions between the Westenr Frontier Protecorate and the Northern Lights Confederacy made distribution of Shaian Mechanics' new Gear slow. The close relationship between the WFPA and Riley Weapon Systems of Fort William has meant, however, that WFPA troops are often able to get certain armaments at a reduced price or with greater frequency. The availability of Riley Hammerstrike-I guided missile tubes in the TN 1890s was one such example. Using the old *Hunter Recon* chassis as a basis, the WFPA created a relatively rapid anti-armor unit with guided missiles.

The two shoulder-mounted missiles were not without their problems, however. In order not to sacrifice speed and maneuverability, the standard outwardly exploding armored sheath of the Hammerstrike-I launcher (which ensures that detonating missiles will explode away from the pilot's cockpit) was dispensed with, exposing pilots to additional risk. The *Recon AG* also saw its only other weapon system — the Riley MR25 autocannon — removed for the same reasons. The shoulder placement of the missiles also made the *Recon AG* somewhat unstable at high speeds. Nevertheless, when deployed within a squadron of other recon Gears, the *AG* was an effective weapons system and served well during the War of the Alliance. Most *AGs* have now been decommissioned in favor of *Cheetah* variants, but the Fort James militia at least still uses a limited number of them and some others have found their way into Badlands militias.



Vehicle Specifications

Code Name:	Hunter Recon AG
Production code:	HACS-01MG-L/TK
Production Type:	Mass Production
Cost:	337,613 marks
Manufacturer:	Northco
Use:	recon/assault Gear
Height:	4.3 meters
Width:	2.9 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6525 kg
Primary Movement Mode:	Walk (47 kph)
Secondary Movement Mode:	Ground (77 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	2 x AGM (FF, 2 missiles each), Targeting Designator (Rating 3), Exposed Fire Control, Exposed Movement System, Hazardous Ammunition Storage, Unstable
Remove:	All weapons
Change:	Increase Walker Top Speed to 8 (47 kph), Ground Top Speed to 13 (77 kph), Deployment Range to 600 km, reduce Armor to 14
Modified Threat Value:	506
Offensive:	986
Defensive:	289
Miscellaneous:	247

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	10

Bryce Hubbard (order #5318102)

4.4.17 HACS-01MG-TK HUNTER ZERSTÖRER MK II

The original *Hunter Zerstörer* was developed at the beginning of St. Vincent's War as the first tank-hunting variant of the *Desert Hunter*. It achieved near-legendary status during the war, responsible for a frightening proportion of kills during assaults on Southern cavalry units. The *Zerstörer* continued to serve with distinction until the TN 1780s when the *Hunter Commando* and *Hunter Commando EW* were introduced as paratrooper Gears capable of tank-hunting. While the *Commando* has always been expensive to produce, leaving the *Zerstörer* as the main ground assault *Hunter*, the *Commando* attracted more prestige. As other Gear models brought even more firepower to bear, the *Zerstörer* became less and less impressive, even with the standard *Hunter* Mk II upgrade of the TN 1850s. The model, however, was given a new lease on life during the War of the Alliance.

The Mk II appeared at the end of the War, when the fighting was most furious. Terranovan forces were starting to gain the advantage and needed the most powerful machines they could get to form AT/SS (Anti-Tank/SuperSoldier) teams. The Gears already in these teams were too few and costly to create effective force. The Mk II had heavy armor which was similar in composition to the *Jaguar*'s; sensor and radio equipment nearly identical to the *Headhunter;* and weaponry which gave it a fighting chance against even the most powerful CEF tanks. To maintain speed despite its additional weight, it received a larger engine. Maneuverability was slightly lower, however, which did not place the Mk II at a disadvantage in its tank hunting capacity. It did, however, result in problems against GREL forces. Despite a highly successful tour of duty, the *Zerstörer* MK II can no longer remain competitive with machines such as the *Assault Grizzly*, *Strike Jaguar* and the *Kodiak*, which are produced in ever-increasing numbers at an ever-reduced cost. And demand continues to decrease rapidly with the introduction of even newer Gears, the Mk II continues to fall further and further into obsolescence. Nevertheless wartime pilots remember it well and it continues to serve in some less prestigious units.

Vehicle Specifications

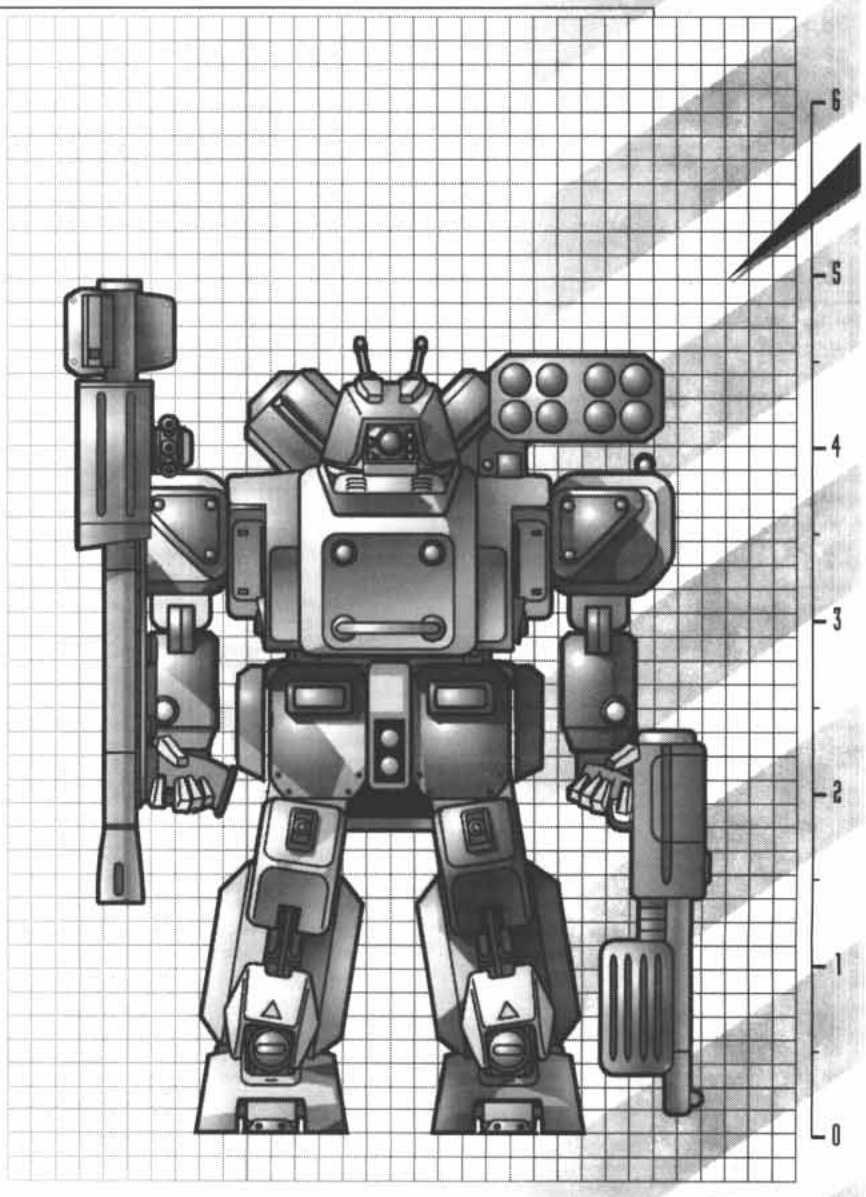
Code Name:	Hunter Zerstörer Mk II
Production code:	HACS-01MG-TK
Production Type:	Mass Production
Cost:	331,583 marks
Manufacturer:	Northco
Use:	anti-armor Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6919 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (67 kph)
Deployment Range:	450 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	LBZK (F, 30 rounds), FGC (F, 20 rounds), MRP/18 (FF, 18 rockets), Reinforced Chassis
Remove:	All weapons, Easy to Modify
Change:	increase Armor to 17, reduce Ground Top Speed to 11 (67 kph), Maneuver to -1, Deployment Range to 450 km
Modified Threat Value:	497
Offensive:	1001
Defensive:	238
Miscellaneous:	253

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5

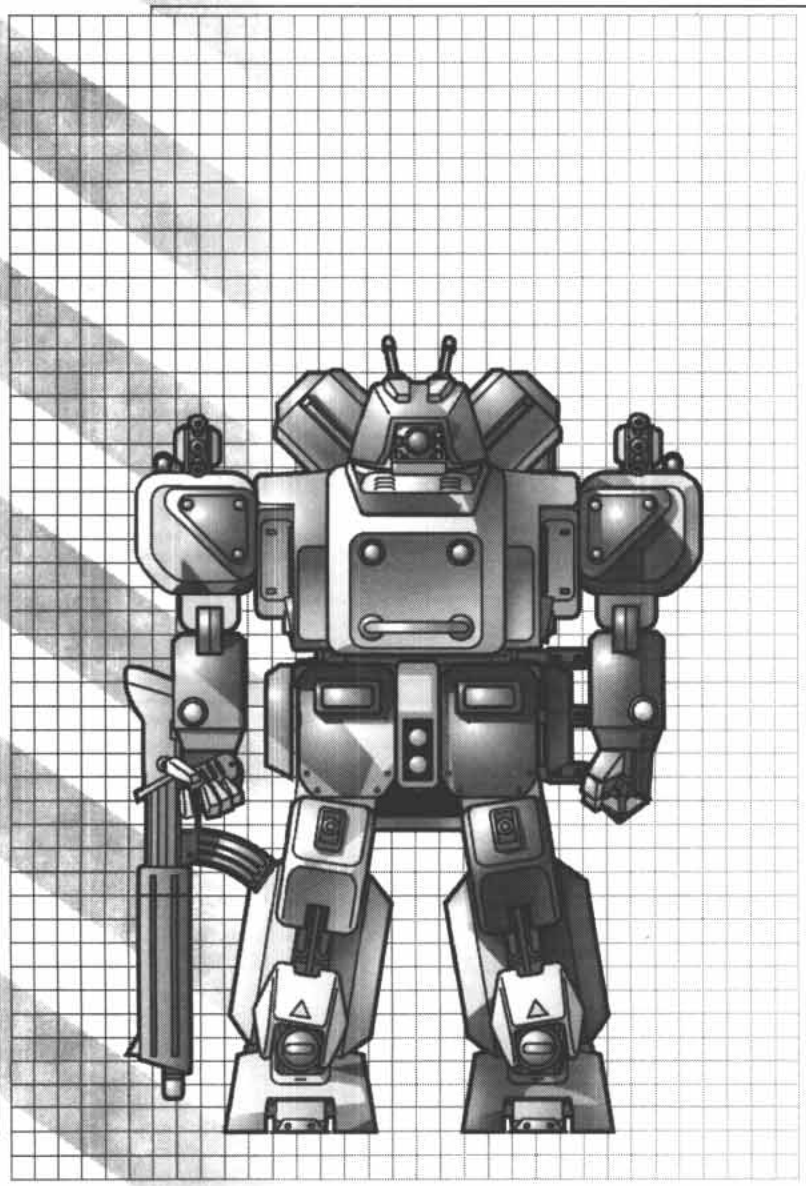


Bryce Hubbard (order #5318102)

4.4.18 HACS-01MG-TK/A HUNTER ZERSTÖRER MK II A

The reduced maneuverability of the *Zerstörer* Mk II made it vulnerable to GREL infantry using anti-armor weapons. While the anti-infantry machinegun used by the Mk. II provided some protection, some units began to modify a few of their *Zerstörers* for more dedicated anti-GREL action. By providing the new "GREL Defender" version of the *Zerstörer* with more automatic weapons capabilities, Northern commanders hoped to be able to create a unit which could saturate formations of shocktrooper GRELs or provide cover fire for standard *Zerstörers* setting up to fire their ATL-70 Bazookas at armored targets. To do so, the standard bazooka and F23 frag cannon were replaced by a simple Riley M222 autocannon rifle. After several *Zerstörers* were disabled by GRELs targeting their engines from a close range, second rear-facing anti-personnel grenade launcher was installed. To preserve anti-armor capabilities, the *Zerstörer* Mk II A was equipped with several panzerfausts which allowed tank-hunting without requiring the assembly of the ATL-70.

The "GREL Defender" was largely a stop-gap measure initiated by commanders who were not provided with sufficient anti-infantry units to defend their tank hunters. Given these constraints, the Gear performed well and was involved in many of the victories of the closing stages of the war. The "GREL Defender" was rapidly phased out after the war, however, and is a relatively rare machine in the TN 1930s. Some remain in action in the Badlands, either as part of Northern Guard units who have been stuck with supposedly outdated vehicles or forming an important part of the arsenal of several rover gangs who had joined with Northern forces during the final push into the Barrington Basin. The higher maintenance requirements of the *Zerstörers* as compared to other *Hunters* has made them less popular with Badlanders, but their firepower remains very attractive. Many of the units still in the Northern armies have been transferred to rear-guard units as more advanced anti-armor Gears become more and more available, but even here most Mk II As have been reconfigured into standard *Zerstörers*.



Vehicle Specifications

Code Name:	Hunter Zerstörer Mk II A
Production code:	HACS-01MG-TK/A
Production Type:	Mass Production
Cost:	116,681 marks
Manufacturer:	Northco
Use:	anti-armor/anti-infantry Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6712 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (67 kph)
Deployment Range:	450 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	APGL (Fr, 6 grenades), 3 x MPZ (F), Reinforced Chassis
Remove:	LRP/24, VB, HG, Easy to Modify
Change:	Increase Armor to 17, reduce Ground Top Speed to 11 (67 kph), Maneuver to -1, Deployment Range to 450 km
Modified Threat Value:	233
Offensive:	209
Defensive:	238
Miscellaneous:	253

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.4.19 HACS-01MG-C/A SPEARHEAD

Northco's *Spearhead Hunter* is an attempt to use the *Hunter* frame as a versatile command center. This variant was first fielded by Colonel Keeth Bradlee, regimental commander of the 74th Heavy Gear Regiment (*Nova Redriders*), and is typical of many regimental command Gears. Because regimental commanders are not expected to fight on the frontlines but may need the mobility of a Gear, the *Spearhead* was derived from the simple and tested *Hunter* chassis rather than the more valuable *Jaguar* chassis. While the basic structure of the *Hunter* remains the same, the computer and communications system have been radically modified. First fielded in TN 1930, the *Spearhead* uses an Abaline Tactical Systems TOC-15 tactical coordination computer — a less powerful version of the TOC-27 employed in the *Command Mammoth* strider. A satellite uplink dish has also been added to ensure an ease of communication with dispersed forces. The two systems allow for easy interface with a regimental Tactical Operations Center as well, although the integration of the TOC-15 display hardware with the IHADS system has cramped the head module with electronics and blocked the Gears vision slits. Weaponry has been changed to a single M225 autocannon, supplemented by automated anti-personnel charges to prevent close assault.

The *Spearhead Hunter* remains in very limited distribution. The TOC-15 system has proven effective, but the sensitive electronics do make the *Spearhead* vulnerable to attack. The Northern Guard also does not wish to encourage its colonels to hop in a Gear and lead from the field where they can easily get killed. Northco and Abaline hope to use the example of the *Spearhead* to develop a new generation of command Gears once the *Jaguar* has been firmly established as the center of Northern forces, but for now the *Spearhead* remains mostly an interesting experiment fielded only by the *Nova Redriders* and a few other regiments. For the time being commanders believe that regiment-level mobile command is better done from a dedicated vehicle such as the CV-3 *Murdock* which allows the commander to travel with close advisors.

Vehicle Specifications

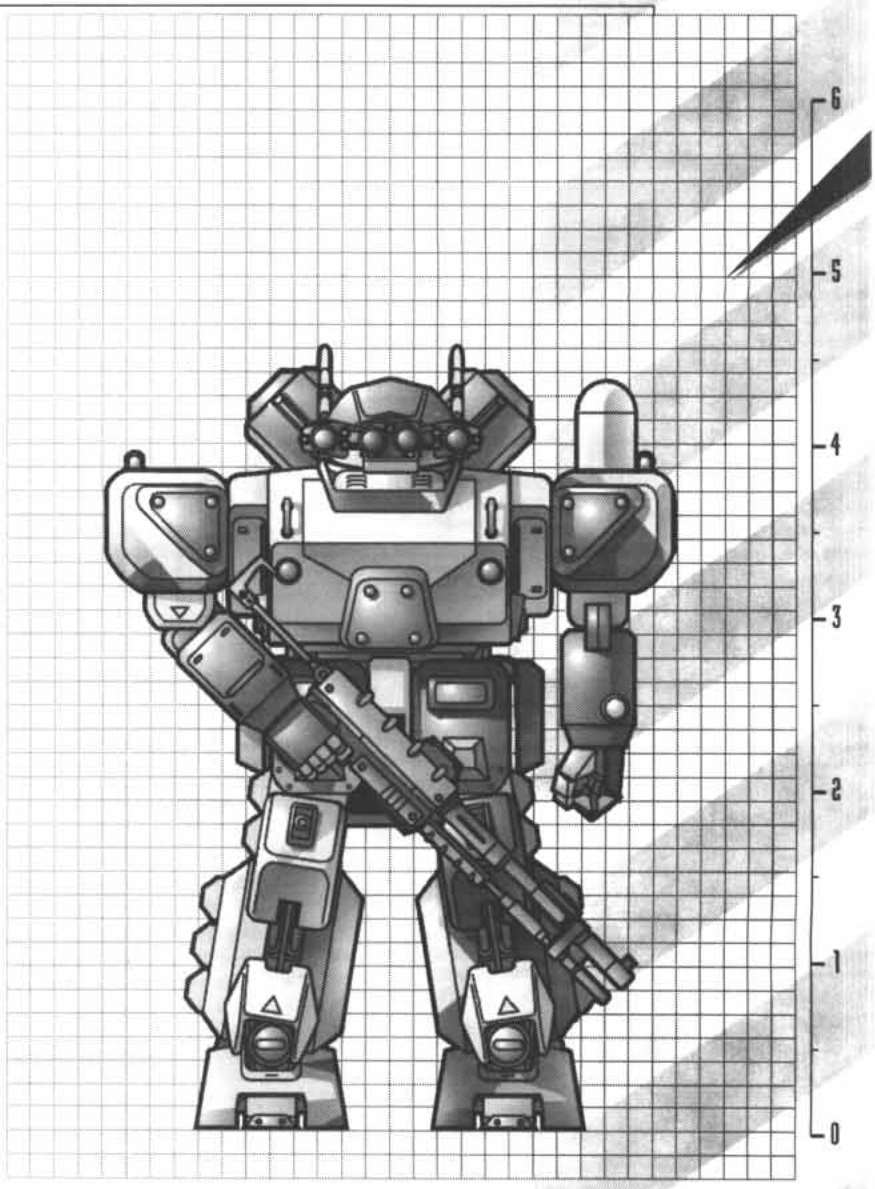
Code Name:	Spearhead
Production code:	HACS-01MG-C/A
Production Type:	Limited Production
Cost:	1,341,333 marks
Manufacturer:	Northco
Use:	regimental command Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6683 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	HAC (F, 20 shells), Laboratory: Leadership (Rating 1), Satellite Uplink, 2 x AP Charges (Rating 1, 6 charges each), Sensor Dependent, Vulnerable To Haywire Effects
Remove:	All weapons, Easy To Modify
Change:	upgrade Communications to +1/15 km
Modified Threat Value:	503
Offensive:	252
Defensive:	297
Miscellaneous:	960

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	1

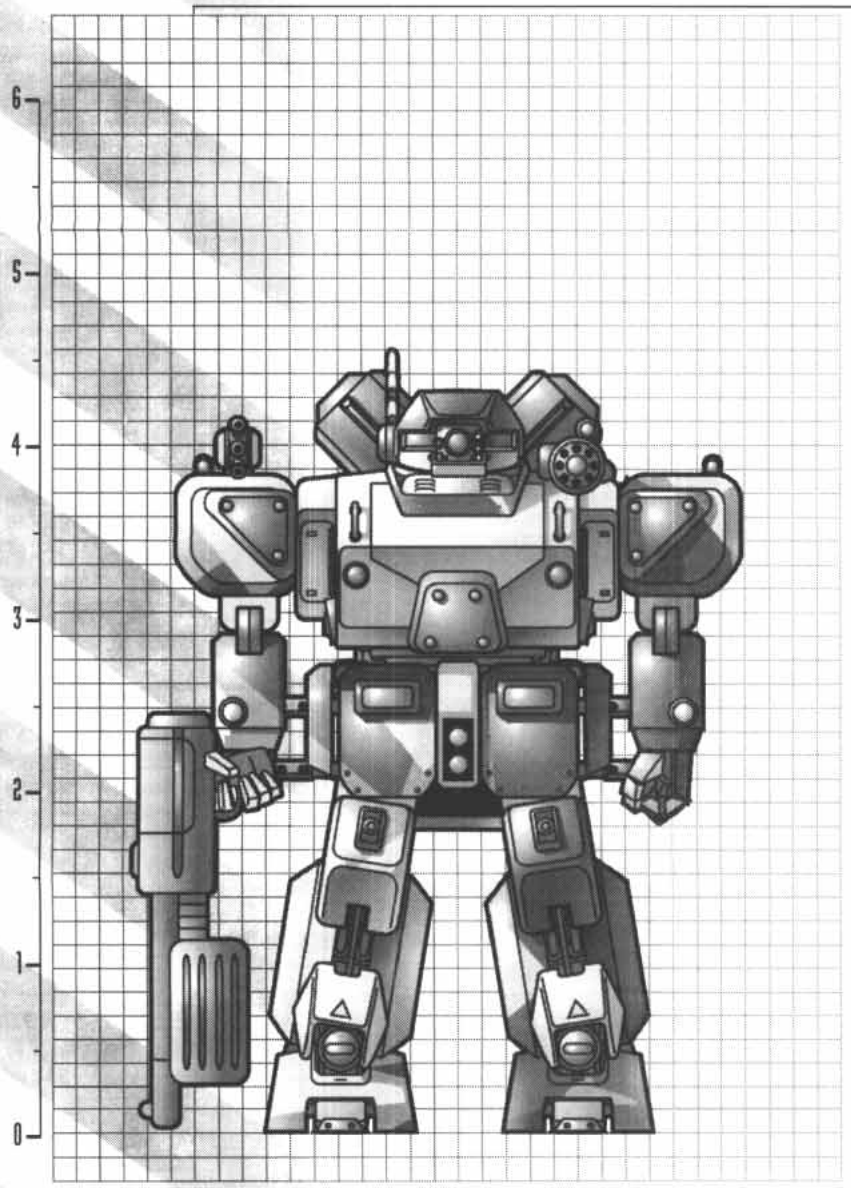


Bryce Hubbard (order #5318102)

4.4.20 HACS-01MG-UC HUNTER UC

Recent historical studies of urban combat during the War of the Alliance have pointed out several flaws and shortcomings in the strategies and options of the Terranovan military planners. The composition of the invading army — composed of an unlikely mix of highly trained and resilient foot soldiers matched with high mobility armored vehicles — required a force capable of delivering both a high volume of fire and concentrated firepower in the tight confines of city streets, depending on the type of unit they confronted. While most military planners addressed the problem by simply assigning Gears and other vehicles with complementing abilities, a few attemps where made to match both in a single chassis. The *Hunter Urban Combat* was one of those, using the sturdy *Hunter* chassis as a base for a unit that would excel in the close confines of street combat.

Pilots have often complained that though one of the prefered northern city fighters, the Assault Hunter, carries an excellent 106mm Snub Cannon, it can hold only one three-round clip. Carrying spare clips is dangerous (a problem later addressed by the Assault Hunter AC) and changing them time-consuming. The *Hunter UC* designers circumvented this shortcoming by replacing the Snub Cannon with a mixture of lesser weapons, tailored to the requirements of close-in fighting. The *Hunter UC* is equipped with a 12-round fragmentation cannon, four panzerfausts and heavy machinegun. The hand-held fragmentation cannon is equally capable of attacking armored targets or mowing down infantry. Four UBP-100 heavy panzerfausts and a few Northco Demolition Grenades are provided for reducing enemy strongpoints and armored vehicles to dust, while a heavy machinegun placed on a swivel mount on the shoulder provides additional protection from ambush by enemy infantry. Ammunition supplies remain a problem, however, since the fragmentation cannon will hold only twelve shots and the four panzerfausts are rapidly used up in heavy fighting.Some *Assault Hunters AC*s have been known to carry fragmentation ammo in large offensive campaigns to extend the *UC*'s endurance.



Vehicle Specifications

Code Name:	Hunter UC
Production code:	HACS-01MG-UC
Production Type:	Mass Production
Cost:	237,417 marks
Manufacturer:	Northco
Use:	*urban fighter Gear*
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	45 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6612 kg
Primary Movement Mode:	Walk (42 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	FGC (F, 12 rounds), 4 x HPZF (F), HMG (F, 400 rounds)
Remove:	LAC, LRP/24
Change:	Upgrade Hand Grenades to Heavy Hand Grenades
Modified Threat Value:	407
Offensive:	534
Defensive:	296
Miscellaneous:	392

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.4.21 HACS-01MG-ENG/A BRICKLAYER BULLDOZER

Along with the basic *Bricklayer* and the *Engineering Grizzly*, the *Bulldozer* and the *Demolisher* variants of the *Bricklayer* form the backbone of the engineering squads in the Northern armed forces. The *Bricklayer* was designed by a Northco team, but the plans have since devolved to its subsidiary, Elementech. Elementech has designed their own *Bulldozer* and *Demolisher* variants based on their field observations and the requests and suggestions of combat engineers. While the *Demolisher* is used for blasting apart obstacles, the *Bricklayer Bulldozer* has been designed to assist in the digging of defensive earthworks such as revetments and trenches. While the more efficient engineering vehicles may do most of the grunt work, the *Bulldozer* makes the finer adjustments and can often dig in the most inaccessible environments. Unlike the *Bricklayer*, the *Bulldozer* is fairly rare in the civilian domain, mainly because it is often cheaper to simply buy a classic backhoe to dig holes in the streets rather than a complex walker vehicle.

A hydraulic power unit fitted with a high-performance earthmoving tool that is a cross between a giant spade and a bulldozer blade replaces the crane mounted on the Gear's back. The blade is usually stabilized and directed by both arms of the Gear, the raw lifting power being provided by the actuators of the blade assembly. The blade itself is held in place with a very simple mechanical lock system and can be replaced by another digging tool in only a few minutes. The strong force required to move large amounts of dirt meant that the engine was retuned for lower torques, resulting in a fuel-inefficient Gear. *Bricklayer Bulldozers* are usually brought to the field by Gear-carriers, where they disembark to start work. Because of their open-topped crew compartment and unarmored limbs, they are kept as far as possible from the battlefield. *Bulldozers* are rarely assigned to a single pilot, as most Gears usually are, and are simply allocated to work crews as required. As a result, they tend to have far less individuality than other Gears, both in their programming and their general outward appearance.

Vehicle Specifications

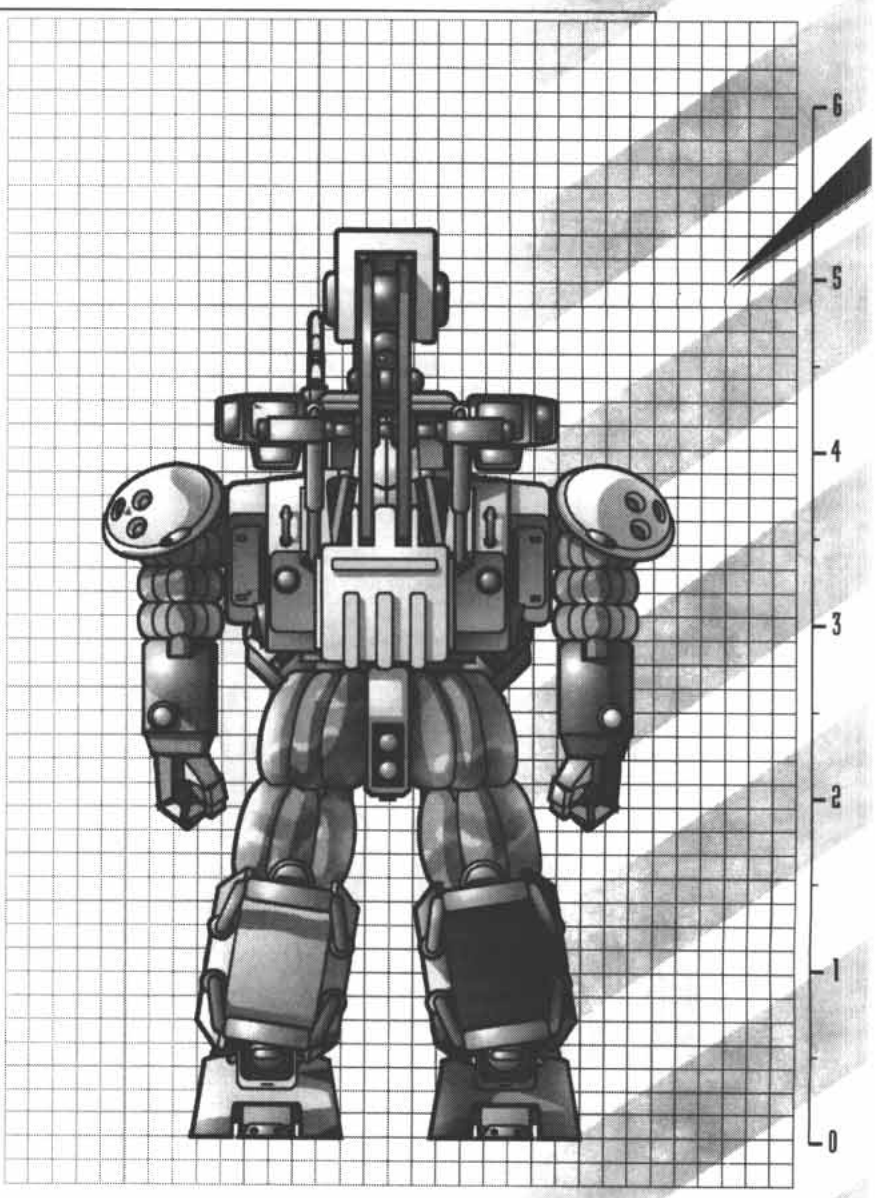
Code Name:	Bricklayer Bulldozer
Production code:	HACS-01MG-ENG/A
Production Type:	Mass Production
Cost:	86,290 marks
Manufacturer:	Elementech
Use:	engineering Gear
Height:	4.3 meters
Width:	3.0 meters
Average armor thickness:	39 mm
Armor material:	durasheet w/alloy
Standard operational weight:	6487 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	None
Deployment Range:	500 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V950A V-Engine
Horsepower:	450 Hp

Modifications

Add:	Light Mining Equipment (cannot attack), Exposed Crew Compartment,Fuel Inefficient (Rating 3)
Remove:	All weapons, Ground movement
Change:	Reduce Armor to 14
Modified Threat Value:	173
Offensive:	18
Defensive:	201
Miscellaneous:	299

Vehicle Availability

Availability Threshold:	2
Maximum Number of Units in the Field:	Unlimited

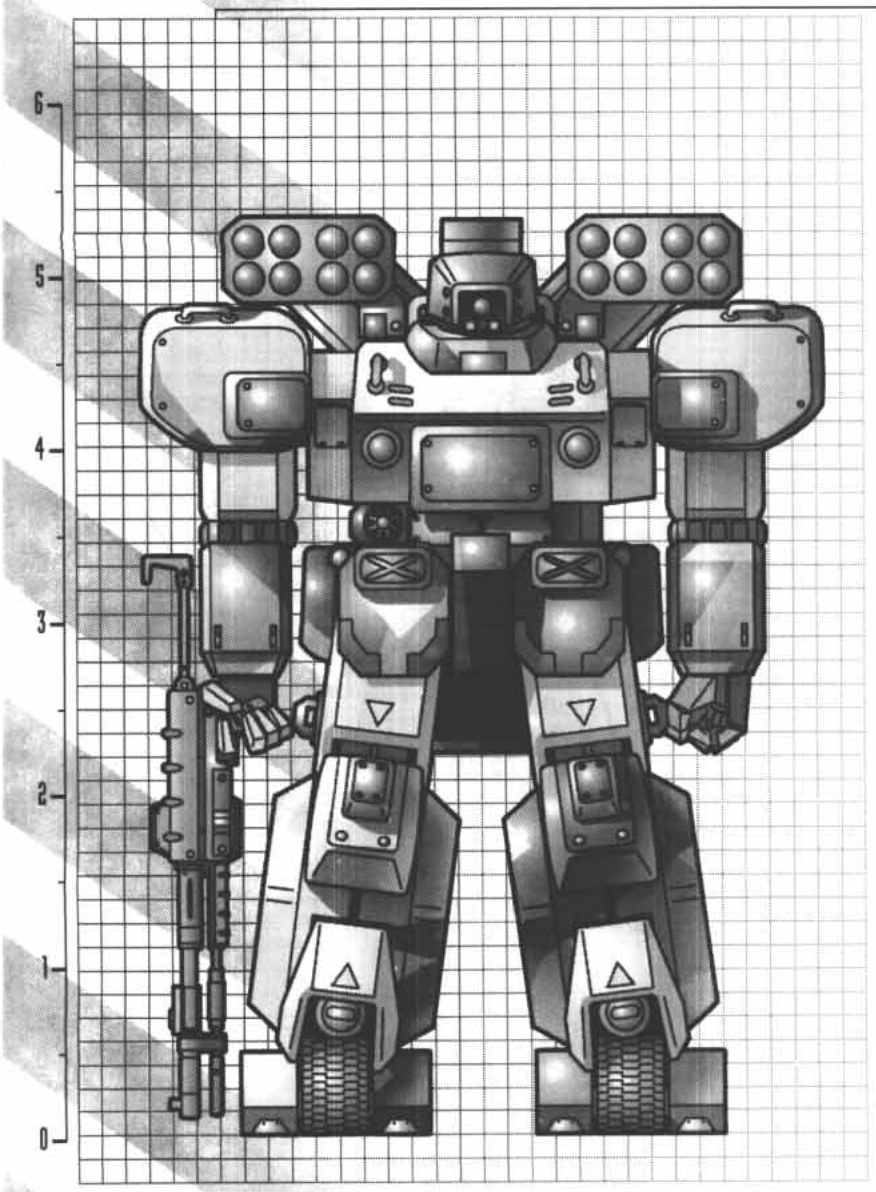


Bryce Hubbard (order #5318102)

4.5 HACS-02HG-MPS GRIZZLY

The first result of cooperation between industrial giant Northco and Kenema's Shaian Mechanics, the *Grizzly* heavy fire support Gear has been a mainstay of the Northern armies since its introduction in the TN 1870s. Designed to replace the *Bear*, the *Grizzly* brought a combination of raw firepower and thick armor to the battlefield. The basic armament of the *Grizzly* was generally based on that of the *Bear* featuring a Riley M225 heavy autocannon as its main direct fire weaponry, supplemented by twin GH-8 rocket pods. In addition to the unguided rockets, indirect fire capabilities are provided by TD-76 mortar unit, capable of lobbing guided high-explosive shells up to two kilometers. This long-range guided weaponry makes the *Grizzly* extremely dangerous when paired with a forward observing unit using a laser designator — such as a *Cheetah* or *Ferret* scout/recon Gears. The *Grizzly*'s S-V2200Z engine was a distinctive improvement over the *Bear*'s troublesome S-V790T and managed a mild speed improvement, despite heavier armor. The *Grizzly* remains slow and lumbering compared to trooper and scout Gears and even to motorized infantry. To provide point defense, the *Grizzly* was equipped with a GU-10 gatling machinegun.

Despite its heavy armor and impressive weapons load, the *Grizzly* is usually deployed with lighter machines as defensive escorts. Tank-hunting enemy Gears can be frighteningly effective if they are allowed to close range with the *Grizzly*, because of speed and maneuverability advantages. The standard tactical deployment remains in mixed companies, using squadrons of *Grizzlies* in secondary positions, with strike squadrons moving forward and including at least one forward observing unit to relay coordinates and laser targeting data to the *Grizzlies*. The successful use of the *Grizzly* has led to the progressive decommissioning of the *Bear*, but has entailed corporate difficulties for Northco. As Shaian Mechanics has become an active competitor, the long term contracts that bind the two corporations to the *Grizzly* line has become a matter of great contention — and possible litigation.



Vehicle Specifications

Code Name:	Grizzly
Production Code:	HACS-02HG-MPS
Production Type:	Mass Production
Cost:	634,286 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	close fire support Heavy Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9210 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Weapon Payload

Name	Ammunition Payload
M225 Heavy Autocannon	30 shells
2 x GH-8 Rocket Pods	18 rockets each
GU-10 Gatling	300 rounds
M25 Pack Gun	30 rounds
TD-76 Mortar Unit	12 shells
HW-VB1 Vibroknife	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

The *Grizzly* has proved its worth repeatedly over the sixty cycles of its existence. An expensive machine to produce, the *Grizzly* only slowly replaced the *Bear*. It first saw action in a Northern Guard campaign to suppress a particularly vicious Wounded Knee smuggling ring in the TN 1880s and was responsible for a stunning number of kills. Conflicts with the South were increasing at that time and the *Grizzly* was also involved in an increasing number of skirmishes with Southern MILICIA troops in the Badlands. The true test, however, was the War of the Alliance. Faced with the fast armor of Colonial Expeditionary Force hovertanks, the *Grizzly* proved effective in combat, especially when deployed with forward observing units to "tag" hovertanks with laser designators. The War also saw the development of the first *Grizzly* variants, most of which pressed it into front-line assault roles against the heavy armor of the CEF. The success of the *Rabid* and *Assault Grizzly* led to the development of the *Kodiak* heavy assault Gear.

Since the war, the *Grizzly* has continued to serve with distinction across the Northern hemisphere. The TN 1920s saw an especially wide distribution of *Grizzlies* as the Northern Guard made a final decision to replace most of its *Bears* in favor of the more modern machine. As tensions have increased once more, *Grizzly* production runs have remained high and have filled the demand for heavier weapon systems. The legal and corporate difficulties now plaguing relations between Northco and Shaian Mechanics may make continued maximum production difficult, but it remains in the interest of both parties to have the *Grizzly* in widest possible distribution. Northern tacticians, however, have felt that the *Grizzly*'s low speed and lack of maneuverability are critical flaws in the design. In anti-armor or fire-support roles, these drawbacks are not very serious, but in cases of combat with other Gear formations, general purpose Gears are needed to shield *Grizzly* units, limiting the flexibility of the force. Northco and Shaian technicians have repeatedly stated that agility and heavy firepower are extremely difficult to mesh together in a Gear, but a program is nonetheless underway to overhaul the *Grizzly*. The first result of this program has been the so-called "Panda" prototypes.

General Stats

Threat Value:	889
Offensive:	2175
Defensive:	257
Miscellaneous:	236
Size:	7
Original Default Size:	10
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movement Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	11
Maneuver:	-1

Electronics

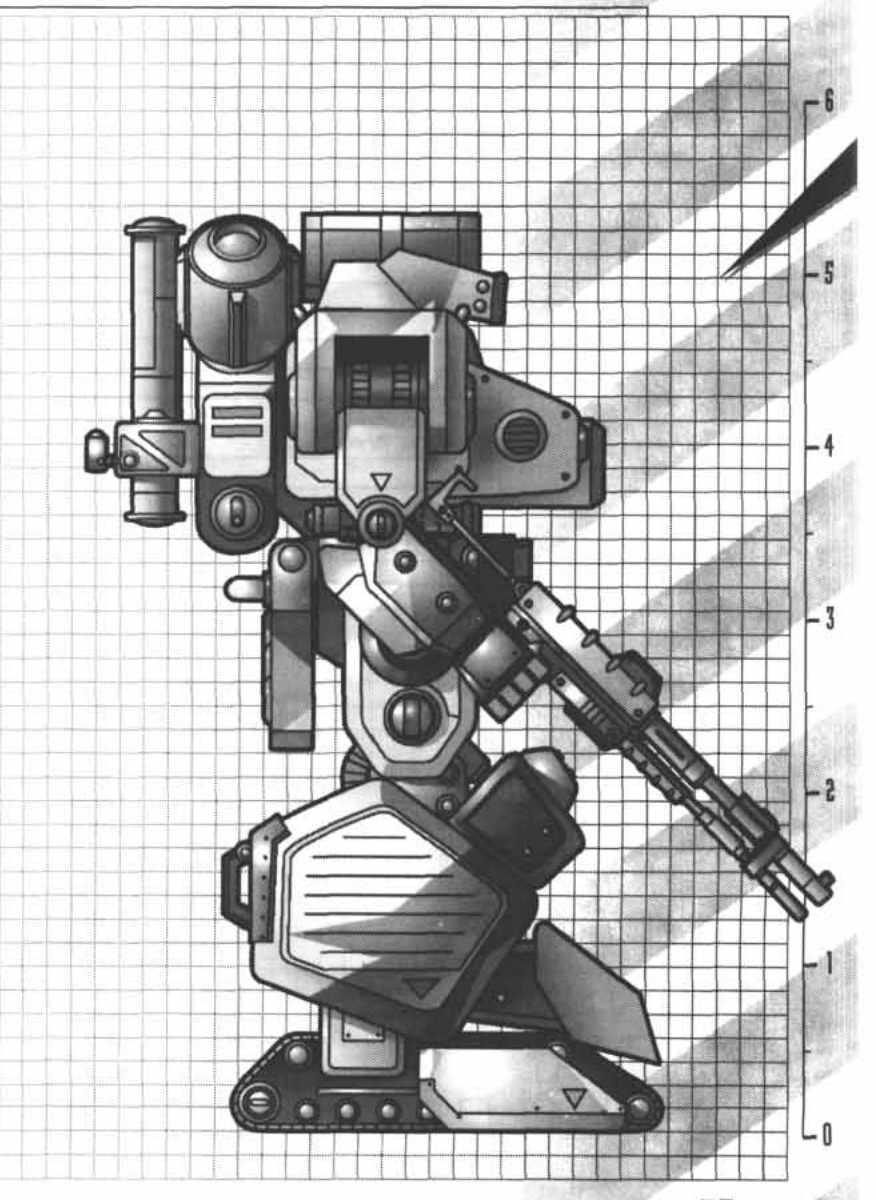
Sensors:	0
Communications:	0
Fire Control:	0

Armor

Light Damage:	18
Heavy Damage:	36
Overkill:	54

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M225 Heavy Autocannon	HAC	Forward	1	30
GH-8 Rocket Pod	MRP/18	Forward	2	18/18
GU-10 Gatling	HMG	Fixed Forward	1	300
M25 Pack Gun	DPG	Forward	1	30
TD-76 Mortar Unit	HGM	Forward	1	12
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effect
High Towing Capacity	-	Double
Hostile Environment Protection	-	Desert
2 x Manipulator Arm	7	Can punch
Reinforced Armor	2	Front

Flaws

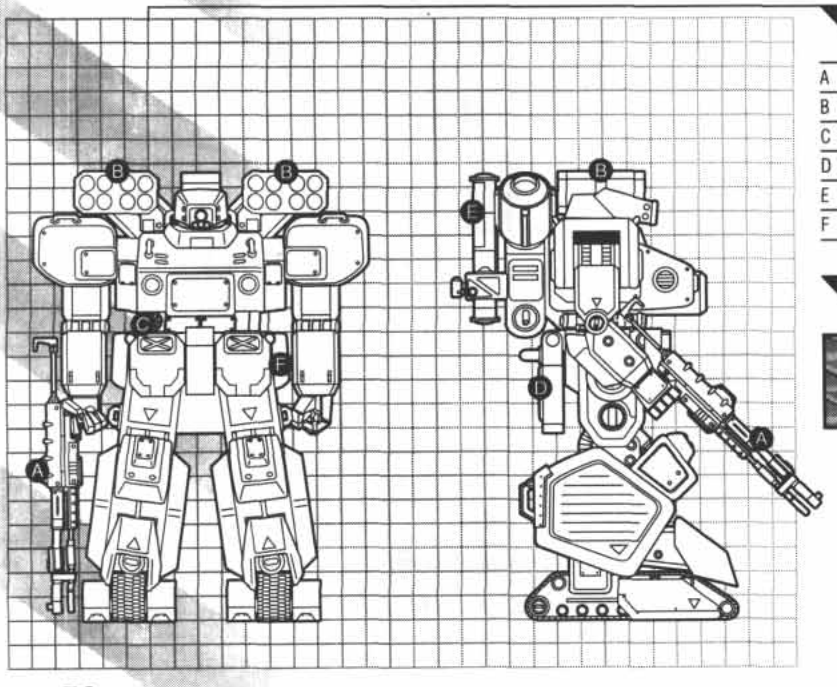
Name	Rating	Game Effect
Large Sensor Profile	1	Easier to detect

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

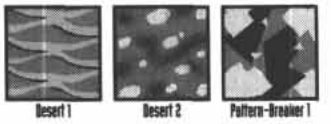
Name	Modified TV
Add Camo Netting	898
Add Smoke Launcher	898
Add Armor Jacket (Reinforced Loaction Armor: Crew, Rating 2)	898
Add 3 HGs	900



Weapons Location Diagram

A	M225 Heavy Autocannon
B	2 x GH-8 Rocket Pod
C	GU-10 Gatling
D	M25 Pack Gun (not shown)
E	*TD-76 Mortar Unit*
F	HW-VB1 Vibroknife (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.5.1 HACS-02HG-AST ASSAULT GRIZZLY

The first combat variant of the Grizzly put into operation, the *Assault Grizzly* is the machine used when heavy combat is expected. First introduced in TN 1913, during the War of the Alliance, it answered an urgent need of the Terranovan military for strong front-line combat Gears; more specifically, machines that filled the niche of a powerful assault unit strong enough to deal with tanks but mobile enough to engage with lighter vehicles if it had to. To meet these requirements, most of the standard weapon layout of the Grizzly was modified. The M225 heavy autocannon was replaced by a high-performance Riley B-300 bazooka, and the two GU-8 18-shot rocket pods were exchanged for two GHI-20 incendiary rockets pods, both carrying 20 white phosphorous rockets. The TD-76 mortar unit, better suited for fire-support duties, was also removedin the *Assault* variant.

Protection and striking power were the twin concepts on which the *Assault Grizzly* conversion package was based. Upgraded armor, in the form of three additional layers of laminate, and the possibility of adding a sort of armor jacket gave this impressive-looking Gear a better chance of surviving the deadly battlegrounds of the War of the Alliance. Following the same design philosophy, the armored skirts were sometimes extended with spare armor sheeting to provide better leg protection. Some machines were even covered with anti-magnetic paste on their lower halves to ward off magnetic mines that Earth infantry was widely believed to be carrying (later in the War, it was learned that they used molecular adhesive to fix the charges). Radio communications were improved by adding an upgraded radio antenna pod on the right side of the head module. Many *Assault Grizzlies* had an autopilot installed, but these systems were never popular as they interfered with the main drive computer. Throughout these many changes, the *Assault* remained very successful, bringing a terrifying amount of hitting power to the battlefield and being able to face down hovertanks like few other units. The success of the *Assault Grizzly* would inspire the construction of the *Kodiak*.

Vehicle Specifications

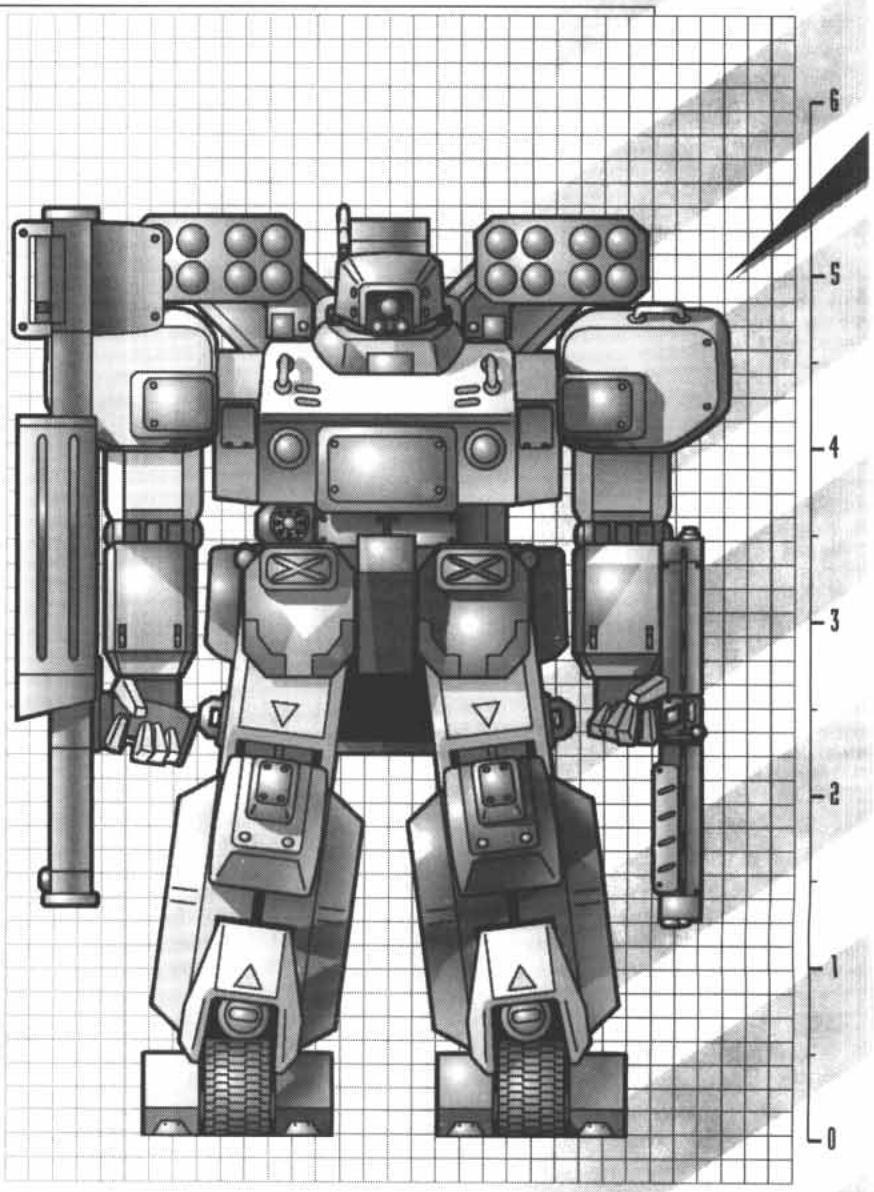
Code Name:	Assault Grizzly
Production Code:	HACS-02HG-AST
Production Type:	Mass Production
Cost:	481,275 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	heavy assault Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9205 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	MBZK (F, 30 shells), 2 x IRP/20 (F, 20 rockets), Autopilot, Backup Communication System
Remove:	HAC, MRP/18s, HGM
Change:	Upgrade Communications to +1/15 km
Modified Threat Value:	749
Offensive:	1390
Defensive:	257
Miscellaneous:	598

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	5

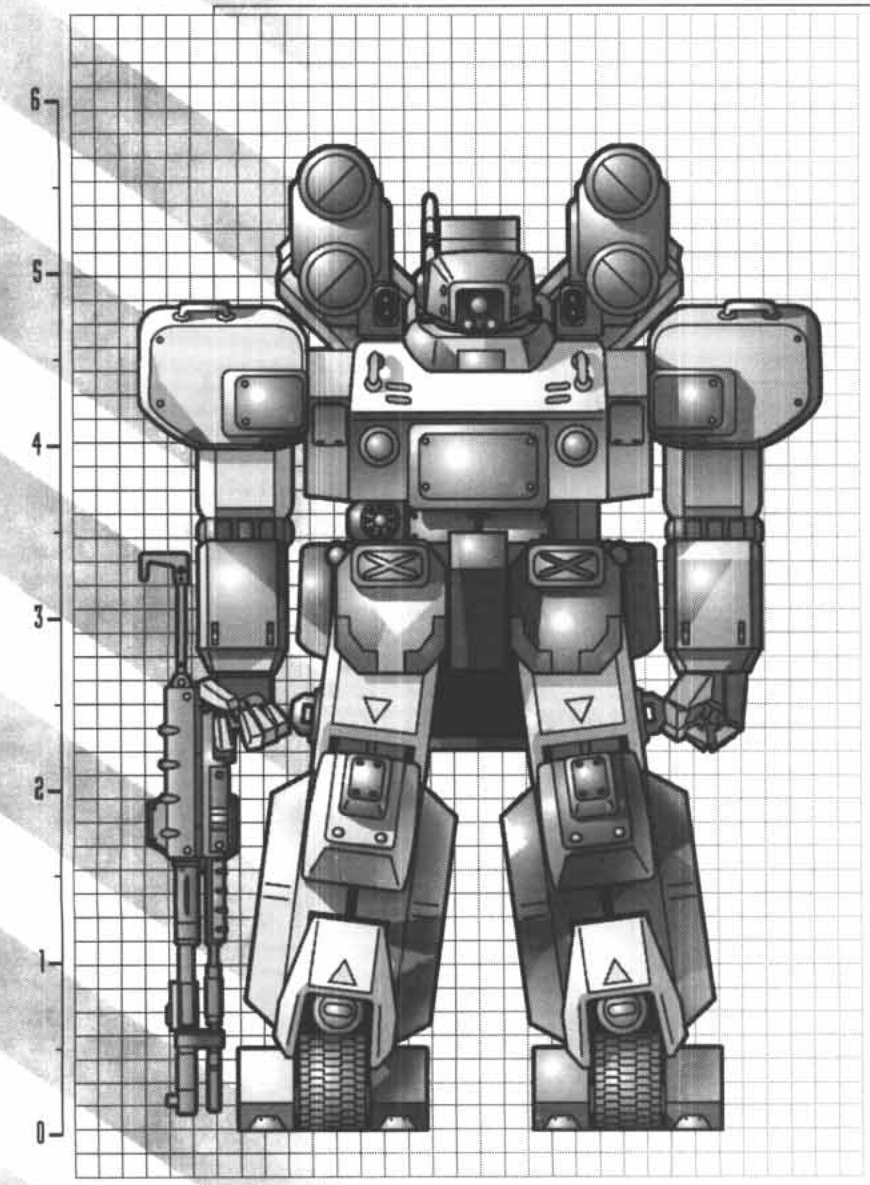


Bryce Hubbard (order #5318102)

4.5.2 HACS-02HG-HAST CROSSBOW GRIZZLY

The *Crossbow Grizzly* was born during a desperate time in the early cycles of the War of the Alliance. After a bloody defeat along the United Mercantile Federation's southern border, the Gears of the Northern Guard's 4th Infantry Brigade had to fight their way back to the city-state of Ashington without most of their armored units and infantry. One of their few vehicles to hold its own against the Colonial Expeditionary Force hovertanks was the *Klemm* light tank with its deadly array of DiMaean anti-tank missiles. With dozens of disabled *Klemms* suddenly at their disposal, the techs of the 70th Provisional Gear Regiment, the *Centurions*, adapted the DiMaean launchers to some of their regiment's *Grizzlies*, producing what was, in effect, a *Klemm* with legs. Two DiMaean missiles were loaded on each of the Gear's shoulder, which required the removal of both GH-8 rocket pods and TD-76 mortar. Even with the removal of these weapons and the *Grizzly*'s huge frame, the converted machines were top-heavy and suffered from stability problems.

Despite the awkwardness of the shoulder-mounted missile tubes, the *Crossbow Grizzly* acquitted itself well during the *Centurions'* embattled march home. The variant saw duty in a number of later battles, acting as a fill-in heavy weapons vehicle for United Mercantile Federation's armored squadrons. Most *Crossbows*, however, were returned to their original configuration at the conflict's end, primarily due to the high cost of the guided missiles. The UMFA is well known for a certain sentimentality about machines that have served it well and have access to an elevated budget. In TN 1920, both forces combined into a standardized version of the *Crossbow*. The DiMaean Raven missiles were maintained and an improved and armored communication system was installed, along with a simple autopilot system that could guide the machine safely across most terrain without toppling. A larger clip was designed for the M225 autocannon rifle to give the *Crossbow* some added endurance in combat. The *Crossbow* is rare even in the Federation as a whole, but is relatively common with the Ashington Royal Guard regiments of the UMFA.



Vehicle Specifications

Code Name:	Crossbow Grizzly
Production Code:	HACS-02HG-HAST
Production Type:	Limited Production
Cost:	2,188,741 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	heavy assault Gear
Height:	5.1 meters (5.4 m w/ ATMs)
Width:	3.8
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9375 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	ATM (FF, 4 missiles), Autopilot, Backup Communication System, Unstable
Remove:	MRP/18s, HGM
Change:	Increase HAC ammo to 40 shells, upgrade Communications to +1/15km.
Modified Threat Value:	851
Offensive:	1743
Defensive:	257
Miscellaneous:	553

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.5.3 HACS-02HG-AA DEFENDER GRIZZLY

Although strategic actions on Terra Nova depend on land forces, attack aircraft can still create a significant tactical advantage — or disadvantage. While wheeled and tracked anti-aircraft platforms are the backbone of the mobile air-protection units of the Northern Guard, Gear-based weapon systems — such as those featured on the HACS-01LG-AA *Cheetah Air Claw* — have had a place to provide cover for Gear units. In The TN 1920s, the decision was made to create heavier walker platforms for air-defense and the *Grizzly* was one of the chassis used for the purpose. The *Grizzly Defender* was released in TN 1925 and deployed in conjunction with *Flak Jaguars* in five or six-Gear squadrons. These "flak teams" are designed to provide mobile air defense for important Northern Guard field encampments. Because of this standard duty, the sight of the back-mounted missile launchers of the *Defender* has become associated with the presence of a Northern filed command center.

The *Grizzly Defender* sports a redesigned head module with an upgraded sensor array. Its primary weapon is a DiMaean Binary surface-to-air missile launcher, mounted on the Gear's backpack, which can fire two microwave-guided missiles. If an enemy aircraft survives this barrage, the *Defender* can still respond with accurate anti-aircraft fire with its manipulator-held Sergon Optics Redeye-B laser rifle. This last weapon can also be turned against ground targets if necessary. The *Defender* also maintains one of the standard GH-8 rocket pods and the GU-10 gatling gun for ground defense and limited indirect fire capability. The possibility of dual function deployment has led some commanders to include single *Defenders* as part of standard *Grizzly* teams when intelligence reports the possibility of enemy air cavalry in the area. The long-range power of the DiMaean Binary missiles has also made the *Defender* a passable offensive anti-aircraft unit, and they are often used as part of a mobile assault on forces featuring aircraft. The *Defender* will remain behind the front-line assault unit but will use its missiles to attack any enemy aircraft harassing the lead units.

Vehicle Specifications

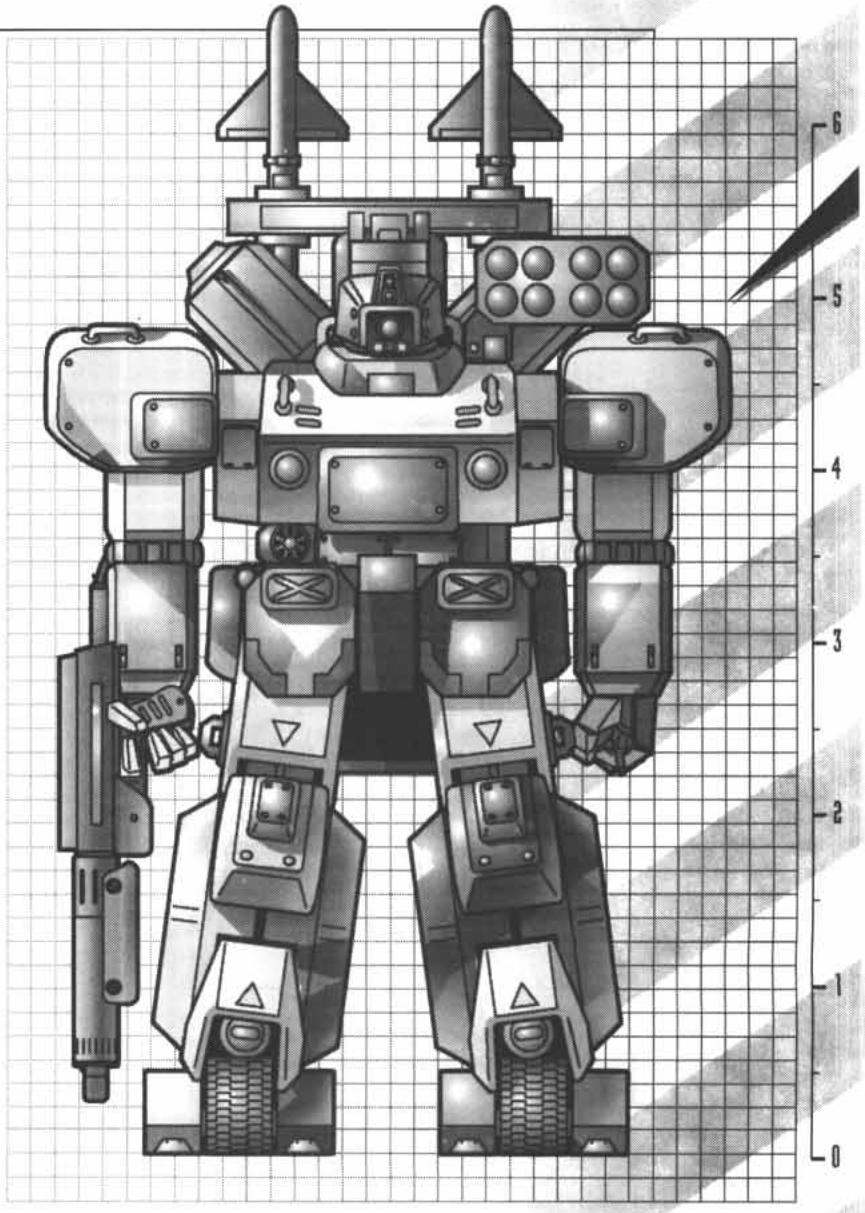
Code Name:	Defenbder Grizzly
Production Code:	HACS-02HG-AA
Production Type:	Mass Production
Cost:	683,861 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	anti-aircraft Gear
Height:	5.1 meters (6.3 m w/ AAM)
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9290 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	80 hexes/4 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	SLC (F, 40 shots), AAM (FF, 2 missiles)
Remove:	HAC, HGM, and one MRP/18
Change:	Upgrade Sensors to +1/4km
Modified Threat Value:	957
Offensive:	2345
Defensive:	257
Miscellaneous:	270

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	3

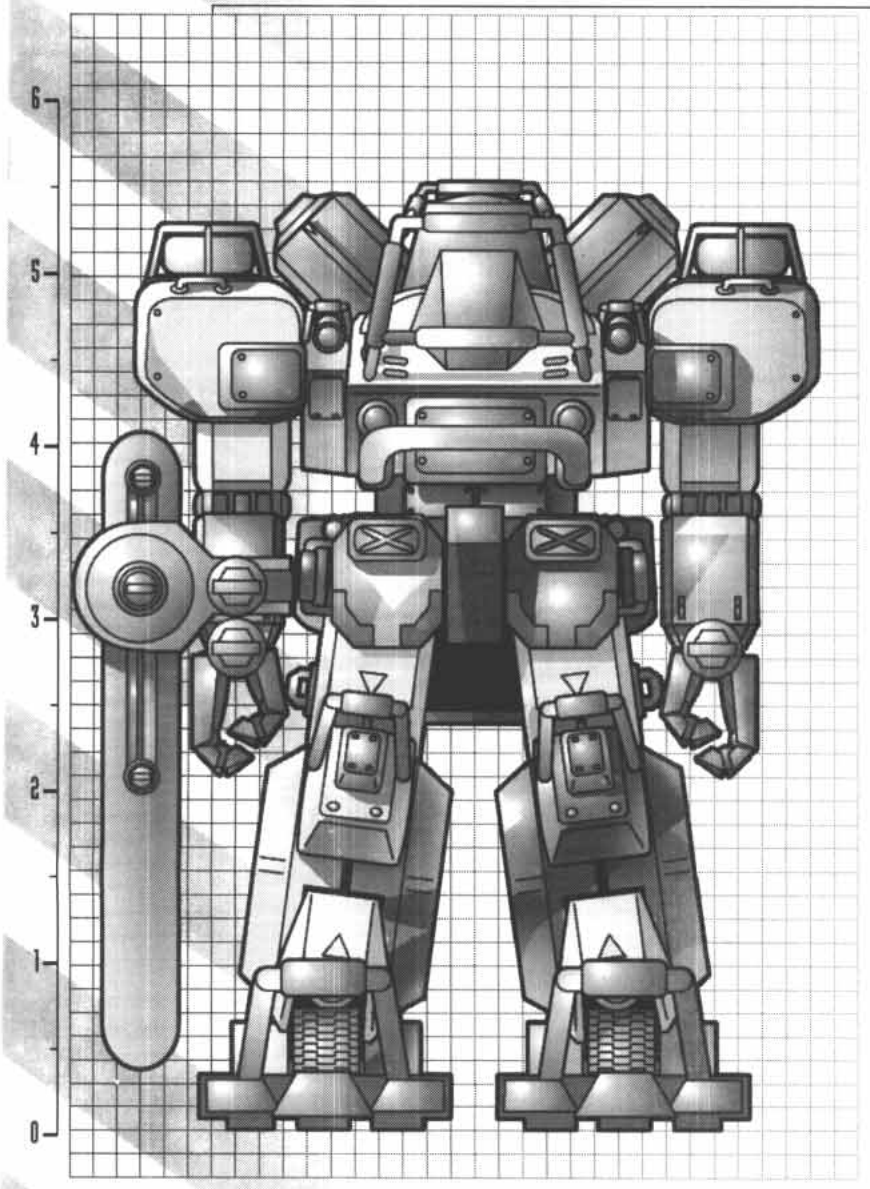


Bryce Hubbard (order #5318102)

4.5.4 HACS-02HG-ENG ENGINEERING GRIZZLY

The *Engineering Grizzly* is a field engineering vehicle based on the basic frame and chassis of Northco's and Shaian's popular *Grizzly* fire support vehicle. Released in TN 1923, Northco wished to ensure that the two remained closely related and the *Engineering Grizzly* shares almost 80% of its components with the base model, allowing for easy repairs. The *Engineering* variant is one of the rare *Grizzly* models produced exclusively by Northco without the cooperation of Shaian Mechanics. A non-combat model with a lower overall weight, the *Engineering* did not require the same high-performance actuators and subsystems as the battlefield models. This move has been widely interpreted as the first step in Northco taking over complete production of the *Grizzly* line from Shaian. Shaian has done much to stop this move and the squabbling between the two corporations has slowed production on many of the line's variants, most notably the *Thunder Grizzly* artillery command unit.

The *Engineering Grizzly* does not feature the armored head unit of the combat vehicle, and many armor panels are thinner to save both weight and money. This exposes the pilot to environmental conditions and enemy fire, and some units have installed additional light armored plates. Like the civilian *Prairie Dog*, the *Engineering Grizzly*'s tool arms are semi-modular: they can be exchanged for another pair through a relatively simple operation that only takes a few hours to perform. Common tools include specialized lift pads for heavy crates, powered cutters for logging operations and trenchers for digging. A standard issue Northco C-14 chainsaw is included with the *Engineering* Grizzly for forestry and light demolition work. *Engineering Grizzlies* are strong enough to defend themselves in combat (some have even been equipped with weaponry), but their real purpose is anything but battle. Their size and strength makes them ideal for large scale military construction and field engineering operations. When the military high command wishes to build an advanced base, up to a full engineering company can be sent to build the required installations.



Vehicle Specifications

Code Name:	Engineering Grizzly
Production Code:	HACS-02HG-ENG
Production Type:	Mass Production
Cost:	36,158 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	engineering Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	8940 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	CS, Searchlight (FF, 50 meters), 2 x Tool Arm (Rating 7, cannot punch, claw-tipped) Exposed Crew Compartment
Remove:	all weapons. Manipulator Arms
Change:	Downgrade Base Armor to 16, Top Walking Speed to 6 (36 kph) Sensors to -2/2 km, Communications to -1/10 km.
Modified Threat Value:	101
Offensive:	20
Defensive:	206
Miscellaneous:	77

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.5.5 HACS-02HG-SUP FIELD SUPPORT GRIZZLY

Based on a similar design as the *Engineering Grizzly*, the *Field Support Grizzly* is dedicated to supporting friendly units in the field, towing extra fuel tanks and reloading weapons. The *Field Support* is so close to the *Engineering Grizzly* that each machine can be rapidly converted to the other by simply changing the arms, an operation that only requires a few hours for a technician. Each arm of the *Field Support* has long and dextrous pincers which are specially adapted to handle ammunition and have non-slip pads at the tip of each of their three "fingers." A small back-mounted bay placed on the rear hip armor skirt is designed to hold spare weapon clips for infantry and Gear weapons.

Fire Support Grizzlies account for almost half the number of *Grizzly*-derived engineering vehicles currently in service. Most are assigned to artillery units and serve as oversized loaders for large artillery weapons, being more flexible than an equivalently sized crane. *Field Supports* are not designed as combat-ready machines, but do operate on the battlefield as they load artillery pieces and carry supplies over difficult terrain. The *Field Support* serves as a part of the standard Northern Guard artillery battery deployment, along with artillery guns such as the *Verder* and ammunition carrying trucks and vehicles. The presence of a large Gear like the *Field Support Grizzly* complements the skills of the crew of ammo loaders that travel in the artillery barrage's support vehicles and ensures a rapid reloading during a battle. The pincers of the *Field Support* are designed with the huge armored clips of the *Verder* and other Northern artillery guns in mind. When deployed closer to the frontlines with other Gear forces, the *Field Support* is sometimes used to tow and set up a field artillery carriage, although the reduced armor and exposed crew compartment of the *Field Support* makes this a risky deployment because of the relatively short range of towed artillery carriages. More commonly, the *Field Support* serves as the standard reloading vehicle for walker artillery vehicles such as the *Thunderhammer* and *Damocles*.

Vehicle Specifications

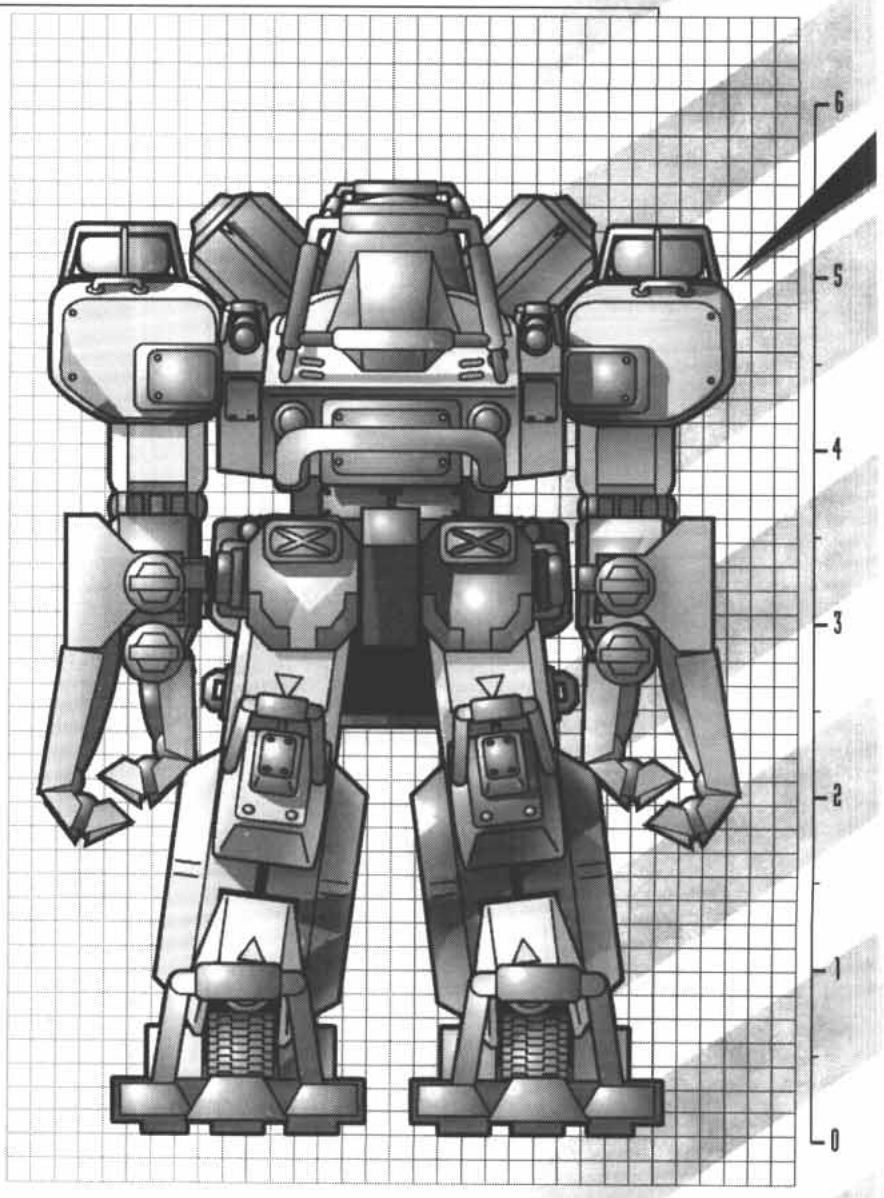
Code Name:	Field Support Grizzly
Production Code:	HACS-02HG-SUP
Production Type:	Mass Production
Cost:	43,094 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	engineering/filed support Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	8935 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	Ammo Storage (20 pts), Searchlight (FF, 50 meters) Exposed Crew Compartment
Remove:	all weapons
Change:	Downgrade Base Armor to 16, Top Walking Speed to 6 (36 kph) Sensors to -2/2 km, Communications to -1/10 km.
Modified Threat Value:	121
Offensive:	25
Defensive:	206
Miscellaneous:	131

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited

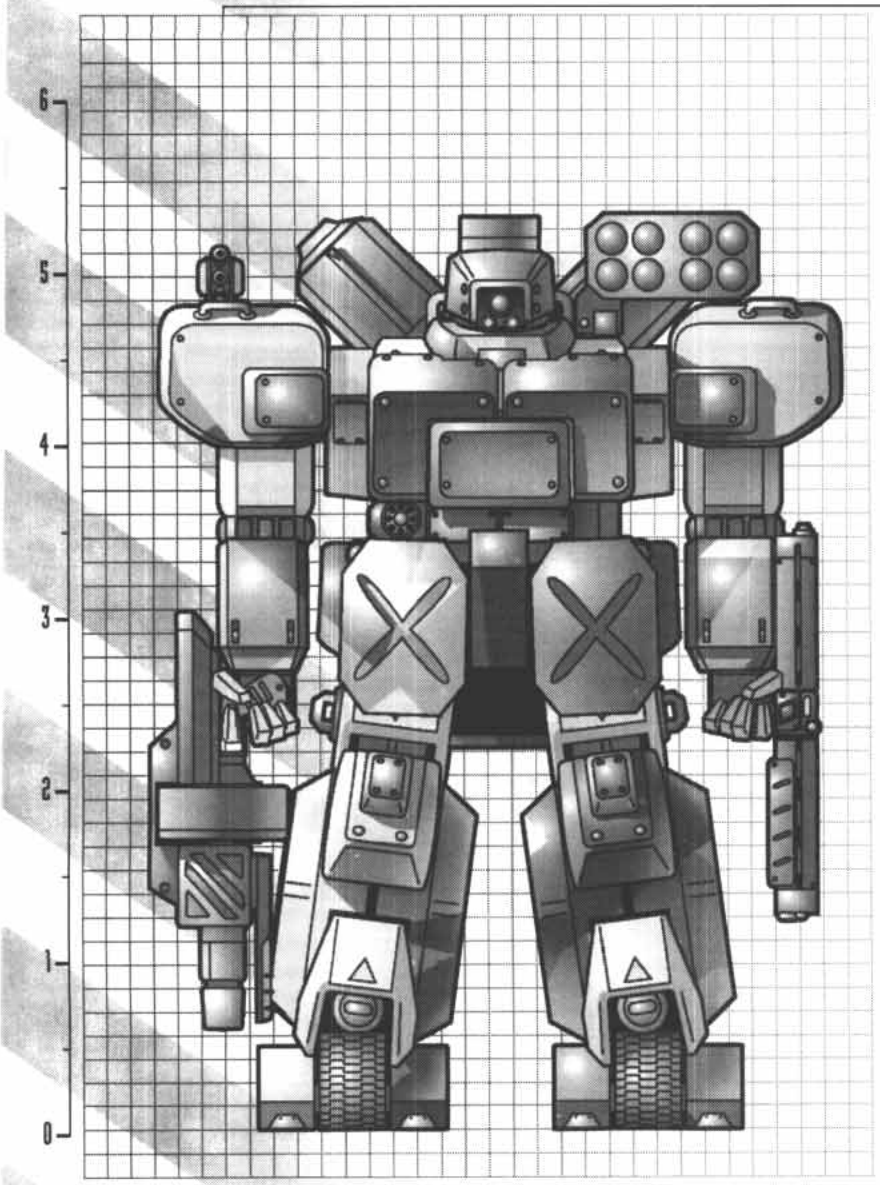


Bryce Hubbard (order #5318102)

4.5.6 HACS-02HG-FS RABID GRIZZLY

The second variation on the *Grizzly* model, the *Rabid Grizzly* entered service only a few weeks after the *Assault Grizzly*. It was developed as a defense line softening unit, as the *Assault Grizzly* soon proved to be a relatively easy target for the Colonial Expeditionary Force's GREL supersoldiers. What was needed was a heavy armored Gear that could get in at medium range and keep the supersoldiers' heads down while the assault Gears burst through the defense lines. As with the *Assault Grizzly*, the *Rabid Grizzly* keeps the basic structure of the standard machine with only a few add-ons and a different weapons layout. The armor was slightly upgraded with additional torso plates, while the weapons layout was heavily modified. The M225 heavy autocannon was replaced by an Ankerson G-60 grenade launcher, the TD-67 guided mortar unit by a UBM-100 unguided mortar unit and the two GH-8 rocket packs by a single GH-16 model carrying 36 rockets. An anti-personnel grenade launcher was installed for suppression fire. The GU-10 gatling machinegun, M25 pack gun and the vibroblade knife remained from the basic *Grizzly* model.

The *Rabid Grizzly* proved its worth during the anti-GREL operations that began in the middle of the second half of the War of the Alliance. Teamed with other *Grizzlies*, the *Rabid Grizzly* was part of the mopping operations that typified the last months of the war, when the invasion forces tried to escape the planet. Since the end of the conflict, the *Rabid Grizzly* has been slowly phased out because of the lack of its designated target in the arsenal of its enemies. The area coverage ability of its weapon load is still favored by some commanders and it is still used a s a covering unit for *Assault Grizzlies*. Overall, however, the *Rabid* becomes a rarer and rarer sight. It is still officially in service, but has not seen heavy use since the war. Some of them have even been switched back to the standard *Grizzly* configuration. Some commanders are also experimenting with using a heavier grenade launcher to give the ***Rabid Grizzly*** some anti-armor punch, essentially creating a machine that would treat Gears as the ***Rabid*** did GRELs.



Vehicle Specifications

Code Name:	Rabid Grizzly
Production Code:	HACS-02HG-FS
Production Type:	Mass Production
Cost:	623,770 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	assault/fire support Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9450 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	LGL (F, 60 grenades), MRP/36 (F, 36 rockets), MFM (F, 12 mortars), APGL (F, 6 grenades)
Remove:	A ll weapons except DPG and VB
Change:	Reinforced Armor (Rating upgrade to 3)
Modified Threat Value:	873
Offensive:	2099
Defensive:	257
Miscellaneous:	263

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.5.7 HACS-02HG-ART THUNDER GRIZZLY

A command and artillery control variant of the reliable *Grizzly*, the *Thunder Grizzly* is slated to replace the venerable *Den Mother* Gear. It boasts a modular, back-mounted satellite communications system which is superior to its predecessor's in both range and efficiency. The XLR-65 communication system was developed by Lynton Electronics, who also produces the array for the *Tattletale* command and communications Gear. In order to make room for the communications system housing, however, the *Grizzly*'s TD-76 guided mortar unit had to be replaced with the smaller Harmon T-12 mortar weapon, fitted with an enlarged ammunition tube. To protect the valuable junior officers who pilot the *Thunder*, additional armor plates have been added to the Gear's crew compartment. Altogether, the *Thunder* is a worthwhile successor to the *Den Mother* just as the basic *Grizzly* was for the *Bear*, improving overall performance without radically altering design philosophy.

Deployment of the *Thunder Grizzly* variant has been spotty so far. Released in TN 1930, it has suffered from the competition between Shaian Mechanics and Northco. The two corporations' increasingly bitter rivalry has made the development and fielding of new *Grizzly* variants — supposedly a cooperative project between them — a difficult task. The *Thunder* has remained a rare model thus far, with only a few dozen produced over the last few cycles. Only selected regiments have received this limited release variant, including the Northern Guard's 99th Auxiliary Gear Regiment, the *Blue Angels*. The characteristic dorsal hump of the *Thunder* has become a common sight in their exercises around the holy city of Massada. Many units who have placed requests for the *Thunder* and received only empty promises have decided to rely on their *Den Mothers* instead, leading to an upgrading of the venerable artillery commander and the birth of the *Den Mother* as a stop-gap measure. Northco and Shaian have both been reprimanded by the high command for delaying the *Thunder Grizzly*, and Northern Guard and civilian mediators have been assigned to solve the problem.

Vehicle Specifications

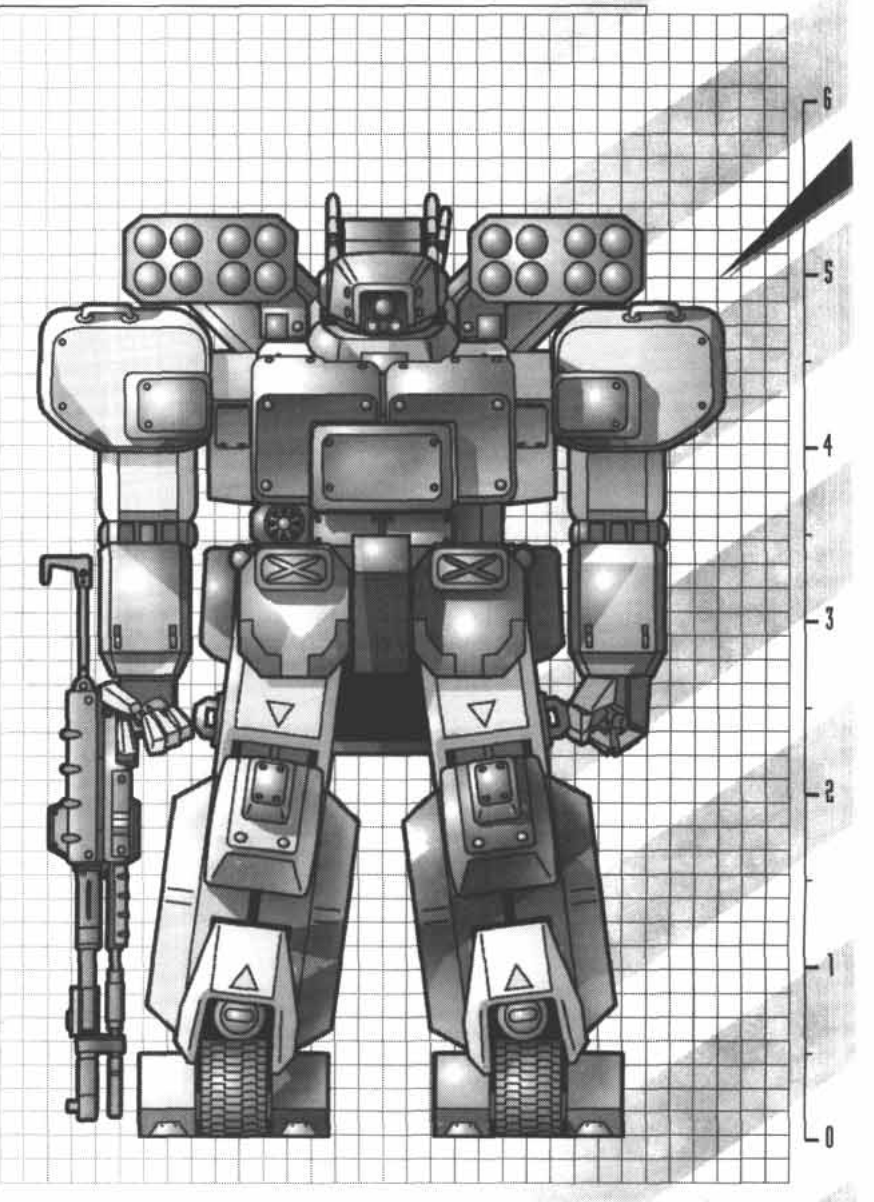
Code Name:	Thunder Grizzly
Production Code:	HACS-02HG-ART
Production Type:	Early Production
Cost:	1,360,966 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	artillery command Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9175 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	LGM (F, 20 rnds), Satellite Uplink, Reinforced Location: Crew (Rating 3)
Remove:	HGM
Change:	upgrade Communications to +2, 25 km range
Modified Threat Value:	953
Offensive:	1817
Defensive:	257
Miscellaneous:	784

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	2

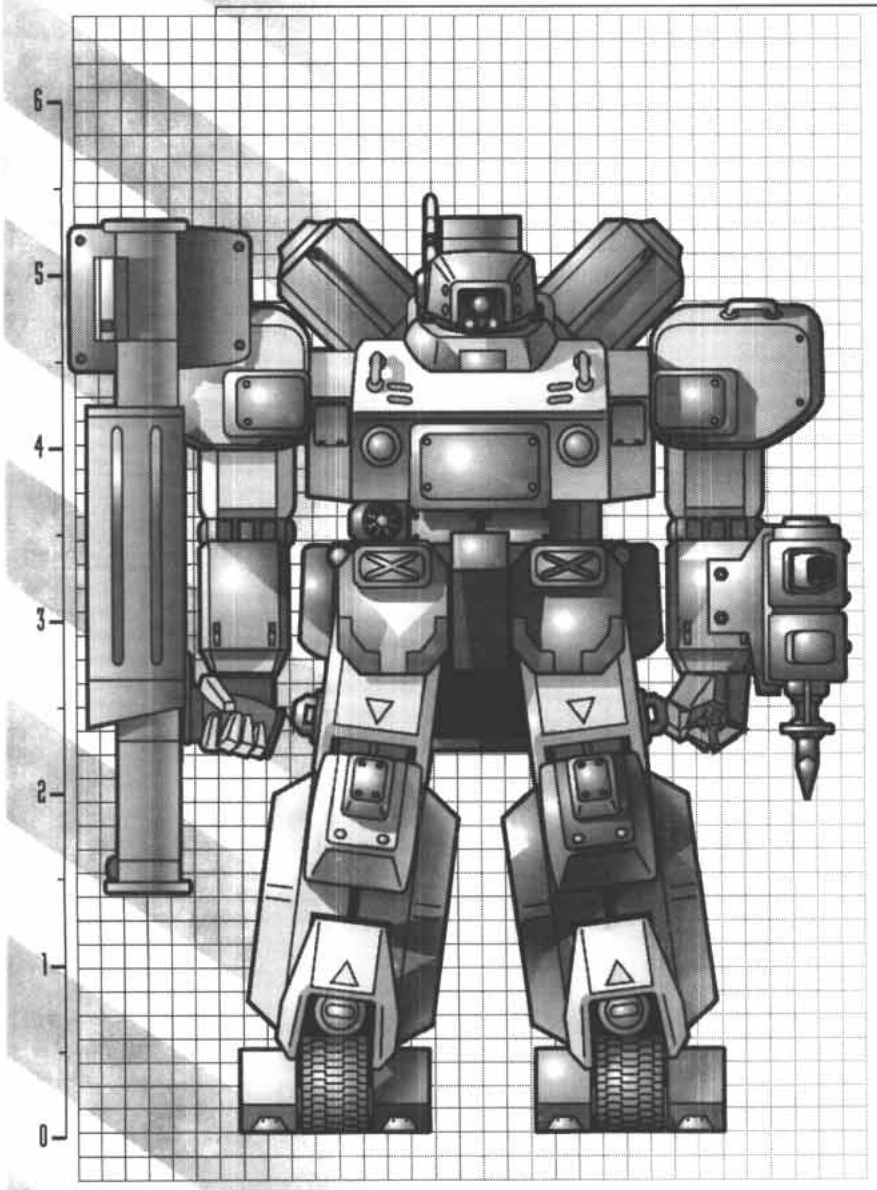


Bryce Hubbard (order #5318102)

4.5.8 HACS-02HG-TH GRIZZLY DESTROYER

A powerful strike Gear, the *Grizzly Destroyer* carried even more destructive weaponry than the Gear on which it was based. In fact, its true inspiration is the infamous *Kodiak Destroyer* variant. Created during the War of the Alliance, the "GD" is an attempt to field an affordable, mass-production Gear with the same deadly mystique as the *Kodiak*. It carries the Paxton Juggernaut heavy bazooka, though without the advanced targeting system found on the *Kodiak Destroyer*'s version of that ominous weapon. A fragcannon was often stored on a special quick-release mount on the rear hip armor plate. The machine was just as well armed for close combat, however. The heavy ranged armament were backed with a heavy spike gun mounted on the left arm. Spike-tipped armor plates were added to the Gear's wrists to ensure that it would still be effective once the eight-charge drum magazine of the spike gun were depleted. These reinforced punching plates tend to obstruct fine manipulations, but few pilots have complained so far.

Most ***Destroyers*** started life as standard ***Assault Grizzlies*** that were subjected to multiple field refit programs. The ***Destroyer*** retains certain features of its parent design, such as the redundant communication module on the right side of the head assembly and the special autopilot circuitry. It also has internal reinforcements and bracing that, even if they make the technicians grumble, usually mean that the chassis is less likely to collapse under enemy hits or simply from the weight of the huge weapon carried on the shoulder of the Gear. Over one-sixth of the *Assault Grizzlies* that remained in service after the War of the Alliance were known to have been switched over to the *Destroyer* configuration. Paxton Arms, who brought the Juggernaut gun into increased production toward the end of the War, is certainly no stranger to that state of things. Indeed, Paxton Arms and Northco recently began a joint promotional campaing featuring the ***Grizzly Destroyer*** as its center-piece. There have been some public outcries about the cost of maintaining such a heavily armed machine in service, but the soldiers just love it.



Vehicle Specifications

Code Name:	Grizzly Destroyer
Production Code:	HACS-02HG-TK
Production Type:	Mass Production
Cost:	720,693 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	heavy assault Gear
Height:	5.1 meters
Width:	3.8 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9975 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	HBZK (F, 12 shots), 2 x IRP/30s (F, 30 shots each), FGC (F, 20 shots), HSKG (F, 8 shots), Autopilot, Backup Communication System, Reinforced Chassis, Annoyance (reinforced punching plates obstruct fine manipulation)
Remove:	All weapons except HMG
Change:	Upgrade Communications to +1/15 km
Modified Threat Value:	1009
Offensive:	1871
Defensive:	257
Miscellaneous:	899

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	3

Bryce Hubbard (order #5318102)

4.5.9 HACS-02HG-ALP POLAR GRIZZLY

A key axiom of Northern defense is that whoever controls the high mountains and cliffs of the Arctic regions can, via effective artillery fire, control the valleys below. The CNCS' highly regarded *Thunderhammer* artillery and fire support strider is based on this principle, but the cumbersome machine was always somewhat vulnerable to close assaults. To correct this situation, a companion vehicle was developed in the early TN 1920s: the *Polar Grizzly*. With the *Rabid Grizzly*, Northern units already had the Grizzly's heavy armor and the formidable bombardment capabilities of the UBM-100 field mortar, so it was relatively simple to refit existing *Rabids* with climbing claws and foot cleats to produce an effective mountain-capable artillery Gear. The machine would thus be capable of not only assuring the close defense of the strider/Gear pair but also contribute to the barrage unleashed on the valley below.

The *Polar Grizzly*, despite its name, is not equipped for operations in cold climates. Thermal protection was considered for a time, but no combat group was ever expected to be sent to altitudes where this would become a problem. Should it ever become necessary, the Northern Guards procurement office has subcontracted Kugrer Industries, a climatization expert, to develop a thermal protection convertion package. Early *Polar Grizzlies* were assigned light grenade launchers to keep enemy units away from their striders, but in recent years the surviving *Polars* have been refitted with heavier LK-70 launchers. Although more cumbersome to wield and use, the longer range and higher damage capacity of the new weapon was found to complement well the mission profile of the field mortar carried on the backpack of the vehicle. Sensor range was boosted by adding extra data processors and antenna panels in selected locations of the head and upper body. Finally, heavy spikes and cleats were added to the lower body and arms to allow the huge machine to hoist itself up to its assigned firing position. Approximately 60 *Polar Grizzlies* are now in service in the mountainous Northern regions, mostly in the units of the Norlight Armed Forces.

Vehicle Specifications

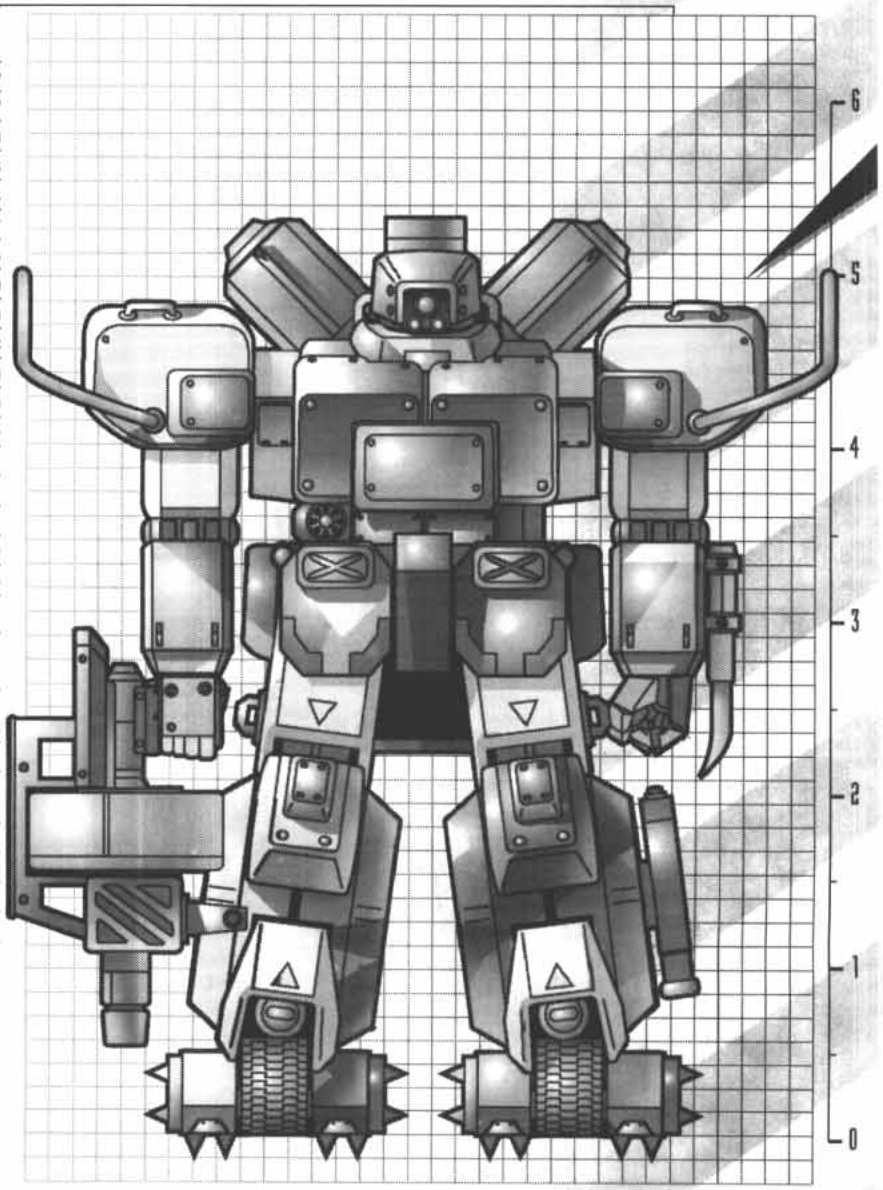
Code Name:	Polar Grizzly
Production Code:	HACS-02HG-ALP
Production Type:	Limited Production
Cost:	1,973,426 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	alpine Gear
Height:	5.1 meters
Width:	3.8 maters (4.8 m w/ crash bars)
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	9075 kg
Primary Movement Mode:	Walk (40 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	60 hexes/3 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	956 Hp

Modifications

Add:	MFM (F, 12 mortars), HGL (F, 20 rounds), Climbing Apparatus
Remove:	all weapons except DPG, HMG and VB
Change:	Reinforced Armor (Rating upgrade to 3), upgrade Sensor Range to 3 km
Modified Threat Value:	767
Offensive:	1719
Defensive:	257
Miscellaneous:	325

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	5

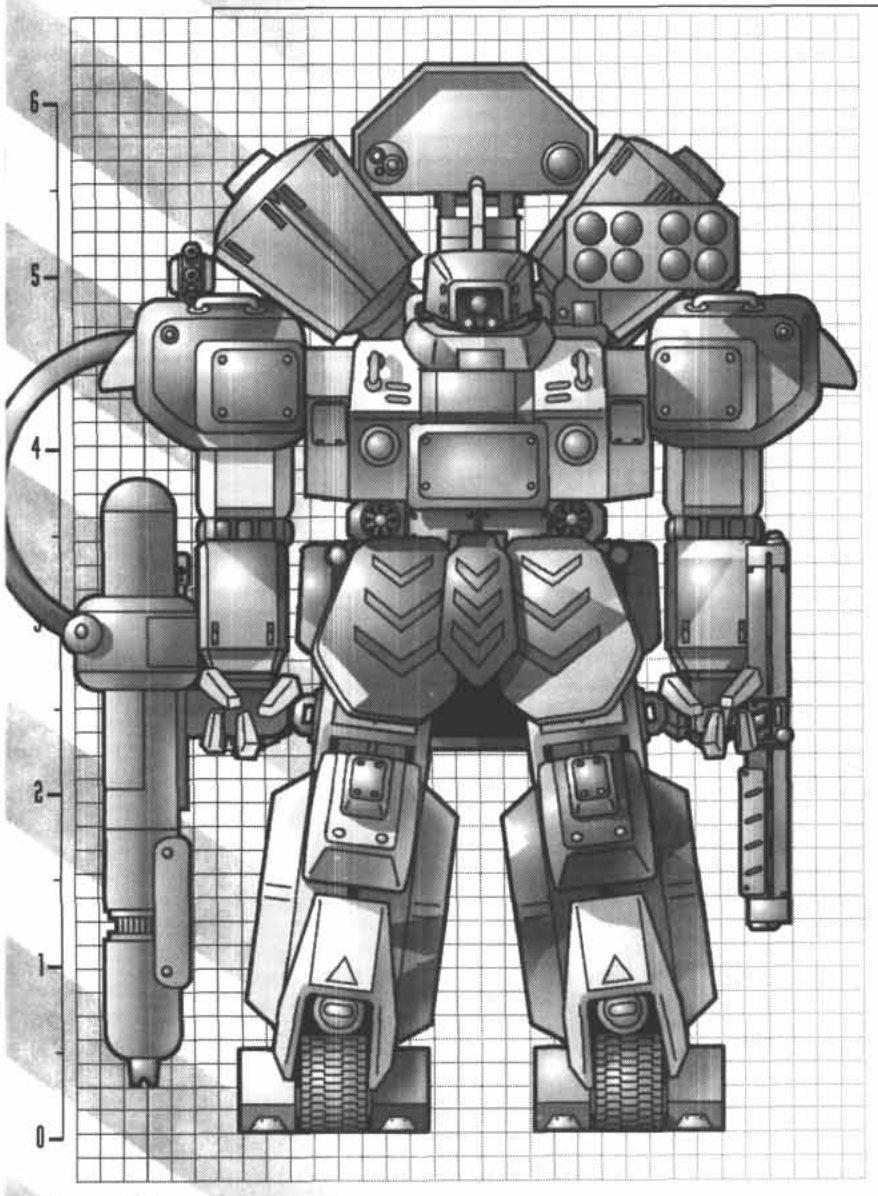


Bryce Hubbard (order #5318102)

4.6 HACS-10HG-AST KODIAK

The War of the Alliance proved to be a test of ingenuity for many Terranovan engineers. They had to make do with the machines they had on hand, though sometimes they managed to come up with the unexpected. While most machines developed to take on the columns of hovertanks fielded by the Colonial Expeditionary Force were relatively simple variants of existing machines — such as the *Assault Grizzly* — the *Kodiak* was a completely reworked design. Introduced in the final two cycles of the war, the *Kodiak* was the sum of Northern engineering, concentrating massive firepower in a mobile package. The armor was considerably thickened, especially on the front, and the armor skirts were extended for additional protection. The engine and transmission were upgraded to help the ***Kodiak*** carry the nearly one and a half tons more of weapons and armor plating. The communication system was also upgraded, giving it more range, and a new laser sensor system was installed in a lengthened head housing. The new Gear was a massive beast, standing 5.2 meters tall and weighing in at a over ten tons.

The armament, which was already heavy on the standard *Grizzly*, became truly monstrous on the *Kodiak*. The experimental Northco XPA-001 8.2 mW Particle Accelerator, a weapon very similar to that carried by the Southern *King Cobra* assault Gear and in the same class as the main weaponry of light Terran hovertanks, is hand carried in a rifle mount. Power is provided directly from the *Kodiak*'s generator, though the internal capacitors can only handle the energy for twelve shots before requiring a lengthy recharge. The XPA-001 did not become available until the last seasons of the war and the original configuration of the *Kodiak* featured the *Grizzly*'s Riley M225 autocannon. The *Kodiak*'s other main weapon is the proven Hammerstrike-II guided missile launcher. Originally a light Anti-Gear Missile and still carried in that capacity by the *Rabid Badger* armored fighting vehicle, the Hammerstrike-II proved extremely efficient against the lighter classes of CEF hovertanks.



Vehicle Specifications

Code Name:	Kodiak
Production Code:	HACS-10HG-AST
Production Type:	Limited Production
Cost:	3,063,164 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	heavy assault Gear
Height:	5.2 meters (6.2 m w/ AGM)
Width:	3.9 meters
Average Armor Thickness:	80 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	10,485 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V2202 V-Engine
Horsepower:	1150 Hp

Weapon Payload

Name	Ammunition Payload
Northco 8.2 mW XPA-001 Accelerator	12 shots
GH-16 71 mm Rocket Pod	36 rockets
Hammerstrike-II Guided Missile Launcher	12 missiles
GU-10 10 mm Gatling Gun	400 belted cartridges
GU-10 10 mm Gatling Gun	400 belted cartridges
Mark IV Grenade Launcher	6 grenades
Hand Grenade	6 grenades
Heavy Hand Grenade	6 heavy grenades
HW-VB2 Vibroknife	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

The *Kodiak* was first introduced in Spring of TN 1916, when it was used to good effect against CEF incursions into Northern territories. Its success against hovertanks quickly became a morale-boosting military legend and the rare *Kodiaks* were wrapped in a mystique of invulnerability they only partially deserved. Colonial Expeditionary Force commanders came to realize the power of this mystique and in the final stages of the war began targeting *Kodiaks* for "special attention" in order to break Terranovan morale. Although this strategy worked in some cases, it also proved difficult to implement since the morale of Terranovan forces fighting with a *Kodiak* in their midst was significantly higher than that of other defenders. The *Kodiak* did not have a perfect record, however, and many were lost or unaccounted for after skirmishes in the Badlands with CEF marauders. The machines massive operational weight of ten tons reportedly made it difficult to operate in loose sand conditions and several were lost in sink holes during the drive toward the CEF's Barrington Basin staging area at the end of the war.

Since the signing of the Treaty of Westphalia the *Kodiak* has remained in service as a prestige unit. Still quite rare because of its elevated production cost and high maintenance requirements, it is sought after to add a mystique of power to a regiment. Several *Kodiaks* lost during the Barrington offensive have apparently been salvaged by local Badlanders, because a few of the frightening machines have found themselves on the underground Gear dueling circuit. Nevertheless, *Kodiaks* are most commonly seen guarding critical and public installations, such as the Chambers of Valeria or the high command of the Northern Guard. It is more efficient and easier to invest in several more traditional *Grizzly* variants than in *Kodiaks* for standard heavy assault duties. Only truly influential Colonels and Brigadiers can pull enough strings to get a significant number of *Kodiaks* onto the field as part of their standard forces. These units, although rare, are often frighteningly deadly in action and many have gained a legendary status both among the Northern forces they fight along side and the MILICIA troops who must face their firepower.

General Stats

Threat Value:	1072
Offensive:	2167
Defensive:	304
Miscellaneous:	745
Size:	7
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	11
Maneuver:	-1

Electronics

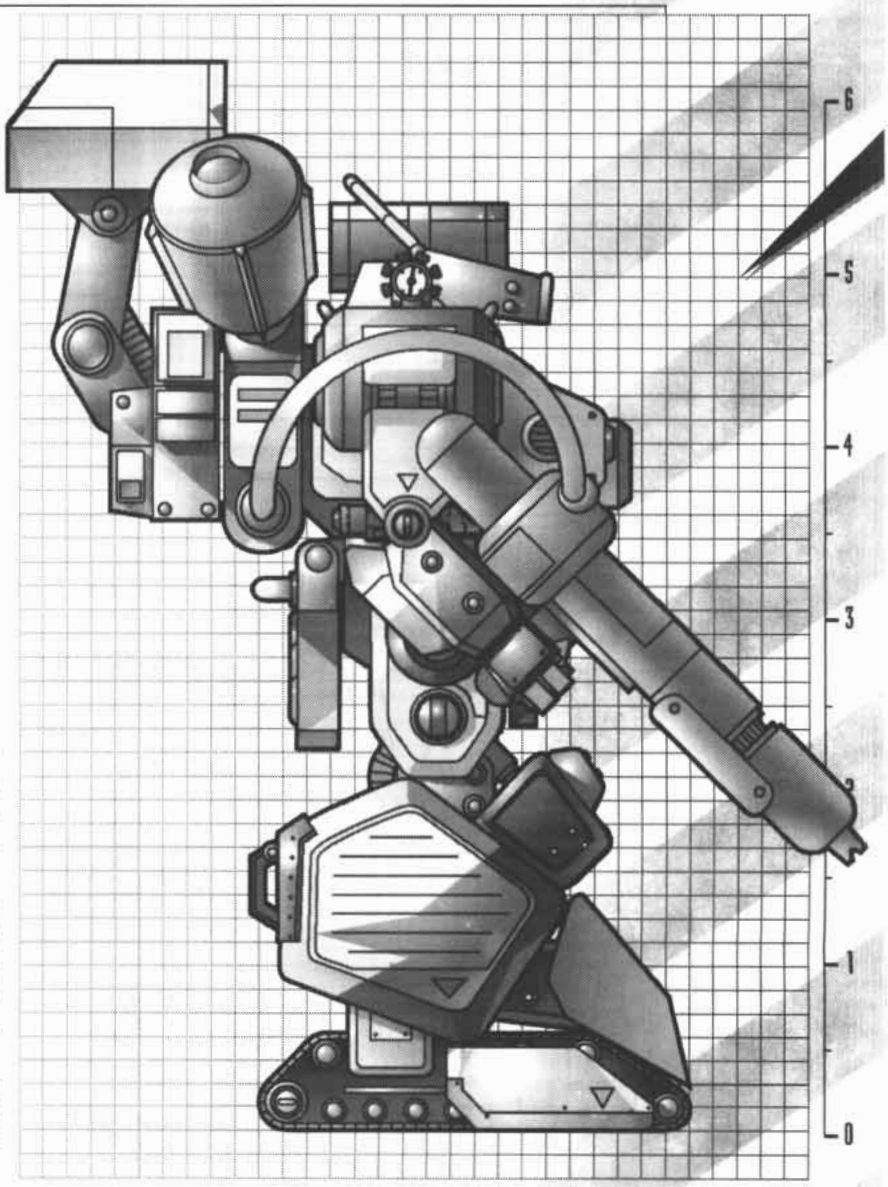
Sensors:	+1
Communications:	+1
Fire Control:	0

Armor

Light Damage:	20
Heavy Damage:	40
Overkill:	60

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	QTY	Ammo
Northco XPA-001 Accelerator	LPA	Forward	1	12
GH-16 71 mm Rocket Pod	MRP/36	Forward	1	36
GU-10 10 mm Gatling Gun	HMG	Fixed Forward	2	400 ea.
Mark IV Grenade Launcher	APGL	Forward	1	6
Hammerstrike-II Missile Launcher	AGM	Forward	1	12
Hand Grenade	HG	Forward	1	6
Heavy Hand Grenade	HHG	Forward	1	6
HW-VB2 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effect
High Towing Capacity	-	Double the maximum weight towable
Hostile Environment Protection	-	Desert
Improved Rear Defense	-	Rear defense penalties reduced by 1
Manipulator Arm x 2	7	Can punch
Reinforced Armor	3	Front

Flaws

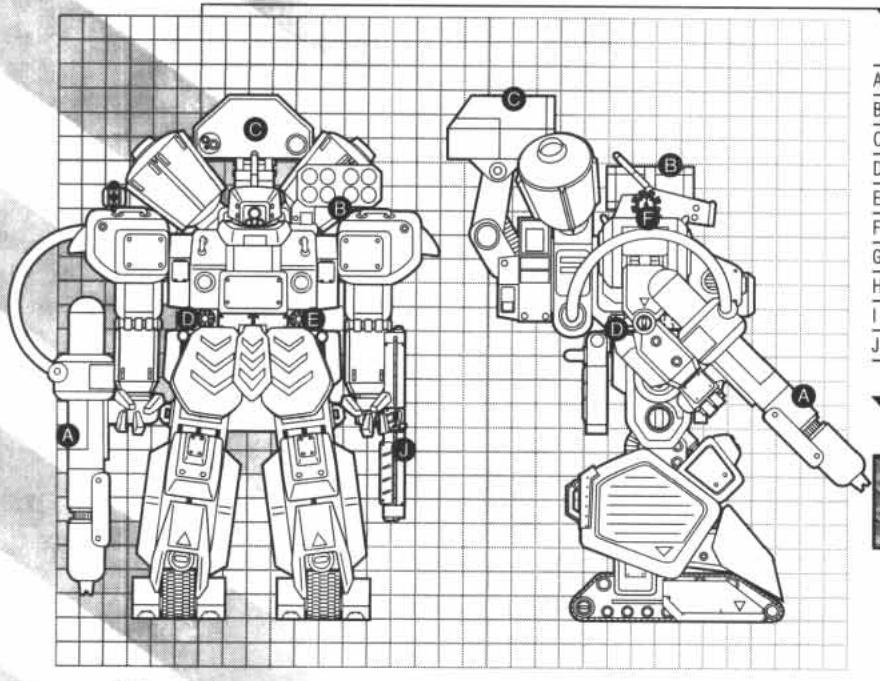
Name	Rating	Game Effect
Large Sensor Profile	1	Easy to detect

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

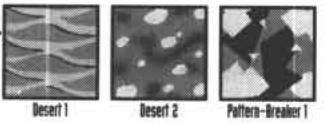
Name	Modified TV
Add: DPG (F, 30 rounds)	1093



Weapons Location Diagram

A	Northco 8.2 mW XPA-001 Accelerator
B	GH-16 71 mm Rocket Pod
C	Hammerstrike-II Guided Missile Launcher
D	GU-10 10 mm Gatling Gun
E	GU-10 10 mm Gatling Gun
F	Mark IV Grenade Launcher
G	Hand Grenade (not shown)
H	Heavy Hand Grenade (note shown)
I	HW-VB2 Vibroknife (not shown)
J	M25 Pack Gun (optional)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.6.1 HACS-10HG-TK KODIAK DESTROYER

The *Kodiak Destroyer* is an even more powerful variant of what was already one of the most heavily armed Gears in existence. It was introduced during the final months of the War of the Alliance, as resurgent Northern forces swept across the Badlands hunting down CEF hovertanks. The standard *Kodiak*'s particle-beam rifle had proven to be an inadequate anti-armor weapon, so the *Destroyer* was outfitted with the new Paxton Arms Juggernaut bazooka. This massive weapon was made even deadlier by the addition of a Northco long-range targeting system. Extra ceramic armor was also bolted onto the torso to provide increased protection against the powerful energy and missile attacks which the Gear was expected to face. The *Destroyer* performed well but suffered from a further reduction in speed that made it even more lumbering than the basic model. Known to most of those who piloted or worked on it as "the monster," the *Destroyer* model was widely seen as a symptom of the Terranovan resurgence after the terrible Battle of Baja. With victory finally a possibility, weapon development entered a phase which focused on ever heavier firepower.

Today, about 20 *Destroyers* remain in service with the Northern Guard. They have a reputation among Southern MILICIA troops for being near-invincible, a legacy from their sterling performance against the CEF. The *Destroyers* are mostly attached to a few elite units. These regiments often use their *Destroyers* together, forming a devastatingly powerful squadron used to break through enemy cavalry formations and utterly terrify enemy troops. Northco and Shaian have announced they have no plans to produce any more *Destroyers* because of their limited battlefield use and expense. Paxton Arms continues to produce the Juggernaut bazooka, however, and has approached several *Kodiak* equipped units with offers to outfit their Gears in the *Destroyer* configuration. A few units seeking to out do their rivals have accepted the offer, but Northern Guard high command has ordered the supply and maintenance branches to limit these purchases to a minimum. As such, they are used as an unofficial reward for successful actions by *Kodiak* equipped units.

Vehicle Specifications

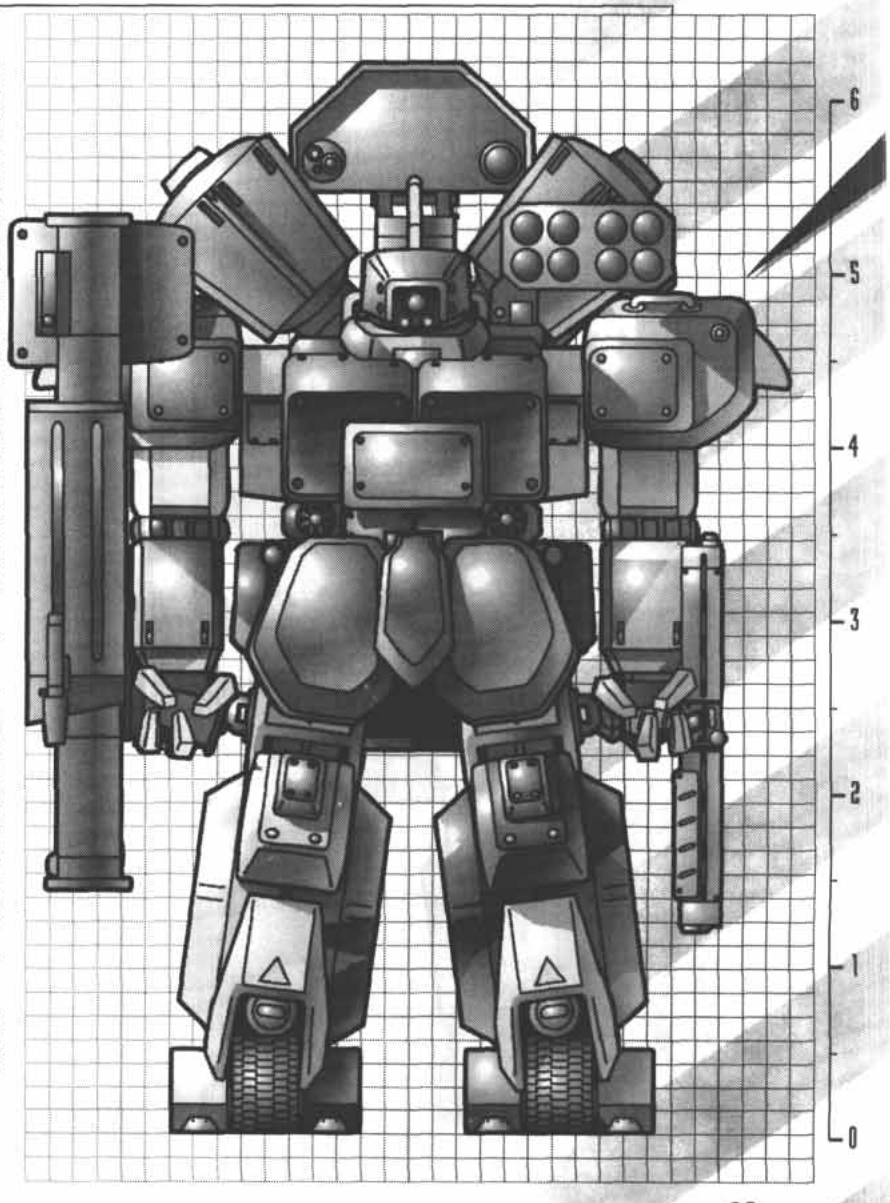
Code Name:	Kodiak Destroyer
Production Code:	HACS-10HG-TK
Production Type:	Limited Production
Cost:	4,004,405 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	heavy assault Gear
Height:	5.2 meters (6.2 m w/ AGM)
Width:	3.9 meters
Average Armor Thickness:	80 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	11,925 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (59 kph)
Deployment Range:	400 km
Sensor Range:	40 hexes/2 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V2200Z V-Engine
Horsepower:	1150 Hp

Modifications

Add:	DPG (F, 30 rnds), HBZK (F, 12 shots), Sniper System (HBZK), HEAT Resistant Armor (Rating 3)
Remove:	LPA, High Towing Capacity
Change:	Reduce Ground Top Speed to 10 (59 kph)
Modified Threat Value:	1274
Offensive:	2611
Defensive:	301
Miscellaneous:	910

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	2

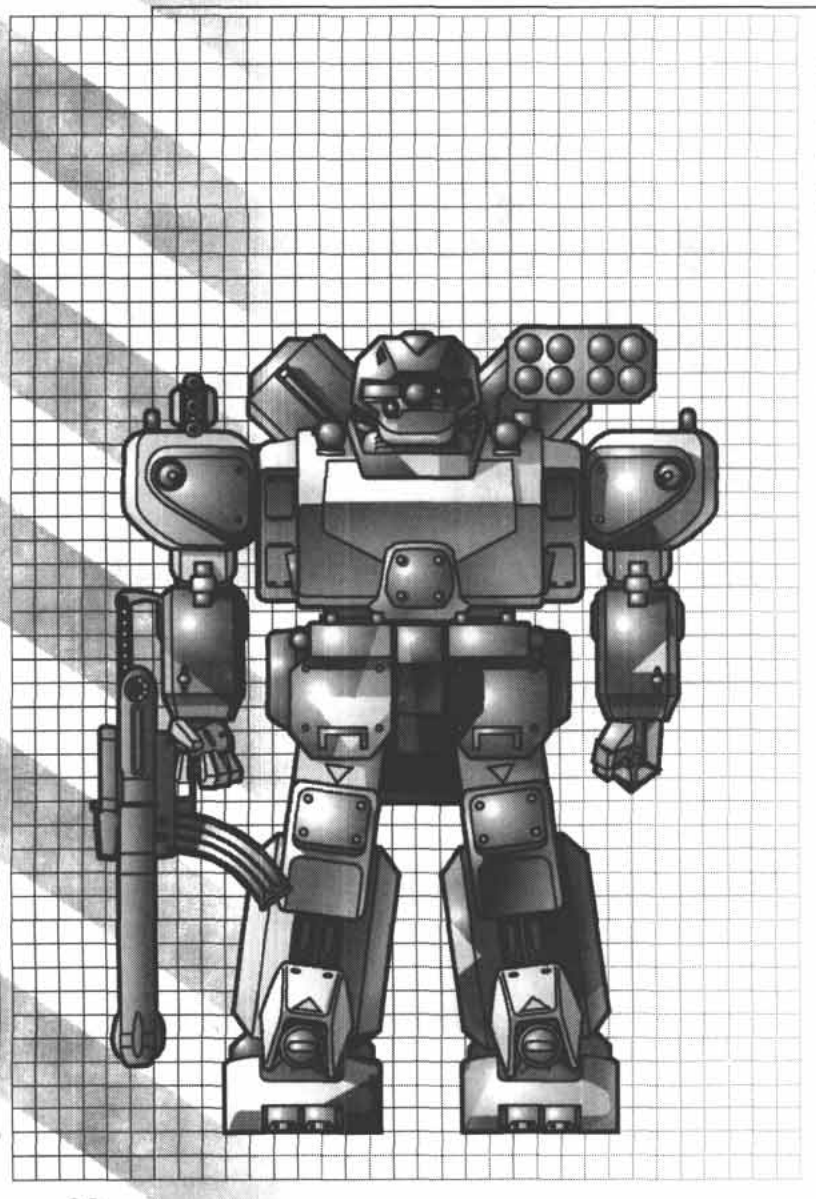


Bryce Hubbard (order #5318102)

4.7 HACS-02MG-MPS JAGUAR

The most advanced commando/general purpose Gear in the Northern armed forces, the *Jaguar* was developed by Northco in the early cycles of the TN 1900s as a possible successor of the *Hunter*. The new machine featured a wide variety of improvements over the venerable machine and even over the more advanced *Tiger*. The weapon load of the new Gear was kept very similar to that of the *Hunter*, although the main direct fire weapon became the heavier Riley MR25 machine cannon rifle. While the weapons load was not significantly changed, the general performances were improved across the board. A new second-generation IHADS control interface was introduced in the *Jaguar* cockpit, creating a better synchronization between the pilot and his machine. In combination with a more precise targeting system — originally developed for the *Tiger* — this allowed a generalized improvement in fire-control that made the weapons much more effective in combat. Actuator systems were improved as well using a new and more powerful actuator design. A more powerful communications array also allowed the *Jaguar* to function under mild ECM jamming and to be used as a command unit.

The *Jaguar* also benefited from the introduction of a new S-V1110 V-Engine that could produce 620 horsepower and allowed it to outpace any Gear in its class. New armor materials, still using the durasheet composite standard to Northern Gears but reinforced with steel alloy sub-plates and chassis struts made the *Jaguar* more resistant to damage from shock and weapon fire. The reinforced chassis of the *Jaguar* also made possible a built-in airdropping capability for every production model. To avoid mounting the cumbersome airdrop vanes and chest mounted parachutes featured in models such as the *Hunter Commando*, the *Jaguar* features modular attachment points for a special drop pack. The pack include small ground-facing solid rockets that apply a breaking thrust when the Gear approaches the ground. To ensure that each *Jaguar* can survive multiple drops with ease, its legs are reinforced. The only real drawback of the *Jaguar* design is the interface for the new IHADS system: bulkier than the old Hunter-inspired system, it leaves little head room for the pilot.



Vehicle Specifications

Code Name:	Jaguar
Production Code:	HACS-02MG-MPS
Production Type:	Mass Production
Cost:	471,750 marks
Manufacturer:	Northco
Use:	general purpose Heavy Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7123 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Weapon Payload

Name	Ammunition Payload
MR25 Machinecannon rifle	40 rounds
RP-111 Pepperbox II	32 rockets
MK IV Grenade Launcher	6 grenades
M-2A Hand Grenade	3 grenades
HW-VB1 Vibroknife	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

The development of the *Jaguar* coincided with a period of great political tension across Terra Nova and within the Confederated Northern City-States. With trust between the Northern leagues at an all-time low, the United Mercantile Federation Army and the UMF government made of the *Jaguar* a "strategic federal resource" in TN 1905 and banned Northco from selling their new model to foreign powers, regardless of alliances. This seemed to dash the weapon conglomerate's hopes of replacing the *Hunter* outright, but the executives proved themselves long-thinking. They continued to develop production lines as if they were preparing to sell to all the Northern powers under the assumption that tensions would either relax, allowing them to carry on with their sales plan, or explode into some form of inter-Northern war which would mean radically increased sales to the UMFA. As it turned out, the attempted Earth invasion broke the tensions and the massive *Jaguar* production lines were brought to full capacity to fill a desperate need. They first swelled the ranks of the Northern armies and, once a rapid agreement had been reached, were sent south to answer the need for high-technology commando Gears in Southern forces.

The *Jaguar* more than earned its stripes during the war. The machine with the best overall performance in the conflict, the *Jaguar* saw action across the planet as a commando, a trooper, a command unit, an anti-armor unit and a makeshift airdroppable fire-support Gear. The *Jaguar* became a symbol of the future of military design, showing across the boards improvement over the *Hunter*. It also (unfortunately for its pilots) kick started Southern Gear development and inspired the deadly *Black Mamba*. The *Jaguar* has yet to replace the *Hunter* because of its higher cost and increased complexity, but with every cycle it enters service in more and more units and some consider it only a matter of time before it becomes the lead Gear of all Northern forces. Of course, Northco's competitors are not laying down and allowing the Mercantile giant to take the whole market; Paxton Arms has released its *Warrior IV* in direct competition with the *Jaguar* for the Badlands and local militia market, while Shaian is rumored to be preparing its own heavy commando unit.

General Stats

Threat Value:	628
Offensive:	1064
Defensive:	552
Miscellaneous:	268
Size:	6
Original Default Size:	8
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movement Mode:	Walk
Combat Speed:	5
Top Speed:	9
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	13
Maneuver:	+1

Electronics

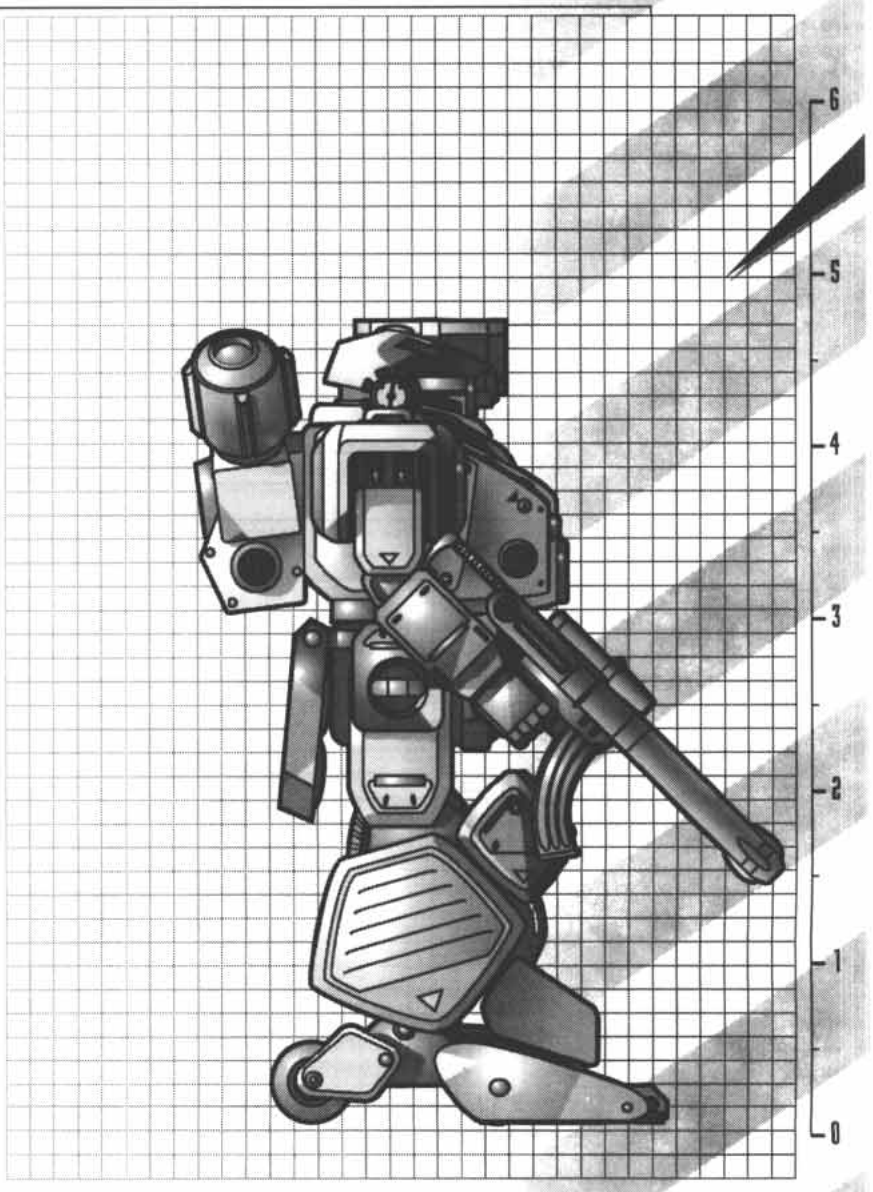
Sensors:	0
Communications:	+1
Fire Control:	+1

Armor

Light Damage:	16
Heavy Damage:	32
Overkill:	48

Vehicle Availability

Availability Threshold:	3
Maximum Number of Units in the Field:	Unlimited



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
MR25 Machinecannon rifle	MAC	Forward	1	40
RP-111 Pepperbox II	LRP/32	Forward	1	32
MK IV Grenade Launcher	APGL	Fixed Forward	1	6
M-2A Hand Grenade	HG	Forward	3	-
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effect
Airdroppable	-	Can be airdropped
Hostile Environment Protection	-	Desert
2 x Manipulator Arm	6	Can punch

Flaws

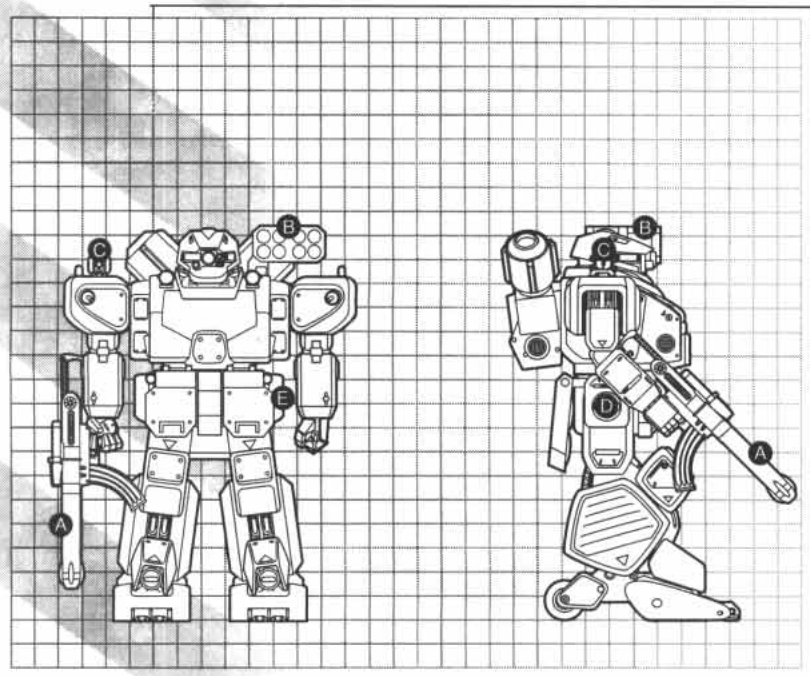
Name	Rating	Game Effect
Annoyance	-	Cramped Head Space

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

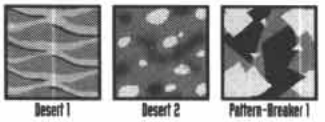
Name	Modified TV
Add Camo Netting	636
Add Smoke Launchers (10 shots)	636
Add Armor Jacket (Reinforced Location Armor 2: Crew)	636
Add 3 grenades	650
Add 2 Medium Panzerfausts	648
Add Deployable Pack Gun (F, 30 rounds)	670



Weapons Location Diagram

A	MR25 Machine cannon rifle
B	RP-111 Pepperbox II
C	MK IV Grenade Launcher
D	M-2A Hand Grenade (not shown)
E	HW-VB1 Vibroknife (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.7.1 HACS-02MG-HFS ARROW JAGUAR

Elite units such as the *Cat's Paws* and the *Roving Guns* that made good use of the *Fire Jaguar* field conversion during the War of the Alliance argued for the introduction of a properly designed fire-support variant of Northco's commando Gear. In TN 1927, high command finally relented an commissioned a new variant designed exclusively for the elite commando/paratrooper market. The result was the *Arrow Jaguar* released the following cycle. The *Arrow* design displayed an understanding of the elite unit mind-set. Instead of providing the brute firepower of the *Fire Jaguar*, the *Arrow* featured highly precise high explosive weaponry designed for elegant kills, even when providing cover for other units. The armor modifications of the *Fire Jaguar* were maintained in the production *Arrow* as was the protective screen affixed to the sensor head. The main weapons system was changed from the area saturation system of the GH-16 rocket pods to the guided precision of twin three-shot Hammerstrike-IIb guided missile launchers. Using this system, the *Arrow* offers pinpoint accuracy in place of its predecessor's raw firepower. Although the model is expensive to maintain, the *Arrow* opened tactical possibilities to its elite owners and so is well cared for.

The *Arrow Jaguar* has yet to spread beyond the cream of the Northern crop, with a slightly higher number in elite airborne units than in ground experts. The expense and difficulty of supply of the Hammerstrike missiles and the large number of *Fire Jaguar* conversion kits still ready to put into action precludes the *Arrow* from becoming a widespread model unless high-command and Northco cooperate on a massive distribution program. The elite units who now hold the monopoly on the *Arrow* prefer the situation as it stands. They claim that it is efficient to confide sophisticated systems like the *Arrow* in the hands of the best pilots in the North, but others see the monopoly as a symptom of the elites' superiority complex. For the time being the high command seems ready to indulge the *Paws*, *Guns* and others as long as they continue to use the *Arrow* effectively.

Vehicle Specifications

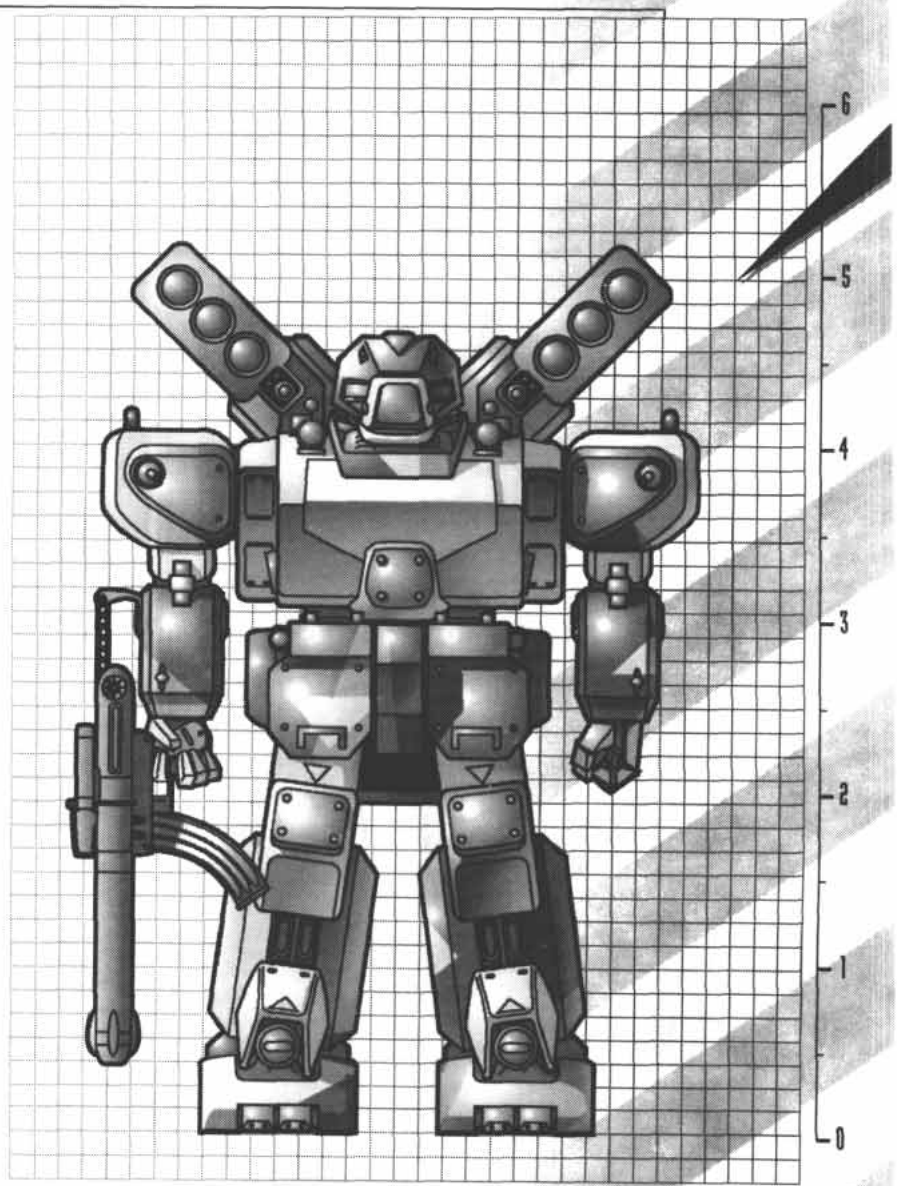
Code Name:	Arrow Jaguar
Production Code:	HACS-02MG-HFS
Production Type:	Limited Production
Cost:	3,065,036 marks
Manufacturer:	Northco
Use:	fire support Gear
Height:	4.6 meters (5.1 w/AGM)
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7425 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	AGM (FF, 6 missiles), Improved Rear Defense, Reinforced Armor (Rating 1, Front)
Remove:	LRP/32, APGL, VB
Change:	n/a
Modified Threat Value:	919
Offensive:	1557
Defensive:	552
Miscellaneous:	649

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	3

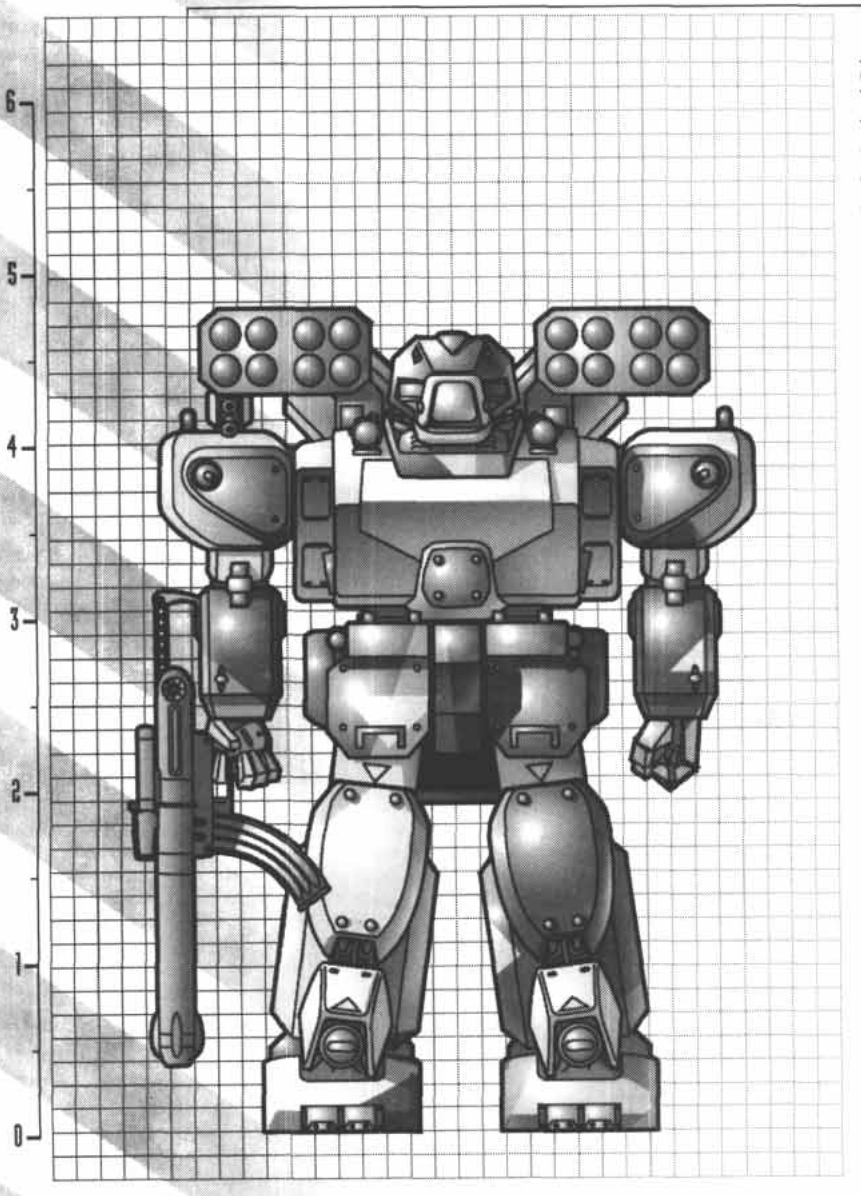


Bryce Hubbard (order #5318102)

4.7.2 HACS-02MG-FS FIRE JAGUAR

Although rather common, the *Fire Jaguar* is not an official factory variant of the standard machine. A field conversion, it was first used in 1913 TN against the Colonial Expeditionary Force units. With the large support Gears being used elsewhere, front-line *Hunters* and *Jaguars* were left with only light field artillery as fire support. Although resilient, these artillery vehicles could not follow the Gears into combat. Many regiments thus converted some of their machines into makeshift fire support units. For the *Jaguar* teams, these machines became known as *Fire Jaguars*. The conversion, quite simple, consisted mostly of: replacing the standard RP-111 Pepperbox II light rocket pack with two GH-16 36-warhead rocket pods, and removing the grenades and vibroblade. The somewhat makeshift placement of the GH-16 rocket pods created several problems. Quite heavy, the pods entailed a shift in the Gear's center of gravity that forced an impromptu recalibrating of leg actuators and the targeting computer. Unfortunately, the *Fire Jaguar* could never match the accuracy of factory calibrated models. The thrust of the launching rockets tended also to damage the *Jaguar*'s sensitive sensor pods and blind the pilot, leading to a simple non-armored polarized lens being placed over omnicamera. Additional armor plating was also placed on the chest and between the V-engine backpack and cockpit of the *Fire Jaguar*.

The *Fire Jaguar* was a field conversion made to correct a desperate situation. When the War was over, many of these machines returned to their standard jobs and the conversion kits were stored – to be used when and if the need arises. Generally, the return of the *Grizzly* fire support unit to its appointed task has made the *Fire Jaguar* rather obsolete. Some machines kept the equipment upgrade, though, and are still in service (about one in every 50 Jaguars is a *Fire Jaguar*). The *Fire* proved its worth, however, in a specialized role during the war. Still airdroppable, the *Fire* could provide fire support to paratrooper units. The *Fire* is consequently far more common in airborne units than in any other Northern force.



Vehicle Specifications

Code Name:	Fire Jaguar
Production Code:	HACS-02MG-FS
Production Type:	Mass Production
Cost:	520,603 marks
Manufacturer:	Northco
Use:	fire support Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7245 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	530 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	2 x MRP/36 (FF, 36 rockets), Improved Rear Defense, Reinforced Armor (Rating 1, Front)
Remove:	LRP/32, APGL, VB, HGs
Change:	Downgrade Deployment Range to 530 km, Fire Control to 0
Modified Threat Value:	694
Offensive:	890
Defensive:	552
Miscellaneous:	640

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.7.3 HACS-02MG-AA FLAK JAGUAR

Part of the same Western-inspired school of development that led to the *Bird Arrow Bobcat*, *Cheetah Air Claw* and *Defender Grizzly*, the *Flak Jaguar* is the latest Gear pressed into service as a rapid reaction anti-aircraft platform. The *Flak* was born form a Western Frontier Protectorate Army project to modify the MC-105 gatling cannon used on its choppers into a Gear-carried, anti-aircraft weapon. Early experiments with a *Hunter* chassis proved less than satisfactory and the Gear became very unstable during firing, leading Western engineers to frustration. Meanwhile the United Mercantile Federation was busy completing favorable field tests on its own *Defender Grizzly* anti-air variant. Eventually, the army decided to put the MC-105 in a rotating, over-the-shoulder mount on a *Jaguar*, with ammo fed from a bolt-on drum on the Gear's back. This worked fairly well, and the resulting *Flak Jaguar* design has been accepted by the CNCS as a variant alongside the *Defender Grizzly*. The *Flak Jaguar* is not as well liked as the *Defender* since its articulated gun-mount is vulnerable to enemy fire, and the bulky ammo drum still does not hold enough shells to keep the ravenous gatling supplied. The *Jaguar*'s impressive targeting system, unfortunately did not respond well to the large anti-aircraft cannon and operates in a reduced capacity. This deficiency is only partially compensated for by a long-range object-tracking system integrated into the gun system; the external sight is unfortunately quite vulnerable to battle damage. To help the *Flak* survive encounters with air cavalry, the armor upgrades introduced with the improvised *Fire Jaguar* were standardized.

The *Flak Jaguar* has served well in its functions, but it remains a good example of a poorly conceived variant. The MC-105 does not really belong on a walker platform and the strengths of the *Jaguar* are largely wasted on such a deployment. The *Defender Grizzly*'s success, although currently deployed with *Flak Jaguars*, has been taken by many as a sign that it will rapidly eclipse the *Flak*. If so it will make of it the first truly failed *Jaguar* variant.

Vehicle Specifications

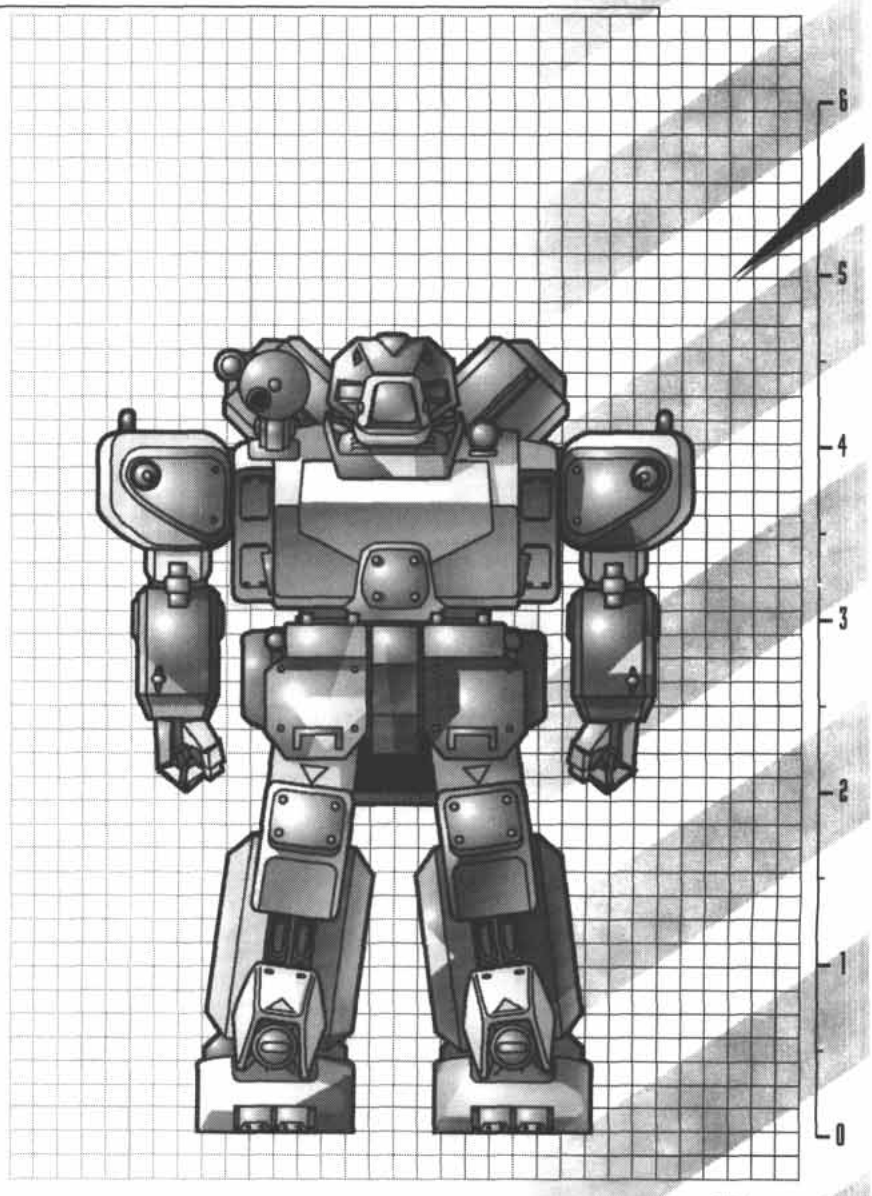
Code Name:	Flak Jaguar
Production Code:	HACS-02MG-AA
Production Type:	Mass Production
Cost:	471,750 marks
Manufacturer:	Northco
Use:	anti-aircraft Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7098 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	530 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	MAAC (F, 160 rnds), Improved Rear Defense, Reinforced Armor (Rating 1, Front), Sniper System (MAAC), Exposed Fire Control
Remove:	MAC, LRP/32, APGL, HGs, Airdroppable
Change:	Downgrade Deployment Range to 530 km, Fire Control to 0
Modified Threat Value:	452
Offensive:	292
Defensive:	552
Miscellaneous:	512

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	2

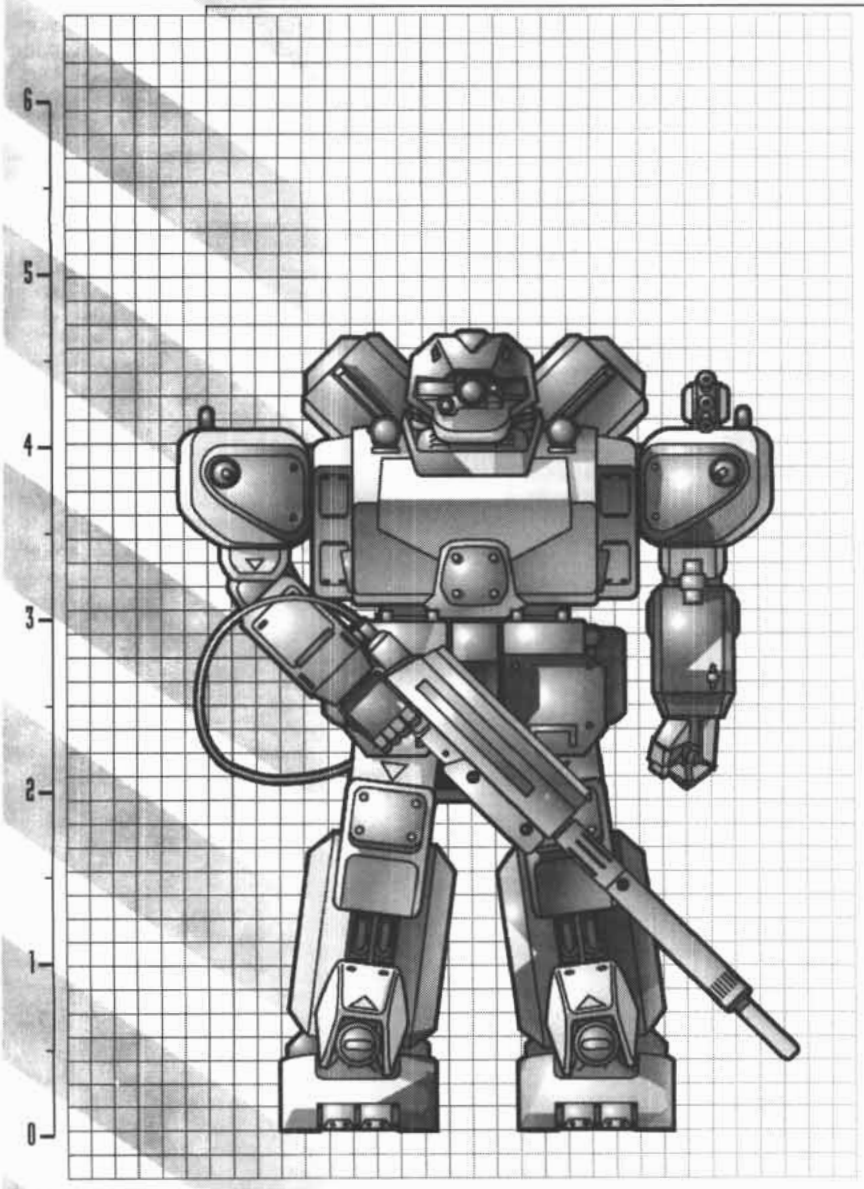


Bryce Hubbard (order #5318102)

4.7.4 HACS-02MG-SNP FLASH JAGUAR

The *Flash Jaguar*, which has begun to enter service in TN 1933, is a response to the South's deployment of the laser-equipped *Snakeye Black Mamba*. While the *Panther* matches the *Snakeye*'s operational profile, the advantage of a laser sniper was also clear to Northern commanders. Northco signed an exclusive deal with Sergon Optics in TN 1931 which allowed it to guarantee a supply of laser weapons that its competitor Shaian Mechanics could not provide for its *Stalking Cheetah* model. Investing in a heavier laser weapon for the *Flash*, Northco was unwilling to replicate the *Snakeye*'s costly stealth capabilities, especially given the strictures against a combination of stealth and laser capabilities that had been placed on them during the development of the *Panther*. The *Flash* was created by refitting standard *Jaguars* as snipers with the new Sergon Optics Arrowlight-14 laser rifle. This weapon requires two manipulators to hold and delivers a great deal of energy to its target, but it is a serious drain on the Gear's energy supply. The *Flash* carries a bank of high-density capacitors on its back to provide power, but the laser must still recharge after about 20 shots. Moreover, the laser recharging system that converts the output from the Gear's engine is plagued by inefficiency. The use of the Arrowlight involved a few additional changes to the *Jaguar*, including stripping off all other weapons except the anti-personnel grenade launcher, a few grenades and vibroknife. The fragile nature of the electronic components of the Arrowlight required that the system be reinforced and armored, but the *Flash*'s paratrooper capability was lost even with these precautions. Nonetheless, the power, range, and phenomenal accuracy of the Arrowlight make the *Flash Jaguar* a premier, though high-maintenance, sniper model.

The *Flash* is only in limited distribution, but Northco is committed to bringing it into the field in significant numbers. The simplicity of it design when compared to the Southern *Snakeye* means that it will soon outnumber the stealth/sniper model. Already a few elite Badlands units such as the *Roving Guns* have received several *Flash Jaguars* and inflicted heavy losses during sniper missions.



Vehicle Specifications

Code Name:	Flash Jaguar
Production Code:	HACS-02MG-SNP
Production Type:	Mass Production
Cost:	471,750 marks
Manufacturer:	Northco
Use:	sniper Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7003 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	LLC (F, 20 shots), Backup Fire Control, Annoyance (laser takes twice normal time to recharge from V-engine)
Remove:	MAC, LRP/32, Airdroppable
Change:	n/a
Modified Threat Value:	684
Offensive:	1213
Defensive:	552
Miscellaneous:	288

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	3

Bryce Hubbard (order #5318102)

4.7.5 HACS-02MG-SEC JAGUAR MP

The Northern Guard's Military Police are granted a lot more freedom than other Guard units. Many of its highly placed personnel have political backing, making them nearly untouchable. The military themselves fear the individual MPs, if only because they are granted permission to use extreme prejudice if they see fit to do so. Prior to the availability of the *Jaguar*, military police pilots had used *Headhunters* and *Tigers* with alternate weapon loads. The *Jaguar*, however, gave them a powerful edge over the drunken or rogue soldiers they would be facing. The *Jaguar*'s standard armament was replaced by one more suited to its role. A 60mm, pump-action fragcannon replaces the MR25 autocannon, while the rocket pod and the individual grenades were eliminated altogether; a second anti-personnel grenade launcher was installed within an armored shield, reserved for riot duty. Some MPs are equipped with a pistol version of the MR25; the cost of such a weapon, however, has made this a rare occurrence. Crashbars were bolted on the machines used for riot control. All machines have a bulletproof visor to protect their sensor clusters. A CB type radio was installed so that the pilot can stay in contact with the civilian authorities if need be.

The *Jaguar MP* entered wide distribution service only after the War of the Alliance (although some UMFA units had access to it in the pre-war years) and has been involved in several anti-insurgency operations. While these problems are less prevalent in the North than in the South, several outbreaks of violence marked the massive demobilization of troops after the war. An outbreak of violence in TN 1917 was perpetrated by demobilized soldiers from Ashington who returned home to find their homes leveled. *Jaguar MPs* were involved in suppressing the riots. A more drastic action took place in TN 1924 when *Jaguar MPs* were involved in a SWAT style incursion into the fortress of a bandit/military smuggler cartel from Wounded Knee. The loss of over eight pilots during the operation led to the development of the *Cheetah MP*, better suited for closed-quarters fighting.

Vehicle Specifications

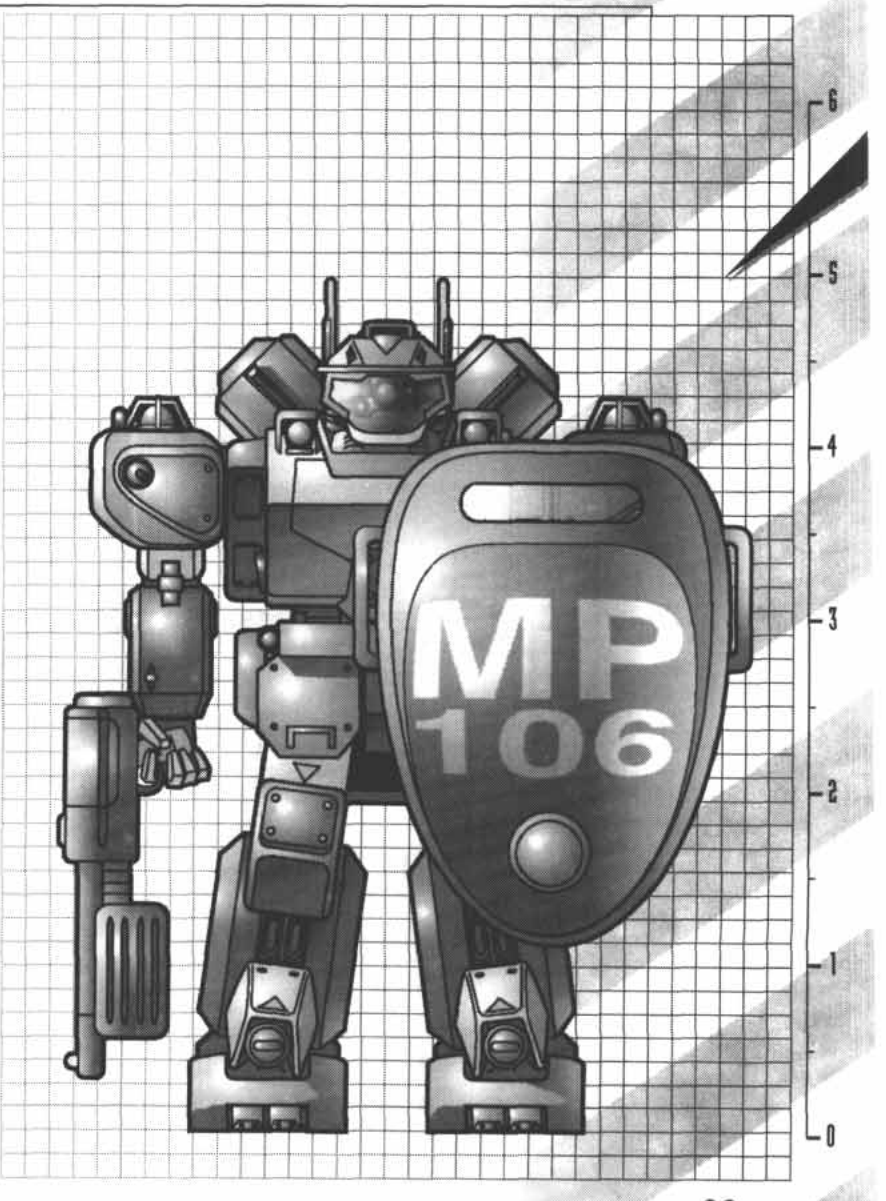
Code Name:	Jaguar MP
Production Code:	HACS-02MG-SEC
Production Type:	Limited Production
Cost:	1,515,960 marks
Manufacturer:	Northco
Use:	military police Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7423 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	FGC (20 shells), APGL (F, 12 grenades), Backup Sensors, Shield (Rating 2, F/L)
Remove:	All weapons except VB
Change:	downgrade Sensors to -1
Modified Threat Value:	568
Offensive:	548
Defensive:	552
Miscellaneous:	604

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	Unlimited

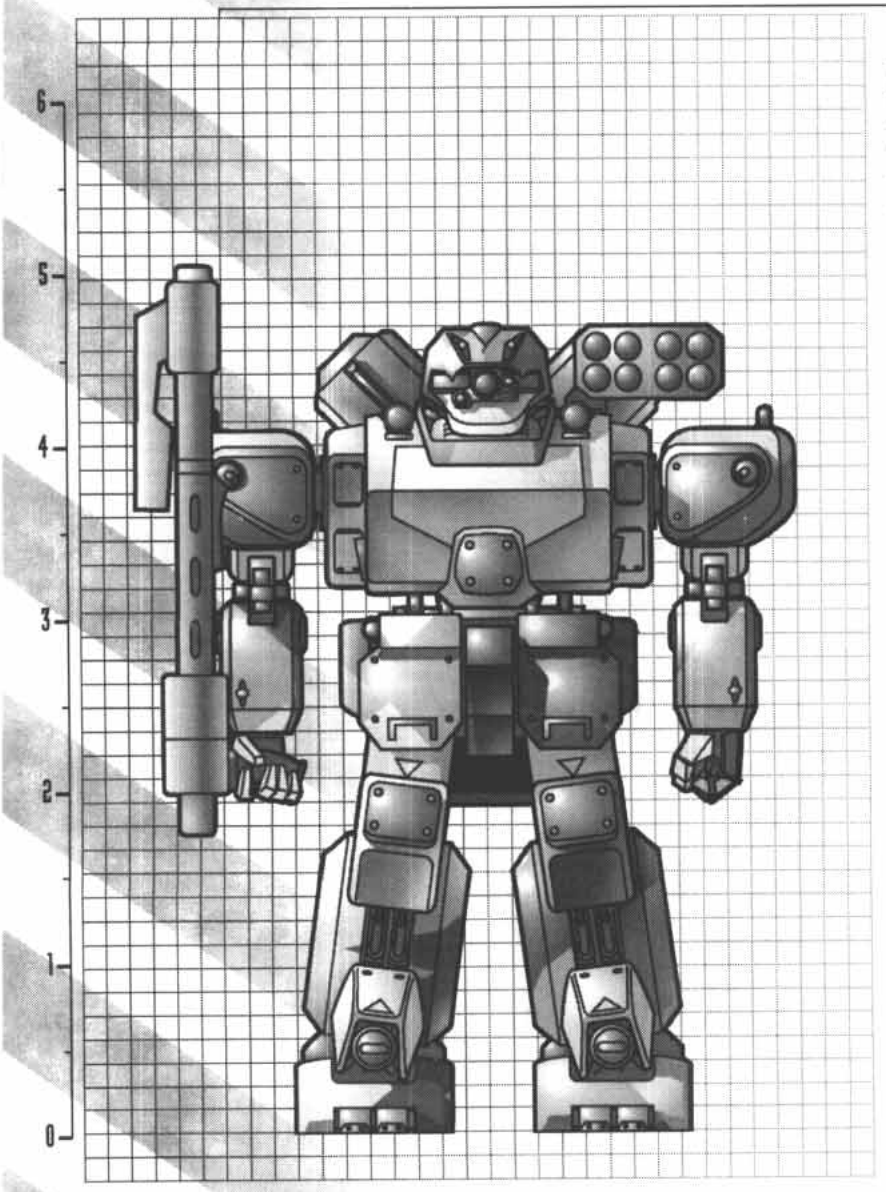


Bryce Hubbard (order #5318102)

4.7.6 HACS-02MG-ANN JAGUARUNDI

The *Jaguarundi* was designed to be a heavy scout capable of maneuvering across broken terrain while maintaining a good speed. The machine was originally planned by Northco to be competitive with the higher end Shaian Mechanics Gears such as the *Strike Cheetah*. To save on development cost, the Northco engineering team turned to one of the firm's most agile designs, the relatively recent *Jaguar*, as a basic chassis. By reducing its armor and increasing its running speed through newer actuators inspired by the *Nemesis Jaguar*'s, the modified *Jaguar*, now somewhat reduced in size and mass, showed a greatly improved physical performance curve. The final product, however, was slower than the *Strike Cheetah* and much more expensive. Most of the expense came from its improved control systems, which were based on captured NNet designs dating back to the War. While the machine did perform well, its learning curve proved to be somewhat erratic.

It was planned that the *Jaguarundi* would engage targets from a distance and keep ahead of any retaliatory strikes by virtue of its mobility. When the final product showed itself incapable of this, the proposed light autocannon was upgraded to a rapid-fire bazooka and the light rocket pod was replaced with a medium one. The resulting Gear was not quite a strike Gear, due to its weak armor, and not quite a scout Gear, due to its diminished speed and unfavorable comparison to the *Cheetah* series. As such, the management at Northco have mostly written off the *Jaguarundi*, citing it to be an evolutionary "dead-end." Although considered a failure by Northco and the majority of the military, the pilots of the *Jaguarundi*'s that are currently in service consider them to be good and solid machines. They freely admit that the *Jaguarundi* lacks the specialized abilities of the *Cheetah* or larger Gears, but retort that a solid multi-role Gear like the *Jaguarundi* will always have a place in the army. Some of the pilots go so far as to call the *Jaguarundi* the next *Hunter* (a somewhat overenthusiastic comparison given the cost and complexity of the machine).



Vehicle Specifications

Code Name:	Jaguarundi
Production Code:	HACS-02MG-ANN
Production Type:	Limited Production
Cost:	3,824,851 marks
Manufacturer:	Northco
Use:	advanced scout/attack Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7020 kg
Primary Movement Mode:	Walk (60 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	RFB (F, 60 rockets), MRP/9 (F, 9 rockets), 3 x HWG, Advanced NNet, Backup Sensors, Reinforced Chassis
Remove:	all weapons except VB
Change:	upgrade Walk to 10 (60 kph)
Modified Threat Value:	1147
Offensive:	1653
Defensive:	585
Miscellaneous:	1205

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.7.7 HACS-02MG-FL MAGMA JAGUAR

During the War of the Alliance there were many opportunities for a clearing action Gear to excel; stubborn pockets of resistance that could not be easily reduced without high losses and wasted time. The success of the Southern OACS-01M/FLM, *Flammjäger* became the basis for a similar Gear for use by the North. The end of the war saw only the deployment of field conversions of the *Hunter* and other Gears in anti-personnel duties, but TN 1919 saw the release of the *Magma Jaguar*. Designed to limit friendly losses and eliminate resistance quickly, the *Magma* was a deadly flame-based weapons platform designed to outperform its Southern counterparts. The decision to use the *Jaguar* chassis, a sturdy well armored and maneuverable Gear, was made by Northco as part of their medium term plan to make the commando Gear into the basic model of the Northern military complex. The weaponry of the *Magma* is centered around the Westfellow Lavaflow-12 flame cannon, supplemented by a RP-101 Chilibox incendiary rocket pod. The *Magma Jaguar* has been covered with a heat-resistant coating and its articulations are all covered with special flame resistant polymer cloth. To prevent pilot injury from super-heated air or smoke inhalation the cockpit is equipped with a self-contained breathing apparatus as well as additional armor.

To avoid the stigma associated with the pilots of the *Flammjäger*, potential *Magma Jaguar* pilots are rigorously subjected to various psychological, emotional and environmental testing. The goal being to obtain pilots who will find their job necessary but not take the maniacal pleasure that *Flammjägers* are notorious for; the testing procedures are rated 75% accurate. Since its release, the *Magma* has been used on several occasions to clear out bandit locations in the Badlands. On each occasion, despite moderate resistance, the *Magma* teams have returned both successful and unscathed. The use of flame weapons on rovers and other troops has resulted in negative coverage in the independent press however, and the *Magma* is now used only when deemed strictly necessary and always away from the prying eyes of the media.

Vehicle Specifications

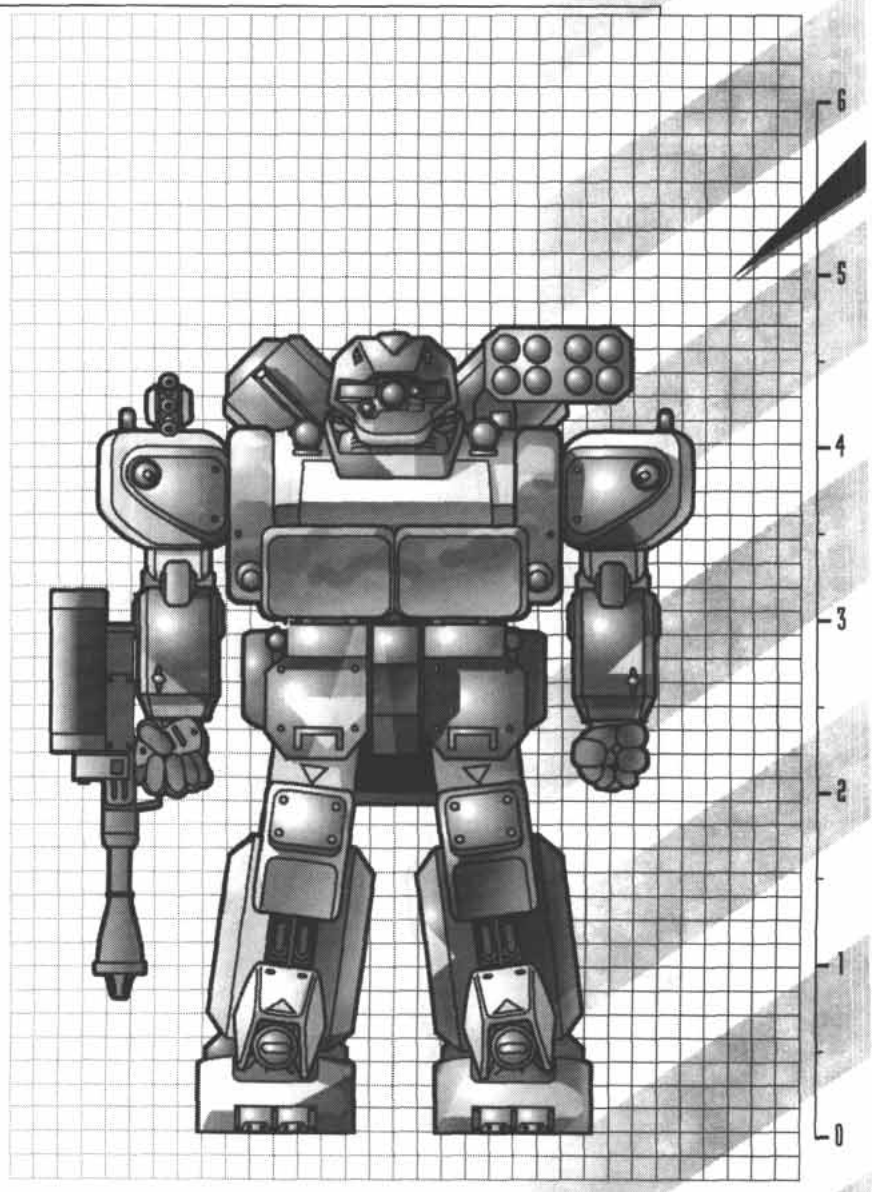
Code Name:	Magma Jaguar
Production Code:	HACS-02MG-FL
Production Type:	Mass Production
Cost:	486,973 marks
Manufacturer:	Northco
Use:	anti-infantry Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7050 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	MFL (F, 40 shots), IRP/10 (FF, 10 rockets), Fire Resistant, Limited Life Support, Reinforced Location Armor: Crew (Rating 2)
Remove:	MAC, LRP/32
Change:	n/a
Modified Threat Value:	649
Offensive:	747
Defensive:	552
Miscellaneous:	649

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	5

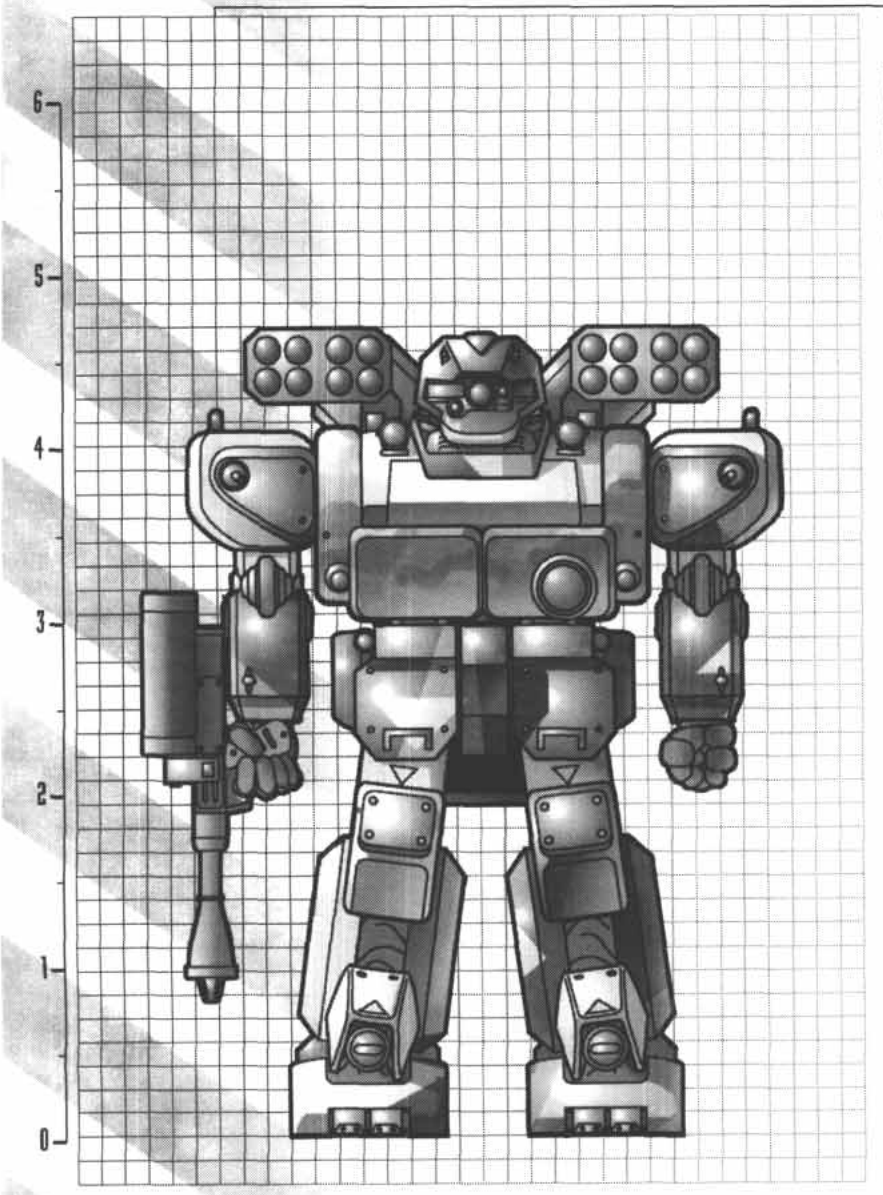


Bryce Hubbard (order #5318102)

4.7.8 HACS-02MG-FF FIREFIGHTER JAGUAR

Ironically based on the flamer-equipped *Magma Jaguar*, the *Firefighter* was introduced in TN 1922 as a standard modification package for the *Magma*. The *Firefighter* has its flame cannon modified to fire chemical flame-retardant foams and uses an additional standard GH-8 rocket pod equipped with rockets that spray a similar foam in addition to the two GH-18 rocket packs (which also use foam rockets). The *Firefighter* dispenses with the standard anti-personnel grenade launcher and vibroknife in exchange for a heavy vibroax used for getting through burning structures. Because the *Firefighter* may be called on to operate continuously in fire-storm conditions, the polymer clothson the joints and the heat-resistant coating have both been thickened and augmented by a dedicated, self-contained cooling system. Northern and Southern tacticians have noted that reconverting *Firefighters* to *Magmas* is a matter of a few hours for any competent technician and the two units are often deployed together.

Because of the rapid response capability of military units, many military pilots have burning house kill markers indicating their service to civilian defense. Civilian fire fighting units have made some purchases of *Firefighter Jaguars*, but the expense involved is quite prohibitive. The size and weight of Gears makes them of very limited use in residential areas as well. Firefighters operating in industrial areas, however, have used converted Work Gears for generations and the availability of the *Firefighter Jaguar* is seen as a blessing by them. Unsurprisingly, the Rapid City fire department is the best equipped with *Firefighters* — thanks to a generous gift of 20 models from its corporate sponsor Northco. Northco saw the wisdom of its gift in TN 1931 when a critical failure in its *Tiger*-part production line led to a large explosion and an out-of-control fire. Traditional fire fighting vehicles were able to help control the spreading of the fire, but it was the *Firefighter Jaguars* which entered the twisted remains of the production line to beat back the flames and clear an evacuation path for trapped workers. Fifteen firefighters lost their lives during the struggle.



Vehicle Specifications

Code Name:	Firefighter Jaguar
Production Code:	*HACS-02MG-FF*
Production Type:	Limited Production
Cost:	4,366,086 marks
Manufacturer:	Northco
Use:	fire fighting Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 *mm*
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7275 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	MFL (F, 40 shots Fire Fighting Foam), 2 x MRP/18 (F, 18 rockets Fire Fighting Foam), VA, Fire Resistant, Hostile Environment Protection: Extreme Heat, Searchlight (FF,100 m)
Remove:	all weapons
Change:	n/a
Modified Threat Value:	1190
Offensive:	2225
Defensive:	552
Miscellaneous:	794

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.7.9 HACS-02MG-ALP MOUNTAIN JAGUAR

The peaks and rugged hills of the Northern Hemisphere have led to a tradition of mountaineering Gears in the Northern military, but very few designs have been rugged and simple enough to stand the test of time. During the War of the Alliance, the Southern *Desert Viper Mk-* was chosen as the Terranovans' standard mountain fighting Gear. This was an embarrassment to the Northern military, which realized that a better homegrown Gear was needed to defend the peaks and forests of the North. Relying on the technical edge provided by the *Jaguar* CNCS high command commissioned a new mountaineering Gear to be developed based on its chassis. The result was the *Mountain Jaguar*, a *Jaguar* with legs reinforced by thick climbing claws and off-road hydraulics. Bolt-on leg and arm spikes completed the Gear's mountaineering equipment. This new leg assembly did introduce some drawbacks, such as the loss of the secondary movement system and airdrop capabilities. Since these functions are not usually necessary in mountain conditions it seemed a fair trade-off, but the *Mountain Jaguar*'s lack of speed on open ground can at times be crippling. The armament of the *Mountain* was updated by replacing the Pepperbox-II rocket pod with the more powerful GH-16 model featured on the *Fire Jaguar*. This gave additional close-range firepower to the *Mountain* and provided it with the ability to create makeshift rock-slides if necessary.

The *Mountain Jaguar* entered service in TN 1921 and has slowly been distributed to units in mountainous regions in and out of the Badlands. Older models such as the *Alpine Hunter* are still in wider distribution, but it is part of Northco's commercial plan to replace the *Alpine* with the *Mountain* over the next decade. The *Mountain* has thus far seen relatively little battle, although it has been used in the Westridge area against rovers — including the Desert Wolves — as part of the Northern effort to encourage local communities to align with the Confederated Northern City-States. The tactical advantage granted by the *Mountain Jaguar* has thus far been effectively countered by the Wolves' and others intimate understanding of the geography and climate of the region.

Vehicle Specifications

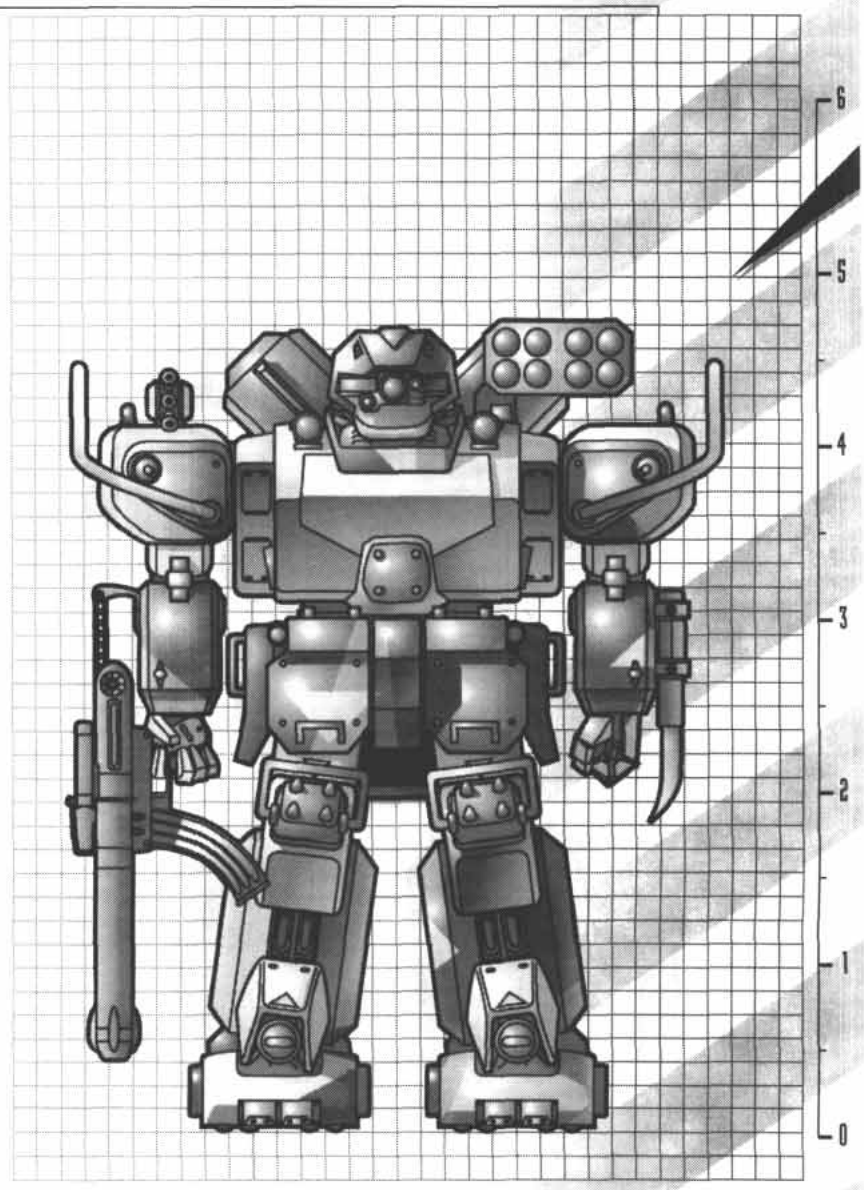
Code Name:	Mountain Jaguar
Production Code:	HACS-02MG-ALP
Production Type:	Mass Production
Cost:	717,500 marks
Manufacturer:	Northco
Use:	mountain combat Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7210 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	n/a
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	MRP/36 (F, 36 shots), Chassis Reinforcement, Improved Off-Road, Rugged Movement System, Climbing Equipment
Remove:	LRP/32, Airdroppable, Secondary Movement System
Change:	n/a
Modified Threat Value:	861
Offensive:	1633
Defensive:	398
Miscellaneous:	561

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5

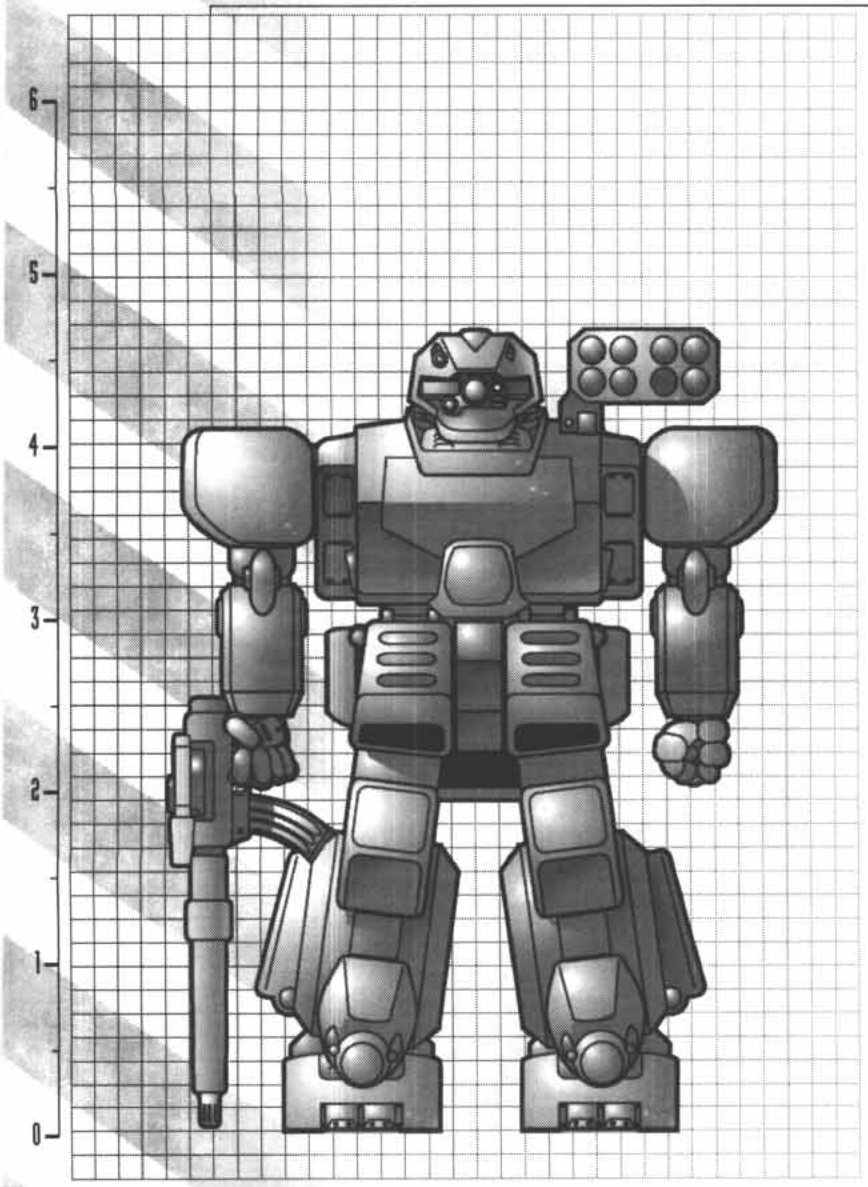


Bryce Hubbard (order #5318102)

4.7.10 HACS-02MG-STL PANTHER

The *Panther* stealth variant of the Northco *Jaguar* first saw action when two prototypes were assigned to the stealth forces ordered to infiltrate the new Colonial Expeditionary stronghold of Baja before the city-state was assaulted by Terranovan forces in TN 1916. The team of *Panthers* and *Black Cats* was charged with taking out the main command center established by Colonel Helena Agrippa of the CEF, while several teams of Légionnaire infantry commandos eliminated secondary communications centers. The *Panther* prototypes served extremely well in the early part of the mission taking out whatever forces they could not avoid with their Sergon Redeye sniper lasers. Unfortunately the CEF routinely fielded dedicated sensor suites designed to detect the ionization paths of laser weaponry. When a *Panther* tried to use its laser to eliminate the sentry forces outside the Baja command center, it revealed the teams position and raised the alarm. Particle cannon fire eliminated the unfortunate stealth unit before it could react. The team nevertheless accomplished its mission and destroyed the command base, but the second *Panther* was forced to simply support the *Black Cats*. When the Northern Guard commissioned the production model of the *Panther*, laser weaponry was banned outright.

The production *Panther*, fielded in TN 1928 but still only deployed in very small numbers, sported a similar stealth coating to that of the *Black Cat*, using the same Racetech rubberized absorbent coating. The standard *Jaguar* V-engine was replaced by an electric battery/turbine silent-running powerplant. The standard sensor array was replaced by an advanced model developed by Hyperion Werks. The RPS-107 Stealthbox rocket pod from the *Black Cat* was also installed to give short-range punch to the Gear. The most innovative system, however, was the Northco Weapons S-992 sniper rifle. Featuring a silenced and stealth-coated 40 mm rifle, the S-992 features an integrated sniper sight and a side-mounted Sergon laser target designator. To ensure endurance in terms of ammunition, the *Panther* features leg mounted armored housings for additional 20 round clips. Most *Panthers* deploy with a variety of ammunition types.



Vehicle Specifications

Code Name:	Panther
Production Code:	HACS-02MG-STL
Production Type:	Limited Production
Cost:	3,743,333 marks
Manufacturer:	Northco
Use:	infiltration/commando Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7123 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	KU-7697 batteries w/gas turbine
Horsepower:	630 Hp

Modifications

Add:	HRF (F, 20 ammo), LRP/16, Ammo Storage (2 20-round HRF clips) Sniper System (HRF), Stealth (level 5), Target Designator (level 4), Exposed Aux. Systems
Remove:	MAC, LRP/32, APGL
Change:	Upgrade Sensors to +1
Modified Threat Value:	1123
Offensive:	1023
Defensive:	552
Miscellaneous:	1793

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

4.7.11 HACS-02MG-SCT JAGUAR PATHFINDER

The *Pathfinder* is a long range reconnaissance and raiding Gear based on the *Jaguar* chassis and a source of prestige for its pilots. Designed both for recon and commando/infiltration duties, the *Pathfinder* is often deployed alone and its pilots have gained the mystique of lone warriors who rely only upon themselves. The *Pathfinder* itself is easily identifiable by the cylindrical auxiliary fuel tanks which descend from its back-mounted S-V1110F V-engine. Though somewhat vulnerable to enemy fire, this additional fuel gives the *Pathfinder* a long deployment range, reaching over 1000 kilometers. This permits the Gear to be deployed on long range missions without the need for air-transport. The *Pathfinder*'s head differs slightly from other *Jaguars*, sporting a pair of small protuberances that house hi-resolution secondary omnicameras. Just behind the Gear's head is a raised, armored module that contains a deployable satellite communications system, enabling pilots to remain in contact with friendly forces even if the next closest unit is hundreds of kilometers away. The *Pathfinder*'s armament is sparse, but effective, using a Riley 40mm RF225 as a long-range deterrent, and three heavy panzerfausts to provide extra firepower for tight situations. The rifle permits the *Pathfinder* to undertake sniper missions as well.

Capable and versatile, the *Jaguar Pathfinder* (released in TN 1931 based on a field conversion from TN 1926) is beginning to appear in significant numbers among the Northern Guard units defending the Western Desert. The only real design problem of the *Pathfinder* is a lack of ammunition for its main weapon. Most pilots have taken to carrying additional clips, despite the chances of enemy fire triggering an explosion. They argue that the placement of the supplemental fuel tanks on the *Pathfinder*'s V-engine already makes it dangerous to pilot (some pilots jettison the fuel tanks to avoid the problem). Other pilots have begun to use different weapon layouts to compensate for this problem and popular options include the R224 rifle or the M260P Paratrooper rifle used by the *Hunter Paratrooper*. *Pathfinder* pilots are often among a regiment's scout elite and can often requisition the supplies they need without great difficulty.

Vehicle Specifications

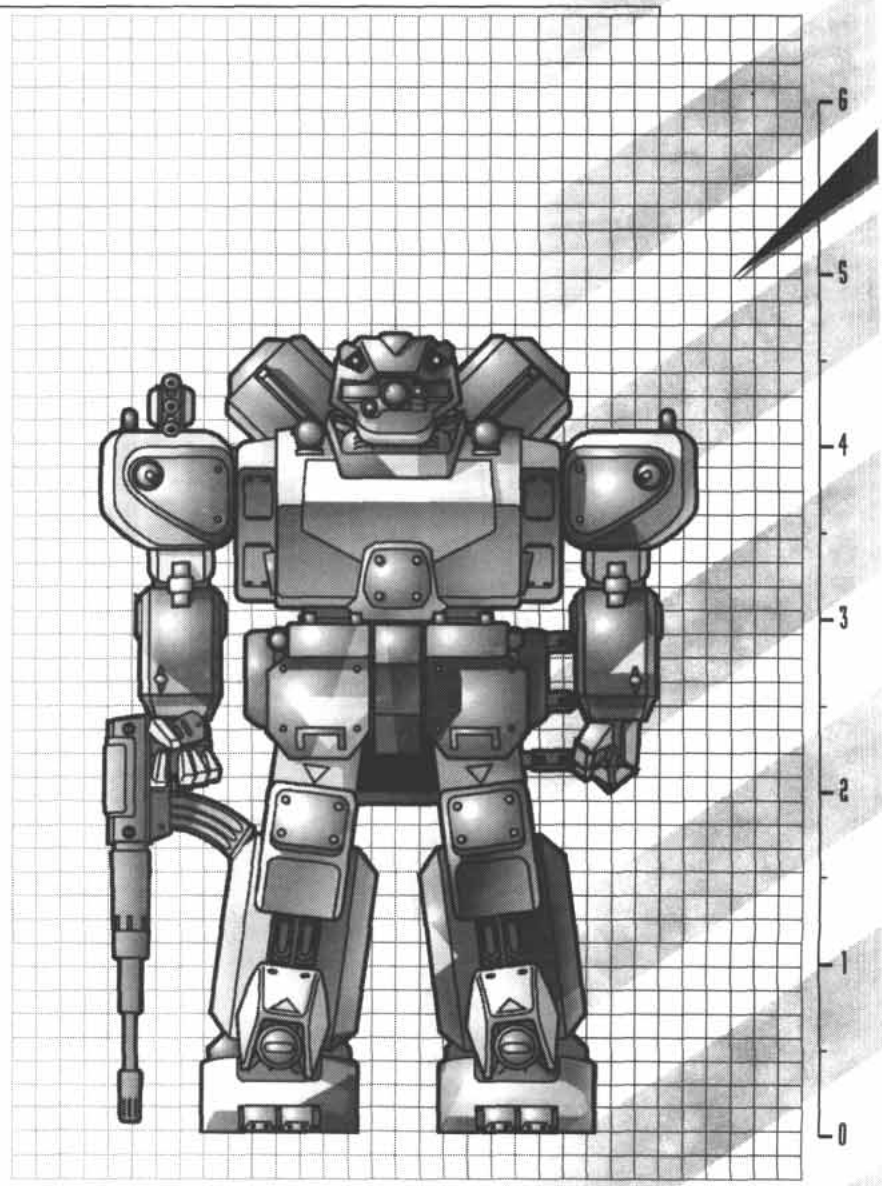
Code Name:	Jaguar Pathfinder
Production Code:	HACS-02MG-SCT
Production Type:	Mass Production
Cost:	551,250 marks
Manufacturer:	Northco
Use:	general purpose Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7123 kg
Primary Movement Mode:	Walk (53.1 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	1050 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	HRF (F, 20 shots), 3 x HPZ, Satellite Uplink, Hazardous Ammo/Fuel Storage
Remove:	MAC, LRP/32, HGs
Change:	upgrade Sensors to +1/3 km, Deployment Range to 1050 km
Modified Threat Value:	735
Offensive:	886
Defensive:	552
Miscellaneous:	765

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	1

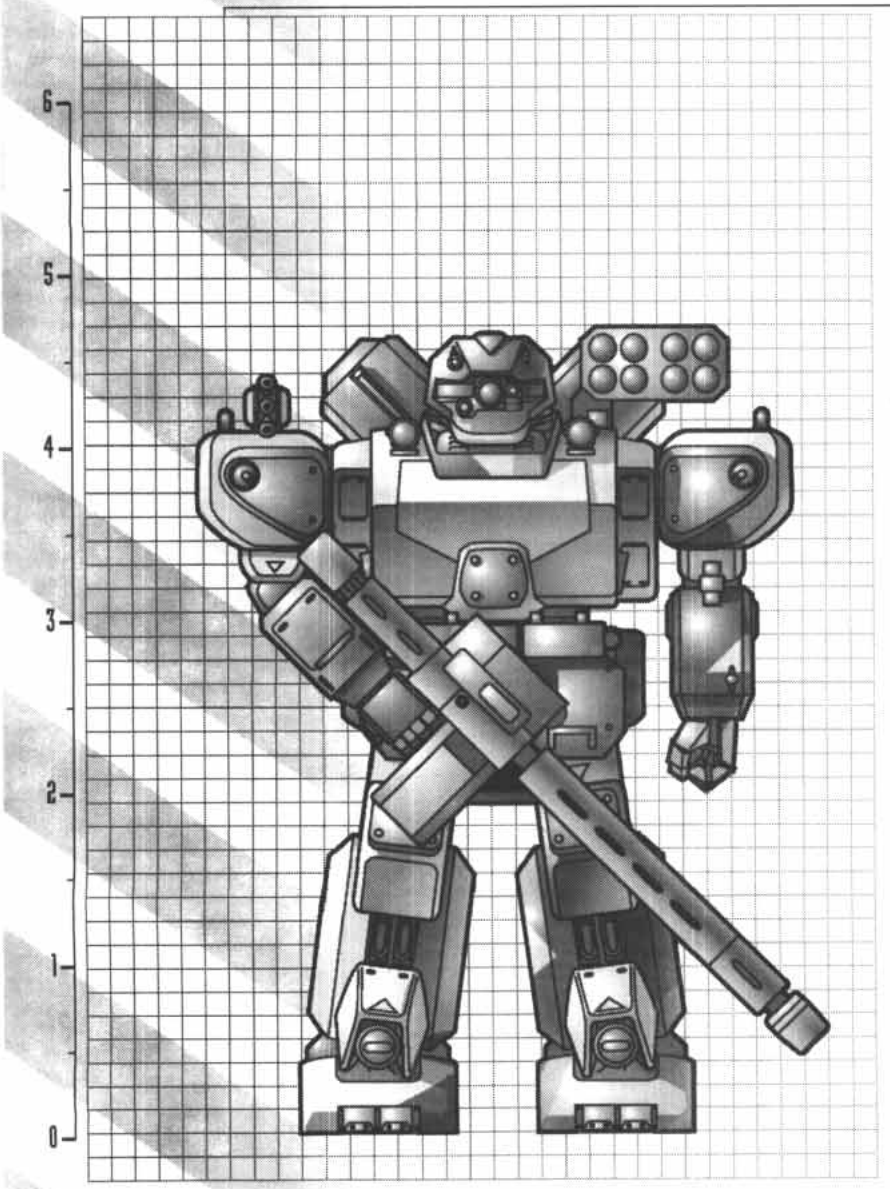


Bryce Hubbard (order #5318102)

4.7.12 HACS-02MG-JG PREDATOR JAGUAR

The jungles of the Antarctic are *terra incognita* for many Northern Gear pilots. Even more so than the North's own dense forests, the jungle lends itself to a deadly, hide-and-seek style of warfare. Nevertheless, Northern high command has long recognized that its troops need to be ready to take the battle to the South's doorstep or the AST will gain a great defensive advantage from its jungles. The latest Northern Gear designed to fight on this type of enemy terrain is the *Predator Jaguar*, which entered service in TN 1931. Wielding the tried and true weapons systems of the venerable *Razorback*, the *Predator* brings paratrooper deployment to the table as well. The main weapon is a Paxton LGPC 106 mm snub cannon, supplemented by Forge 71 mm shoulder-mounted rocket pod. To compensate for the limited internal ammunition storage of the LGPC system (as laid out for the *Jaguar* frame), a small armored, skirt-mounted ammunition canister houses an additional clip. The *Predator* also features an upgraded sensor system, but it has been plagued by slight technical difficulties and may eventually be replaced by the more expensive system used on the *Panther*. Standard jungle camouflage netting was added to the *Predator* frame to add to its effectiveness in its terrain of choice.

Now that the first *Predator Jaguars* have entered service, the overall verdict is still highly positive. Despite the difficulties with the new sensor system, those who have piloted the *Predator* report that it is a joy to use. As the tensions between North and South increase, the orders for the *Predator* do so as well; airborne units have already begun to make it part of special jungle attack squadrons. At least on Norlight landship-based airborne company has requested resupply in *Predators* in preparation for a landnaval assault on Southern territories in the case of war. Paxton Arms has promised an almost limitless supply of the LGPC snub cannon and Northco has slated a large *Predator* production run for TN 1934. The interest in the *Predator* has undoubtedly been noted by Southern intelligence experts and some feel that the whole program is part of a complex plan of intimidation.



Vehicle Specifications

Code Name:	Predator Jaguar
Production Code:	HACS-02MG-JG
Production Type:	Mass Production
Cost:	882,500 marks
Manufacturer:	Northco
Use:	jungle combat Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7123 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	SC (F, 3 shots), MRP/9 (F, 9 rockets), Camo Netting, Ammo Storage (1x 3-shot SC clip), Defective Active Sensors (Rating 1)
Remove:	MAC, LRP/32
Change:	upgrade Sensor Rating to +1
Modified Threat Value:	1059
Offensive:	2105
Defensive:	552
Miscellaneous:	521

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.7.13 HACS-02MG-AST STRIKE JAGUAR

The *Strike Jaguar* first appeared as a mass-produced model in TN 1918 as the Northern military's new assault/anti-armor Gear. When the War of the Alliance began, the *Strike Jaguar* was being manufactured only as a limited production model. The *Hunter Commando*, still in service, was not yet in need of a mass-produced replacement. It was during the *Commando*'s last production run that the CEF landed. After a production run of more than 300 machines, Terranovan high command decided that too much precious materials was being lost on an older design and ordered that the *Hunter Commando* be replaced by the *Strike Jaguar* on the assembly lines. Since only the offensive payload was modified, the basic *Jaguar* chassis staying the same, the replacement was fast and painless. The medium autocannon was exchanged for a Riley B-300 medium bazooka which delivered enough punch to stop or damage a light tank with one rocket-propelled round. A twenty-rocket incendiary rocket pack completed the heavier armament. Some of the first *Strike Jaguars* produced were fitted with a hi-tech fire control system, but pilots in the limited production wartime runs of the *Strike* got into the habit of switching it off. They claimed it was because of glitches in the target identification and tracking software, but some have admitted that it had more to do with proving individual skill than anything else. Since the systems were not being used, engineers removed them from the mass-produced model.

Since its entry into service, the *Strike Jaguar* has been used as a tank hunter. It has now mostly replaced the *Hunter Commando* as the Northern military's standard strike unit, operating at times with the simpler *Assault Hunter*. The *Strike* earned its tank killer reputation during the War of the Alliance, when it was used by one of the planet's best Gear teams: the famous 7th Gear regiment, also know as the *Cat's Paws*. The *Strike* has also been used as a commando Gear, clearly taking over the hunting ground of the *Hunter Commando* by virtue of its paratrooper capabilities. The *Strike* remains expensive to produce and is not quite as common as Northco would like it to be.

Vehicle Specifications

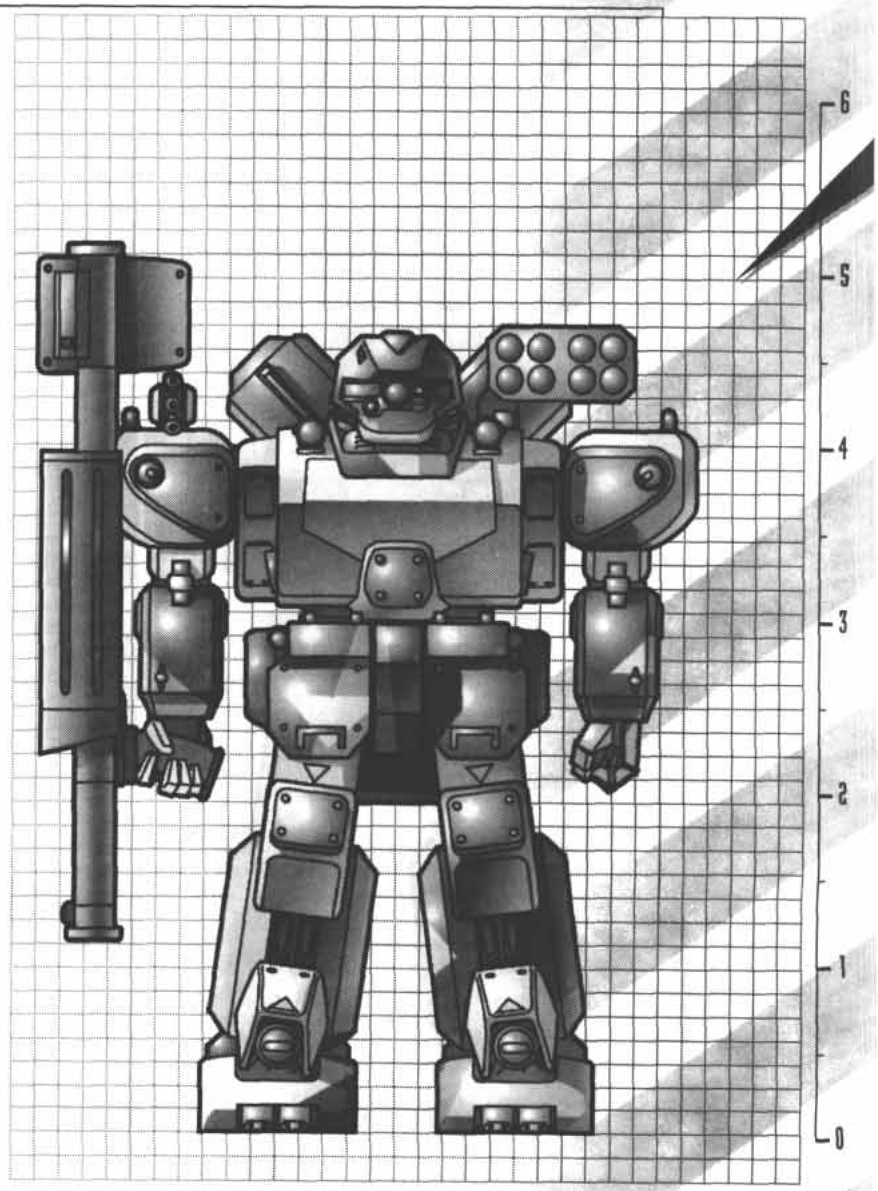
Code Name:	Strike Jaguar
Production Code:	HACS-02MG-AST
Production Type:	Mass Production
Cost:	733,333 marks
Manufacturer:	Northco
Use:	assault Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	durasheet w/alloy and ceramic
Standard Operational Weight:	7123 kg
Primary Movement Mode:	Walk (53.1 kph)
Secondary Movement Mode:	Ground (81 kph)
Deployment Range:	550 km
Sensor Range:	60 hexes/3 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1110 V-Engine
Horsepower:	620 Hp

Modifications

Add:	MBZK (F, 20 shells), IRP/20 (F, 20 rockets)
Remove:	MAC, LRP/32
Change:	n/a
Modified Threat Value:	880
Offensive:	1820
Defensive:	552
Miscellaneous:	268

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	Unlimited

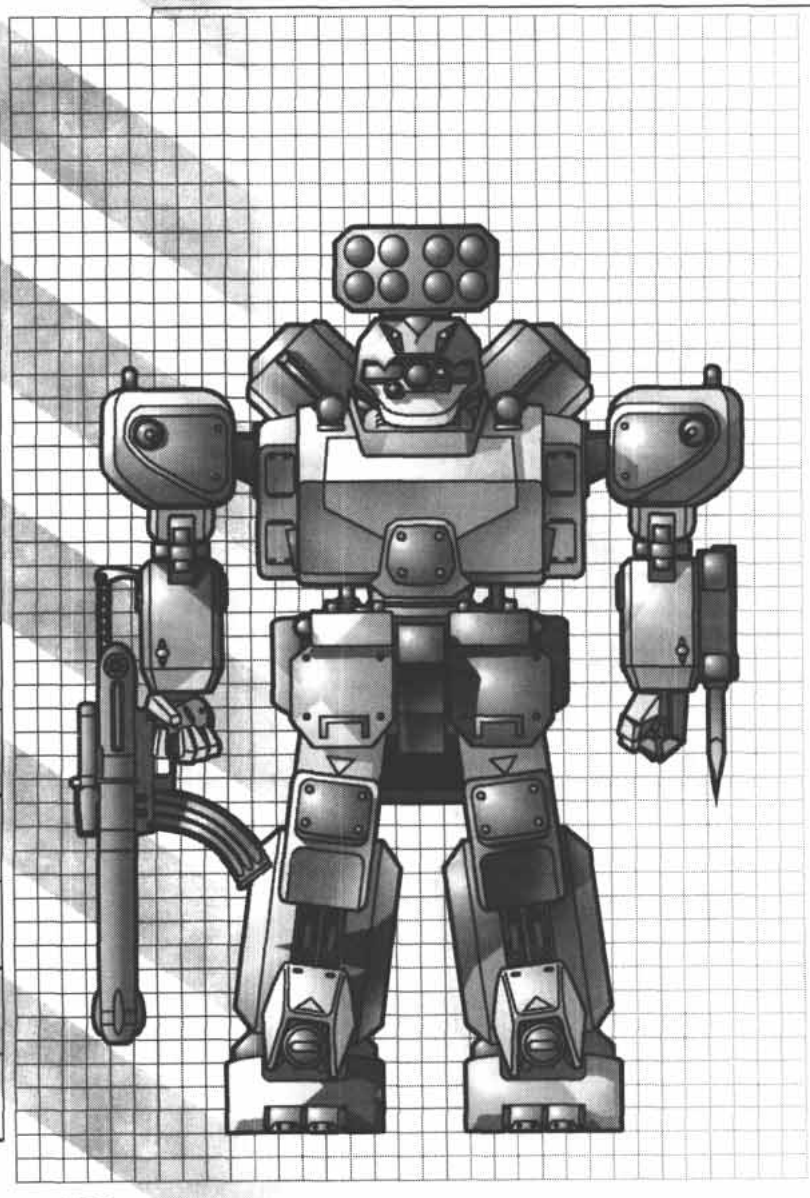


Bryce Hubbard (order #5318102)

4.8 HACS-12MG-DL NEMESIS JAGUAR

The original *Jaguar* designers at Northco had the elite Gear pilot in mind when they put their high-performance machine together. Duelists, however, had requirements that often could not be met in a general battlefield model. The *Jaguar* designers began the *Nemesis* as a side project, using the overall chassis of the battlefield model as a base. What started as an unofficial sideline has become one of the prestige Gears of the United Mercantile Federation. The *Nemesis* quickly became the place to put many of the "toys" becoming available to Northco designers. The standard *Jaguar* actuators were replaced by the high-performance models sub-contracted to Shaian Mechanics, resulting in a level of agility unknown in a Gear of its size. Similarly, computer technicians had a field day overhauling the command system, creating a frighteningly efficient system layout. In the end, little remained but some of the outward shape of the *Jaguar*'s armor. The resulting high-performance dueling machine is outstandingly effective on the field of honor and has been used as part of a Northco/Shaian Mechanics advertising campaign, recalling the days of easy relations between the two Gear producers. Like the massive *Kodiak*, the *Nemesis Jaguar* stands as a testament to what the two giants of Northern Gear production can accomplish when they cooperate freely and easily.

Some sacrifices did have to be made, however. The communications system was downgraded to make room for the added control computers and the complex electronics became more exposed than in the battlefield Jaguar. Armor also had to be slightly reduced to make full use of the Shaian actuators, although added protection was given to the pilot to prevent casualties. The *Nemesis* was given a slightly lighter armament than the battlefield version, including a M260 autocannon rifle and a RP-109 Pepperbox. The Pepperbox was mounted on the top of the V-engine backpack, because of the lack of hardpoints on the *Nemesis*' highly articulated shoulders. A forearm spike added to its required close-combat capabilities.



Vehicle Specifications

Code Name:	Nemesis Jaguar
Production Code:	HACS-12MG-DL
Production Type:	Limited Production
Cost:	2,205,500 marks
Manufacturer:	Northco
Use:	Dueling/assault Gear
Height:	4.7 meters (5.3 w/LRP)
Width:	3.4 meters
Average Armor Thickness:	45 mm
Armor Material:	Durasheet w/alloy and ceramic
Standard Operational Weight:	7134 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	380 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V1110K V-engine
Horsepower:	615 Hp

Weapon Payload

Name	Ammunition Payload
MR25 30 mm Machinecannon	40 shells
RP-109 Pepperbox	32 rockets
HW-VB2 Vibroknife	-
Forearm spike	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The *Nemesis* has been the joy of Northern Duelists since its release just prior to the War of the Alliance. The added responsiveness and incredible dexterity of the machine have been used to greater advantage on the field of honor. Duelists experienced with the *Nemesis* swear by it. There are not a great number of these pilots, however. The two-million mark price tag of the *Nemesis*, the very limited production runs and the icy relations between Northco and Shaian have ensured that very few of these elite Gears have seen the light of day. Some commanders in the Northern Guard would like to see this situation change, however. Despite the expense involved they have begun a campaign for wider distribution of the *Nemesis*, hoping to see most units be able to sport one for their Duelist. They also hope to see some of the features of the *Nemesis*, most especially the IHADS-3 display system and the Terringer control layout, be installed in the standard production *Jaguars*. The reaction speed provided by the IHADS-3/Terringer cooperation is superior to almost any layout currently available and these commanders argue that it would give a very noticeable tactical edge to Northern forces to use it as standard equipment, allowing an unprecedented flexibility of battlefield action.

The pilot who made the *Nemesis* famous was Sergeant Deeana Earnshaw of the 42nd Northern Guard Gear regiment, the *Smoking Guns*. Earnshaw became a celebrated Gear Duelist when she defeated the crack UMFA pilot Ethan Lords in single combat in TN 1921. Lords had publicly spat on the Southern figure in the statue built to honor the memory of those killed during the Battle of Baja, prompting Earnshaw to challenge him for his contempt of these people's sacrifice. Earnshaw is currently serving as the Duelist of her old regiment once more in the region around Prince Gable in the Badlands and has been involved in actions against local rovers and MILICIA forces. Her *Nemesis* is often sought out by local military and dueling enthusiasts who see it and its pilot as legends in action. The Guard commanders seeking to put the *Nemesis* into wider distribution have repeatedly approached Earnshaw for her support, but she has thus far refused to once more become a symbol of Northco's "special toy."

General Stats

Threat Value:	735
Offensive:	974
Defensive:	504
Miscellaneous:	726
Size:	6
Original Default Size:	9
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	5
Top Speed:	9
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	13
Maneuver:	+1

Electronics

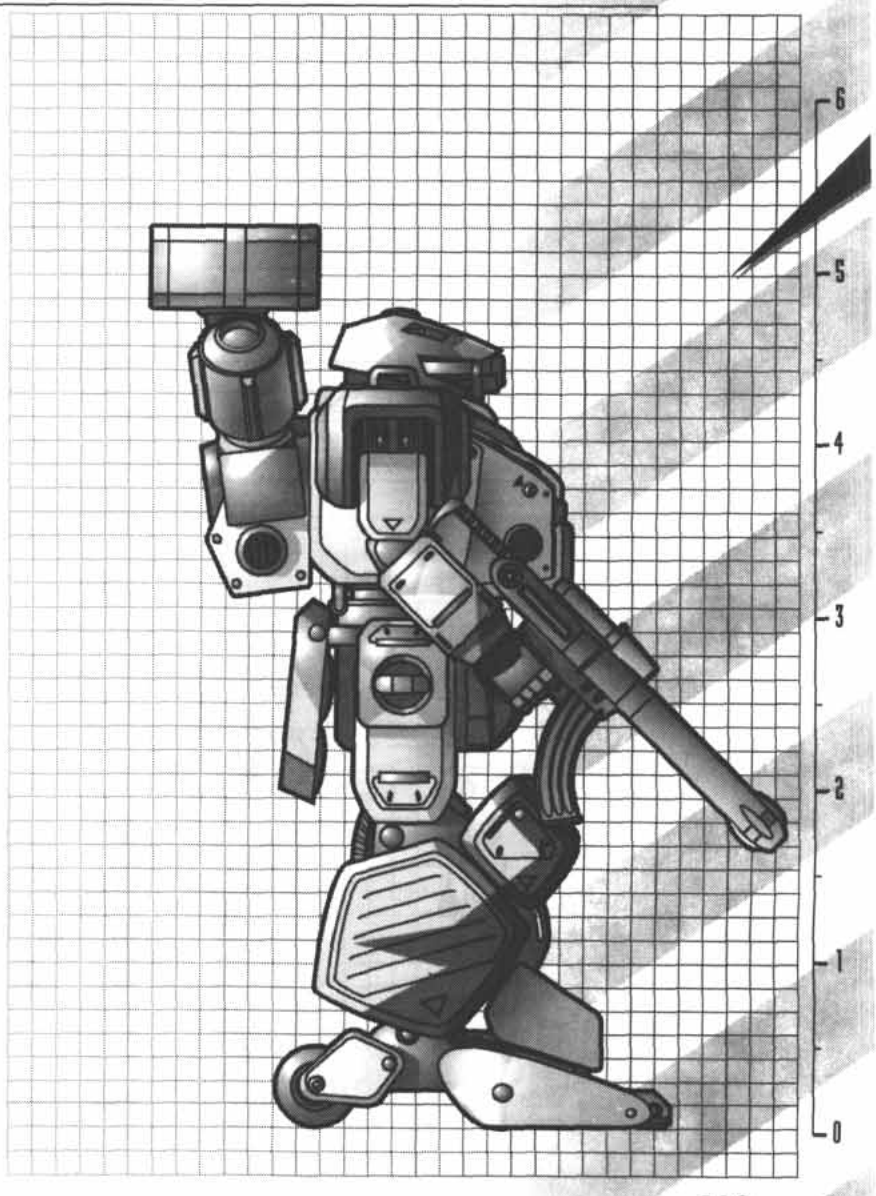
Sensors:	0
Communications:	0
Fire Control:	+1

Armor

Light Damage:	15
Heavy Damage:	30
Overkill:	45

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
MR25 30 mm Machinecannon	MAC	Forward	1	40
RP-109 Pepperbox	LRP/32	Forward	1	32
HW-VB2 Vibroknife	VB	Forward	1	-
Forearm spike	CR	Forward	1	-

Perks

Name	Rating	Game Effect
Acrobatic Handling	-	+1 Maneuver in close combat
Advanced Controls	-	+1 action per round
Airdroppable	-	Can be airdropped
Hostile Environment Protection	-	Desert
Manipulator Arm x2	6	Can punch
Reinforced Crew Compartment	-	Absorbs first "Crew" damage

Flaws

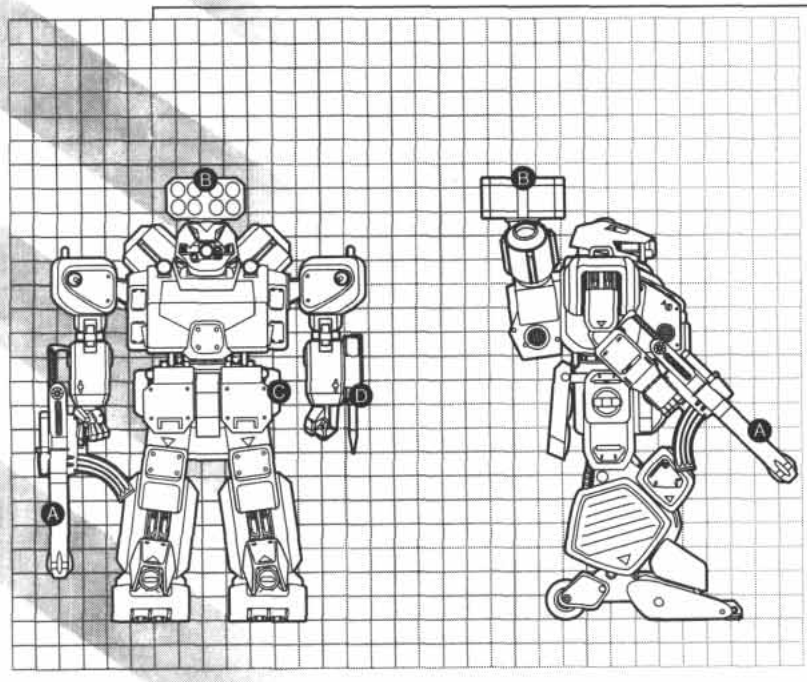
Name	Rating	Game Effect
Annoyance	-	Cramped Head Room
Exposed Auxiliary Systems	-	"Aux" damage is one step worse

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

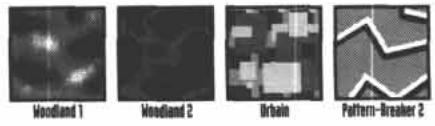
Name	Modified TV
Replace LRP with MRP/36 (F, 36 rockets)	920
Replace MAC with HWP(F, 10 charges)	687
Replace CR with HSKG (F, 6 charges)	776



Weapons Location Diagram

A	*MR25 30mm machinecannon*
B	RP-109 Pepperbox
C	HW-VB2 Vibroknife (not shown)
D	Forearm spike

Typical Camouflage



Bryce Hubbard (order #5318102)

4.8.1 HACS-12MG-DL/B SOUTHERN SPECIAL NEMESIS

The so-called *Southern Special Nemesis* was developed in the early TN 1930s by request of a small group of Northern Guard Duelists who — it was later revealed — had been traveling to the Badlands to meet Southern Republican Duelists for unauthorized duels. Both groups of pilots were operating without approval from their regimental commanders to settle insults made by each side about cowardice during the War of the Alliance. The *Southern Special* was designed to face the Republican pilots in the dueling form of choice: the vibrorapier duel. While the ranged weaponry of the *Nemesis* was retained, the forearm spike and vibroblade that usually ensured close-combat effectiveness were discarded in favor of a high-performance Merikson 15 vibrosword. This permitted the Northern pilots to challenge their Republican rivals to the ultimate test of honor in Southern eyes. On 27 Spring TN 1932, a total of ten pilots (five from each side) met to once and for all resolve their differences. Armed with their new *Southern Specials*, the Northern pilots were confident they could win. Unfortunately, rapier duels are a very difficult skill to master and three Northern Duelists were killed during the course of these illegal matches.

Since the death of the Northern Duelists, the *Southern Special* has been banned from production by order of the Northern Guard high command. The Merikson 15 remains available, however, and several regiments keep one around "just in case." The death of the pilots who created the *Special* has come to be shrouded in folklore in the cycles since it occurred and several young Duelists have claimed to support their actions. These pilots form a sort of underground alliance sometimes called the "brotherhood of the sword" and have made pledges to avenge their fallen comrades. Northern Guard military police officials have begun investigations into the "brotherhood" and Merikson Industries, which may be sponsoring their activities. The investigation is being led by Captain Francys Neils but has faced great difficulty. Neils suspects that several officials within the military police may be members or allies of the brotherhood.

Vehicle Specifications

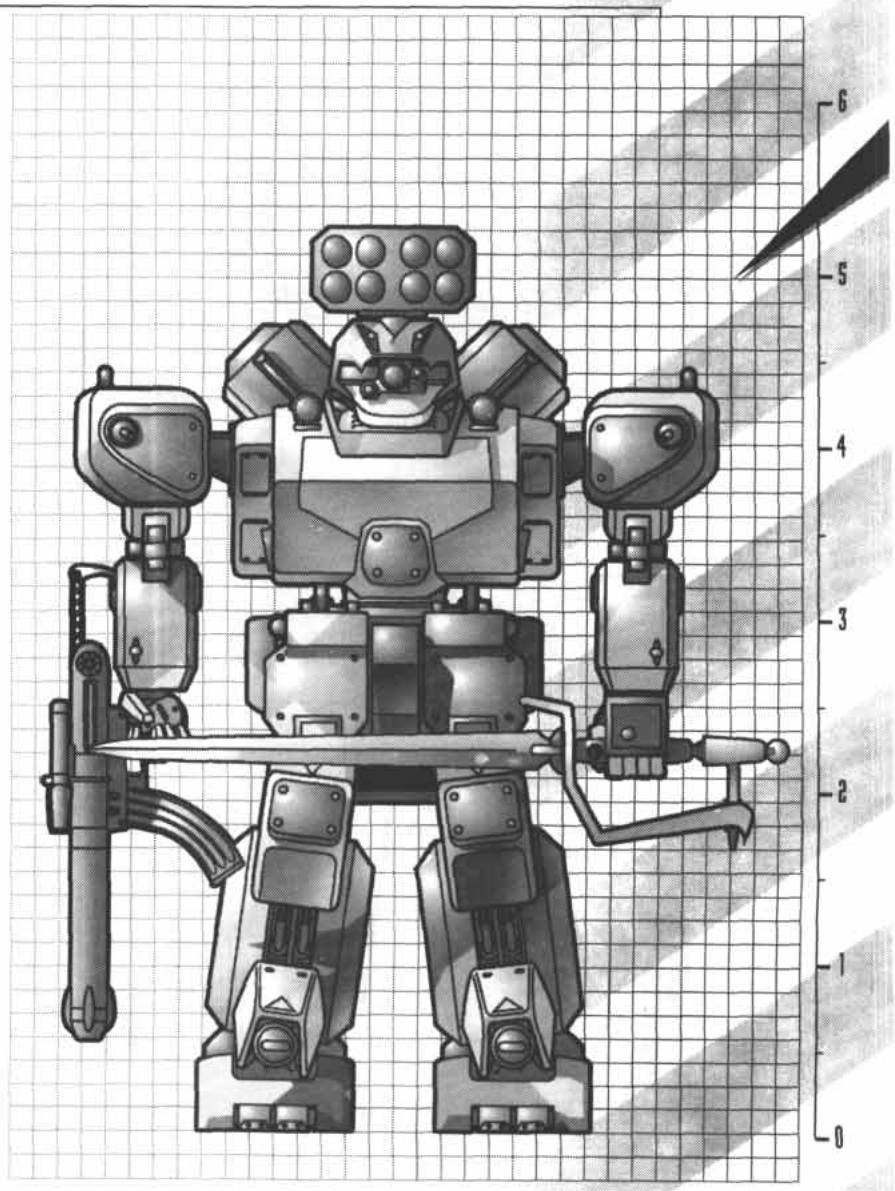
Code Name:	Southern Special Nemesis
Production Code:	HACS-12MG-DL/B
Production Type:	Limited Production
Cost:	2,214,000 marks
Manufacturer:	Northco
Use:	Dueling/assault unit
Height:	4.7 meters (5.3 w/LRP)
Width:	3.4 meters
Average Armor Thickness:	45 mm
Armor Material:	Durasheet w/alloy and ceramic
Standard Operational Weight:	7150 kg
Primary Movement Mode:	Walk (53 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	380 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V1110K V-engine
Horsepower:	615 Hp

Modifications

Add:	VR
Remove:	VB, CR
Change:	n/a
Modified Threat Value:	738
Offensive:	984
Defensive:	504
Miscellaneous:	726

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	1

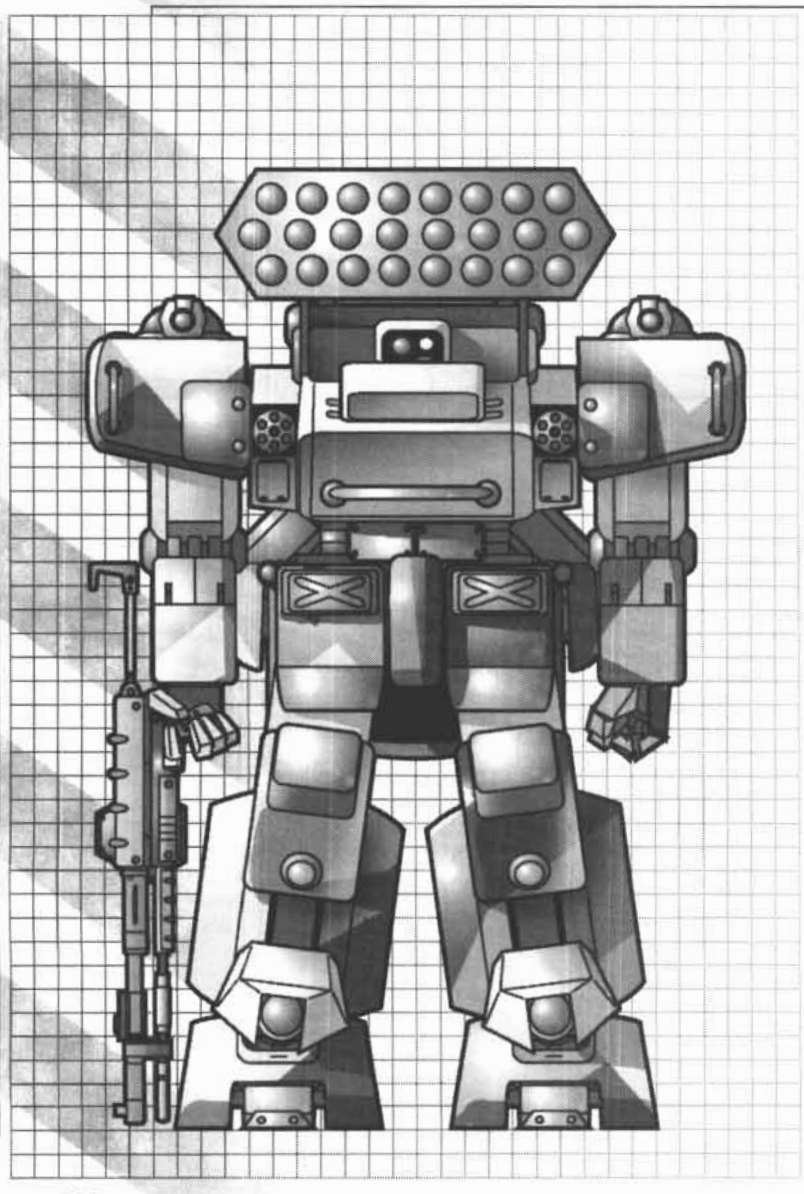


Bryce Hubbard (order #5318102)

4.9 HACS-15MG-MP MAD DOG

The *Mad Dog* was one of the first outside attempts at creating a new model of Gear that could compete with the United Mercantile Federation's *Hunters*. The hulking Heavy Gear was build by West Frontier engineers based on what they knew of the *Hunter* series. The *Wild Dog*, a bastardized *Hunter* copy created by another development team, became a prime source of spare parts to accelerate *Mad Dog* project. The *Mad Dog* was much larger than a *Hunter* and featured heavy limbs filled with cumbersome actuators. The machine had no head to speak off; fearing for the pilot's safety, the engineers had foregone the *Hunter*'s small turret-like "bump," sloping the armor instead. A small sensor pod covered a ninety degree arc on the front, while two small shoulder turrets swept the side. The computer had to allocate considerate time to integrate the various sensor inputs, which often led to shut-downs and rebootings. The one redeeming piece of equipment was the top mounted rocket pod, filled with 24 heavy rockets. Because of the unusual position of the pod, the V-engine was mounted in an inverted position in the backpack. This initially caused multiple problems in the prototype as oil and other fluids kept leaking out along the drive shafts and into the generators, but the problem was solved before mass-production began.

The *Mad Dog* was never a huge success, primarily because of the Westerners' relative inexperience with the Gear concept. The engineers tried to meet too many design objectives at once, and the vehicle was used both as a general trooper machine and as a fire support vehicle. The *Mad Dog* never fared well in actual combat trials and was never produced to appreciable numbers. It was retired as soon as the Protectorate Army managed to get its hands on a steady supply of new *Hunters* for their forces. The *Mad Dog* did have some lasting influence on Terranovan Gear design procedures, however: its knee and ankle linkages were later echoed in such designs as the *Razorback* and the *Bear*. In fact, many *Mad Dogs* were later refitted with *Bear* lower body armor (and in some case, whole lower bodies) to keep them in the field a bit longer.



Vehicle Specifications

Code Name:	Mad Dog
Production Code:	HACS-15MG-MP
Production Type:	Mass Production
Cost:	171,000 marks
Manufacturer:	Western Armories
Use:	fire support Heavy gear
Height:	4.8 meters (5.8 w/HRP)
Width:	3.9 meters
Average Armor Thickness:	74 mm
Armor Material:	molecular steel w/composite
Standard Operational Weight:	8690 kg
Primary Movement Mode:	Walk (30 kph)
Secondary Movement Mode:	Ground (54 kph)
Deployment Range:	350 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	AT87 V-engine
Horsepower:	720 Hp

Weapon Payload

Name	Ammunition Payload
Rollerson M8 40 mm Autocannon	40 rounds
Werren Industries H56 Heavy Rocket Pod	24 rockets
2 x Rollerson M80 Machinegun	200 belted rounds each
PT87 Vibroblade	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

Mad Dogs were first distributed to Western army units on the Badlands front, where they were less likely to face forces from the other leagues as they were put through their paces. From the onset, they were unpopular machines, often shunned by their pilots who eyed the more functional *Hunters* of their Mercantile neighbors. The *Mad Dog* was bigger and better armored, but its speed and maneuverability left much to be desired when compared with the inflated original promises of the manufacturer. About the only good thing the pilots appreciated was the comforting firepower of the 24 heavy rockets stored above the backpack. After only a few weeks out, almost all of the machines were disabled because of the harsh climatic conditions they were forced to endure, and the units were hastily redistributed to more forgiving climates. There were discussions, for a time, about the possibility of designing a set of air filters and cooling units that would allow deployment in the Badlands, but the project never really went anywhere. The few machines that were effectively converted for extended service in desert conditions were the work of independent technicians acting on the request of the local commanding officer.

Perhaps because the machines were unpopular, few battle tales involving the *Mad Dog* have survived to this day. Those that did are often much more centered on the pilots and the foot troopers that accompanied them than the machines themselves, which often are only mentioned in passing. *Mad Dogs* fared somewhat better in other armies. Entire units were salvaged or captured, and for a brief time the design was fielded by all major city-states before the introduction of newer machines. The *Dog* series was eventually phased out of operational rosters, ending as salvaged parts or scrap metals in the many junk heaps of the Badlands dumping grounds. By the early TN 1900s, the only operational *Mad Dogs* still in their original configuration were found in the museums of the Western city-states. Many survived as parts of other machines, however, and for a long time it was not unusual to see a *Mad Dog* torso or arms on a farmer's scratchbuild and often-repaired Work Gear. The *Mad Dog* would eventually return to limited service during the war against Earth as the "R" (Revised") version (see page 115).

General Stats

Threat Value:	342
Offensive:	769
Defensive:	194
Miscellaneous:	64
Size:	7
Original Default Size:	7
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	5
Secondary Movement Mode:	Ground
Combat Speed:	5
Top Speed:	9
Maneuver:	-1

Electronics

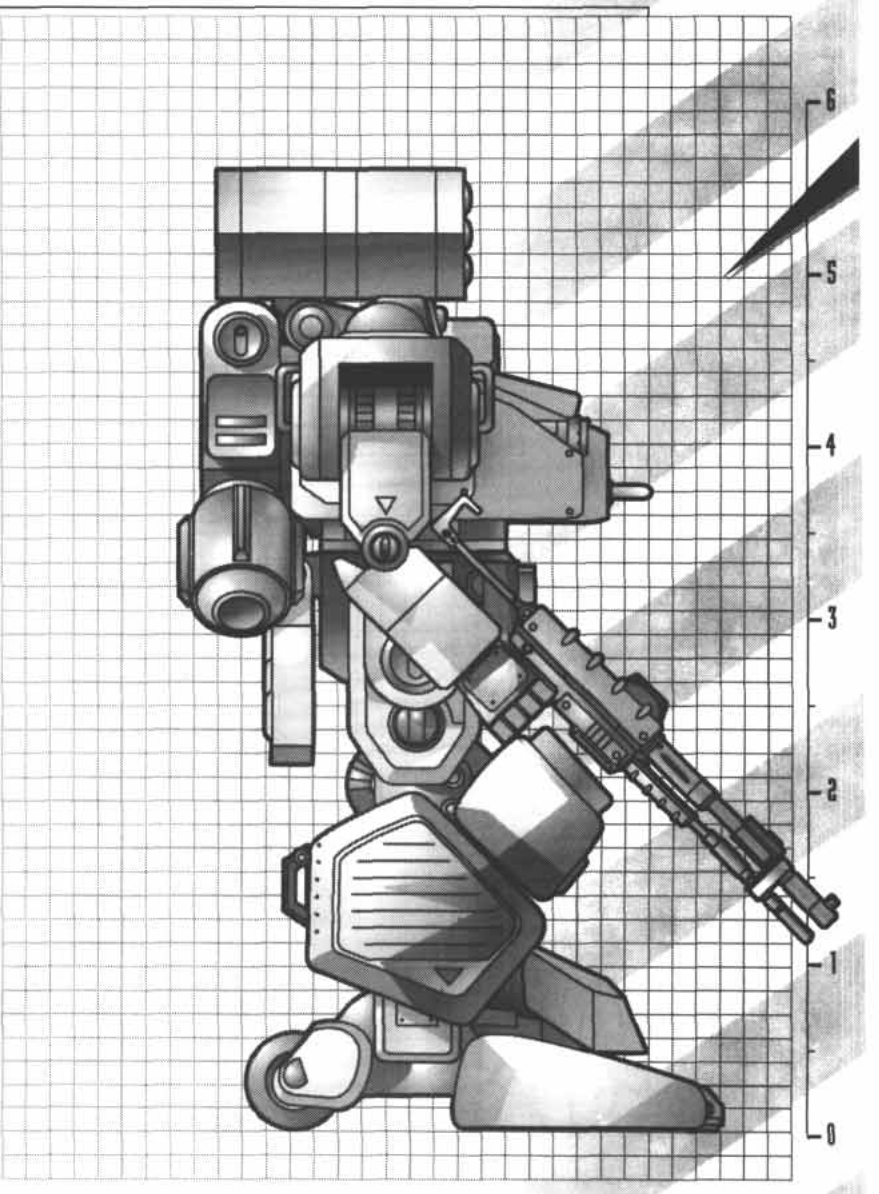
Sensors:	-2
Communications:	0
Fire Control:	0

Armor

Light Damage:	16
Heavy Damage:	32
Overkill:	48

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
Rollerson M8 40 mm Autocannon	HAC	Forward	1	40
Werren H56 Heavy Rocket Pod	HRP/24	Fixed Forward	1	24
Rollerson M80 Machinegun	LMG	Fixed Forward	2	200 ea.
PT87 Vibroblade	VB	Forward	1	-

Perks

Name	Rating	Game Effect
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	7	Can punch

Flaws

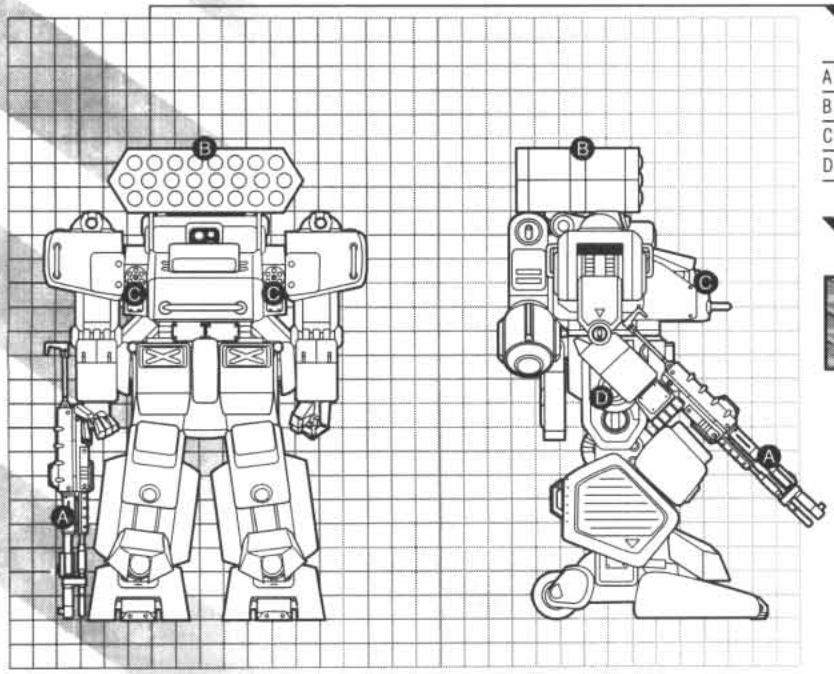
Name	Rating	Game Effect
Large Sensor profile	1	Easy to detect
Random Sensor Shutdown	1	Sensors go on the blink

Defects

Name	Rating	Game Effect
Annoyance	-	Cramped cockpit

Optional Equipment

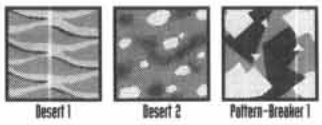
Name	Modified TV
Add Camo Netting	471
Add Smoke Launchers (10 shots)	471
Add Armor Jacket (Reinforced Location Armor: Crew, Rating 2)	471
Add Reinforced Armor (Front, Rating 2)	474
Add Searchlight (FF, 100 meters)	474
Add 2 Light Panzerfausts (F)	478
Add 3 HGs	479



Weapons Location Diagram

A	Rollerson M8 40 mm Autocannon
B	Werren Industries H56 Heavy Rocket Pod
C	2 x Rollerson M80 Machinegun
D	PT87 Vibroblade (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.9.1 HACS-15MG-MP/R MAD DOG R

The *Mad Dog* "R" (for revised) is perhaps one of the strangest hybrids in Terranovan military history. As even antiquated machines were pressed back into service to fight the Terran invader, entire squadrons of *Mad Dogs* were taken out of the scrapyards and refitted to make them combat worthy once more. They could not compare to the more modern Heavy Gear designs, but they could at least help hold onto the rear positions and fill in the ranks of the local militias. It was quickly discovered that many of the *Mad Dogs* could not even stand up due to micro-fractures in the metal of their leg actuators. Rather than lose precious time repairing them, commanders order the lower body of battle damaged *Bear* Heavy Gears to be used to get the *Dogs* out in the field. Similarly, many of these machines had their worn-out and cracked rocket pods replaced by two lighter units mounted side by side in an armored housing, again salvaged from other, less fortunate machines. As the casualties mounted, the machines were patched as well as possible, and it was not unusual to see a *Mad Dog* R sporting *Bear* legs and a *Bear* or *Grizzly* backpack and engine (though their upright generator configuration interfered with the operation of the rocket pod constantly, forcing the pilot to keep it in the upright firing position).

As would be expected, the greatest concentration of *Mad Dog* Rs were found in the Western Frontier Protectorate. *Mad Dog* Rs are fondly remembered by the Ninth Terranovan Lancers, an ad-hoc unit formed mostly of Protectorate army veterans that was founded in the first cycle of the War of the Alliance. Although these men and women were all well past their fighting prime, they took antiquated machines from museums and scrapyards, upgraded the computer system to (almost) modern standard and petitioned the government to be allowed to help defend their city-states. The "gray-haired demons" never faced heavy combat, being too far on the Protectorate frontier, but they did participate in a few inconsequential skirmishes. No machine was lost, and all returned home more or less unscathed after the end of the conflict.

Vehicle Specifications

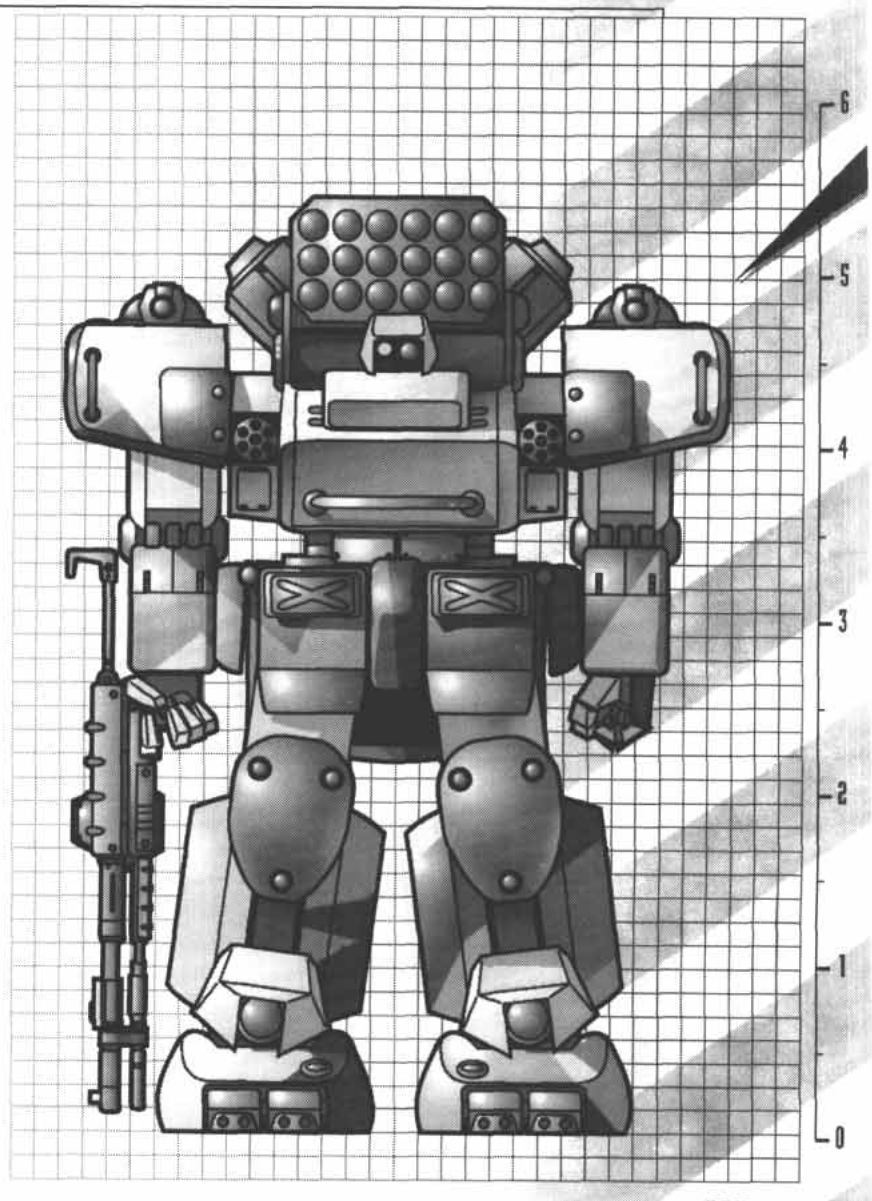
Code Name:	Mad Dog "R"
Production Code:	HACS-15MG-MP/R
Production Type:	Mass Production
Cost:	267,072 marks
Manufacturer:	Western Armories
Use:	general purpose Gear
Height:	4.8 meters
Width:	3.9 meters (5.7 w/MRP)
Average Armor Thickness:	74 mm
Armor Material:	molecular steel w/composite
Standard Operational Weight:	8690 kg
Primary Movement Mode:	Walk (30 kph)
Secondary Movement Mode:	Ground (60 kph)
Deployment Range:	350 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V790T V-engine
Horsepower:	780 Hp

Modifications

Add:	2 x MRP/9 (FF, 9 rockets each)
Remove:	HRP/24, Random Sensor Shutdown
Change:	upgrade Ground Top speed to 10 (60 kph)
Modified Threat Value:	390
Offensive:	904
Defensive:	197
Miscellaneous:	68

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	5

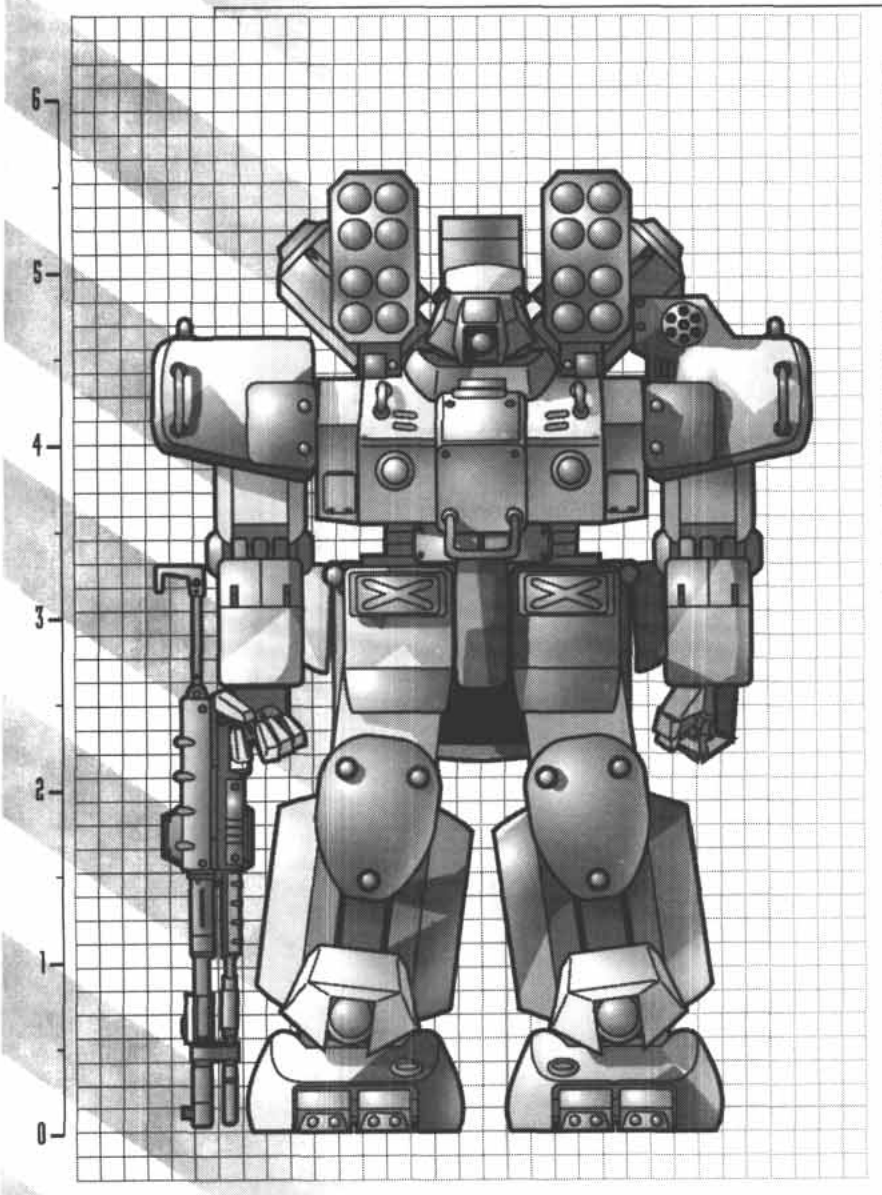


Bryce Hubbard (order #5318102)

4.10 HACS-01HG-FS BEAR

The *Bear* was the first Northern Gear designed to be a true fire support specialist unit from the onset. Previously, this function had been assumed by the *Mad Dog*, a Western-designed Gear made as an attempt to face the UMF's *Hunter*. The *Mad Dog* sported heavier weaponry and spread throughout the North in limited numbers in the early period of Gear development. The *Mad Dog* was never a superior design, however, and was withdrawn from service. The Northco *Razorback* was also supposedly assigned to limit fire-support duties, but its short-range, low-ammunition weaponry kept it as a tank-hunter above all else. In TN 1810 Northco announced that it would be finally filling the fire support niche appropriately and the *Bear* was released soon thereafter.

The *Bear*'s designers based most of their drive train design on the lower body structure of the *Razorback*, a particularly tough system layout that had already proved its worth in combat. The upper body, however, was totally redesigned; the humpbacked frame of the *Razorback*'s torso was replaced by a more humanoid one. The pilot's head was protected by the "head-in-head" configuration, similar to the one found on the *Hunter*. The arms were made large and strong, with hydraulic rotors instead of piston-like actuators. The S-V460T engine was replaced by a S-V790T rigged with a heavy duty radiator. The weaponry of the *Bear* was designed with short to medium range fire-support duties in mind, with assault mission profiles a secondary concern. Fire support duties were ensured by twin GH-10 rocket pods and a Harmon T-12 guided mortar unit. The rocket pods could be used as direct fire weapons during assaults as well, when their power was supplemented by a large Riley M225 autocannon. Anti-infantry defense was insured by a GU-4 machinegun mounted in the shoulder casing of the right manipulator arm. The GU-4 machinegun placement, although ingenious, caused problems because of the muzzle's proximity to the main omnicamera. When the gun was fired on full automatic, the bright muzzle flash has a tendency to blind the Gear's pilot. The problem was usually solved by makeshift flash suppressors.



Vehicle Specifications

Code Name:	Bear
Production Code:	HACS-01HG-FS
Production Type:	Mass Production
Cost:	342, 286 marks
Manufacturer:	Northco
Use:	fire support Heavy gear
Height:	4.8 meters (5.6 w/MRP)
Width:	3.7 meters
Average Armor Thickness:	74 mm
Armor Material:	steel w/composite
Standard Operational Weight:	8456 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (60 kph)
Deployment Range:	380 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V790T
Horsepower:	780 Hp

Weapon Payload

Name	Ammunition Payload
M225 Autocannon	40 rounds
GH-10 Rocket Pod X 2	36 rockets each
GU-4 Machinegun	200 rounds
Harmon T-12 Mortar	8 shells
HW-VB1 Vibroblade	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

While it was a definite improvement on the *Mad Dog* and other converted fire support Gears, the *Bear* was plagued by technical problems over its career. Critical problems, such as the wildly defective fire control computer and sensor camera system of the prototypes, took many cycles to fix. The engine also had the bad habit of shutting down whenever the pilot pushed his machine a little too hard. An inexperienced pilot always took a little time before learning how to use all his machine's potential while avoiding a shutdown. The problem was finally traced to a faulty valve design, though many S-V790T engines were never fixed — the monitoring computer was simply reprogrammed to take the valve failure into account. By the late TN 1820s safeguards were in place and most pilots knew how to keep their *Bears* running on the battlefield.

The *Bear* has served with distinction for over a century and has seen service across the North and the Badlands. Most forces used the *Bear* in five-Gear fire support teams, sometimes including a single scout Gear for target designation. During the incessant border skirmishes of the TN 1840s and 1850s, Southern units very wisely came to fear the sight of a *Ferret* recon Gear scooting across the battlefield using its target designator to "paint" units for the mortars of *Bear* squadrons. Over its career, the *Bear* spawned very few (and rare) variants, although it did lead to the creation of the *Den Mother* artillery command Gear which involved an extensive redesign using the *Bear* as its basis. As new technology became available, however, the *Bear* slowly faded into obsolescence. In the TN 1870s, Northco entered into an agreement with Shaian Mechanics to coproduce a next generation fire-support model to replace the *Bear*. This project led to the development of the *Grizzly*. Despite the introduction of its successor, the *Bear* is still in fairly wide circulation. Pressed back into front-line service during the war, the *Bear* is now a mainstay of second-line and local militia units. A large number of the Gears can also be found in the Badlands and Fort Neil's Neil Motor Works has recently acquired the rights to produce spare parts for the design (and its cousin, the *Den Mother*).

General Stats

Threat Value:	599
Offensive:	1391
Defensive:	226
Miscellaneous:	182
Size:	7
Original Default Size:	8
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	5
Top Speed:	10
Maneuver:	-1

Electronics

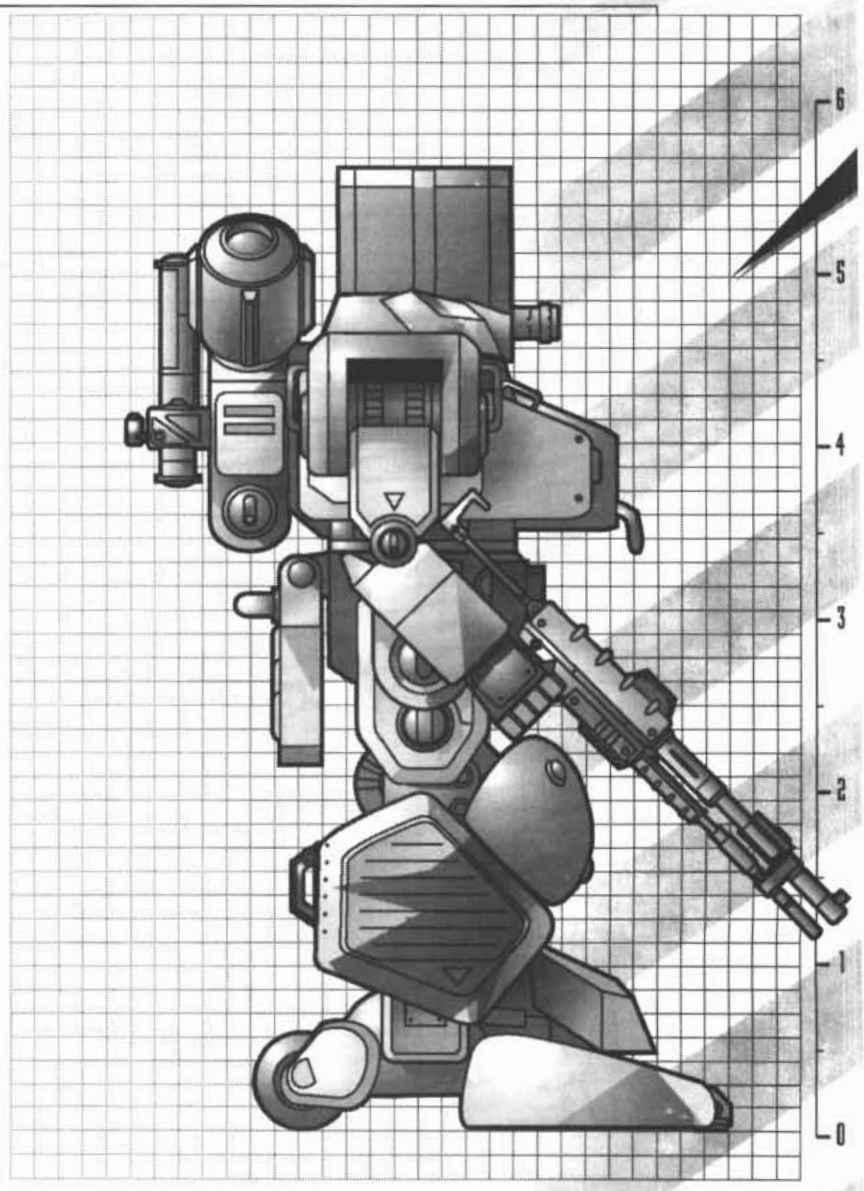
Sensors:	0
Communications:	0
Fire Control:	0

Armor

Light Damage:	17
Heavy Damage:	34
Overkill:	51

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	10



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M225 Autocannon	HAC	Forward	1	40
GH-10 Rocket Pods	MRP/36	Fixed Forward	2	36/36
GU-4 Machinegun	LMG	Forward	1	200
Harmon T-12 Mortar	LGM	Forward	1	8
HW-VB1 Vibroblade	VB	Forward	1	

Perks

Name	Rating	Game Effect
High Towing Capacity	-	Can tow twice its own weight
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	7	Can punch

Flaws

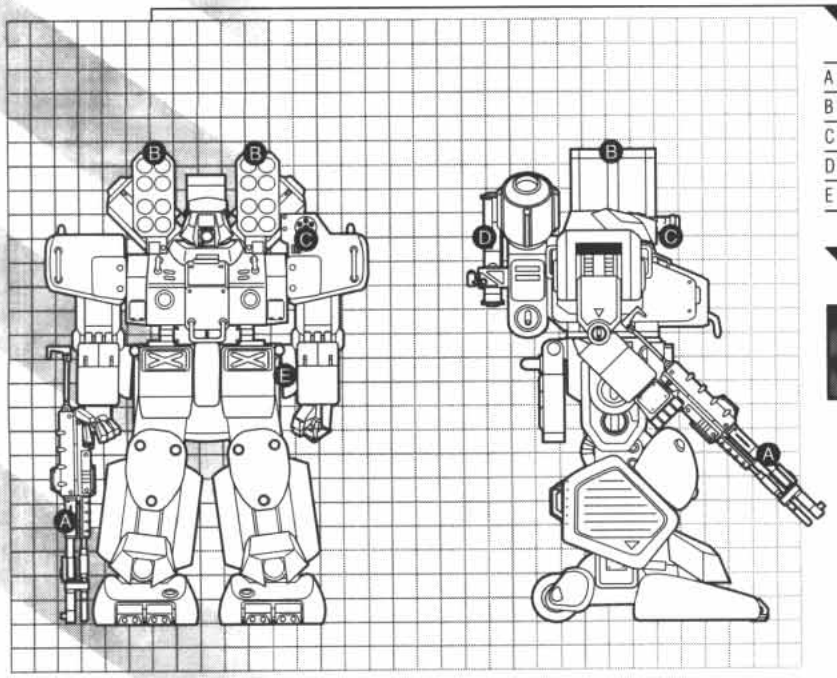
Name	Rating	Game Effect
Large Sensor profile	1	Easy to detect

Defects

Name	Rating	Game Effect
Annoyance	-	Machinegun flash blinds pilot

Optional Equipment

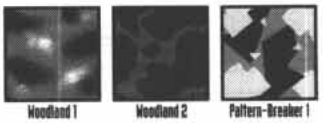
Name	Modified TV
Add 3 Hand Grenades	610
Add armored jacket (Reinforced Location Armor 2: Crew)	607
Add leg armor (Rugged Movement System)	644
Add DPG (F, 30 rounds)	620
Replace HAC by FGC (F, 20 rounds)	587
Replace LGM by APM (F, 30 shells)	517



Weapons Location Diagram

A	M225 Autocannon
B	GH-10 Rocket Pod X 2
C	GU-4 Machinegun
D	Harmon T-12 Mortar
E	HW-VB1 Vibroblade (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.10.1 HACS-01HG-AP MAULER BEAR

Originally developed in the TN 1850s but fielded in very small numbers by Northern forces, the *Mauler Bear* would be revived and updated by the Peace River Army many cycles later. The *Mauler* was conceived as a dedicated infantry killer and sported numerous high explosive weapons capable of literally filling the air around the machine with lethal shrapnel. The main fire support and assault weaponry of the *Bear* — the T-12 Mortar and the M225 autocannon — were eliminated and replaced by a manipulator held Ankerson G-60 grenade launcher as well as by linked torso mounted GU-7 gatling machineguns, which replaced the GU-4 already installed. The layout of the twin gatling layout would be later revived for the *Kodiak*. The *Mauler Bear* was used in specialized city-clearing squadrons by the Western Frontier Protectorate Army until the TN 1870s when a change in deployment doctrine and the introduction of the *Grizzly* lead to its withdrawal from service.

When the Peace river Army was formed, the *Bear* was one of the heaviest machines available and the *Mauler* variant saw itself revived. The dangerous GREL infantry of the CEF made dedicated anti-personnel vehicles more important than ever and Paxton refitted a significant number of *Bears* into revised *Mauler* designs. Heavier GU-10 gatlings were added to the torso, but the GU-4 in place was retained. The grenade launcher remained the *Mauler*'s principal weapon, but defense was augmented by a large number of Paxton anti-personnel charges. The GH-10 rocket pods were retained to maintain some anti-vehicle firepower as well. This weapons layout proved very successful against GREL forces and can still be found in various Badlands forces. Replenishing the antipersonnel mine system on the Gear's lower body can be very expensive and difficult, so many of the surviving *Maulers* simply dispense with this system, relying on their other antipersonnel weapons to do the job. The *Maulers* still in use among Badlanders are now most commonly used as an assault or defense machine against light vehicles such as those found in caravans or rover bands.

Vehicle Specifications

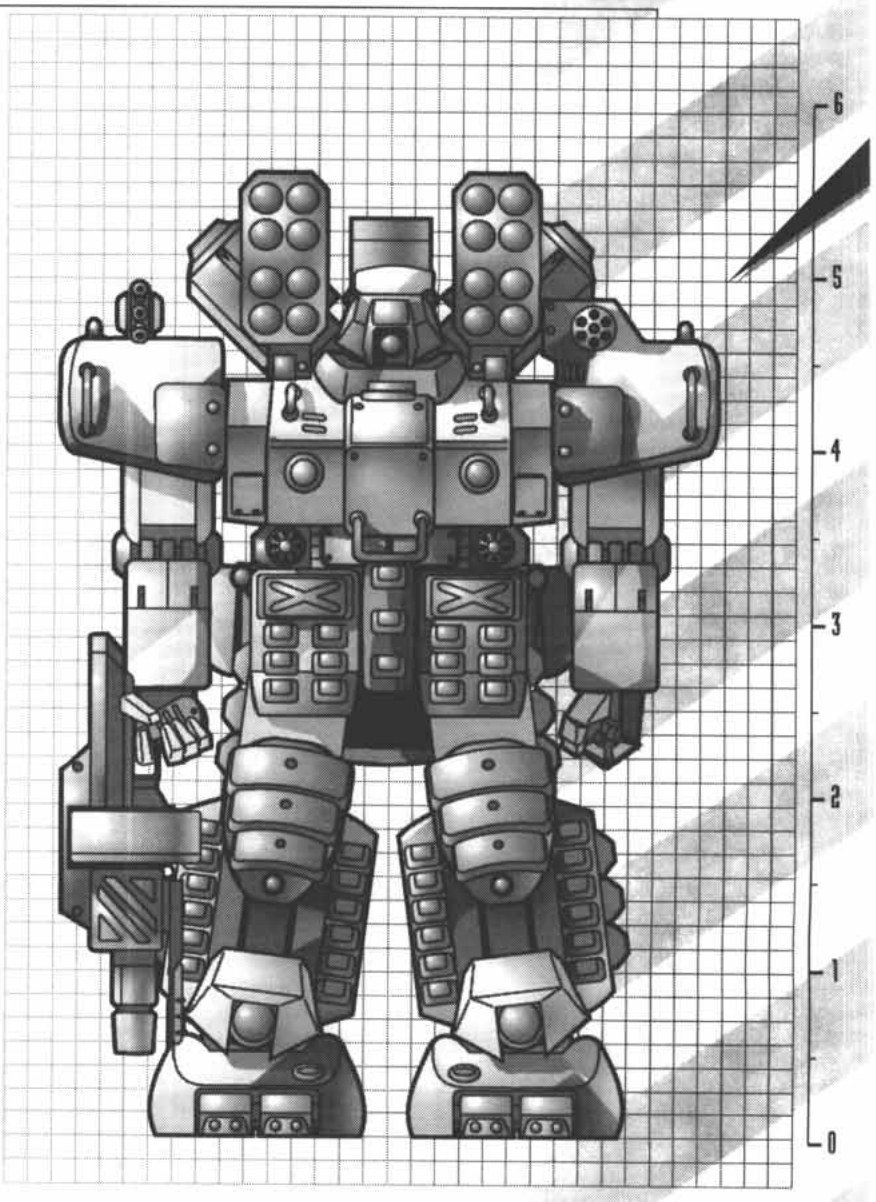
Code Name:	Mauler Bear
Production Code:	HACS-01HG-AP
Production Type:	Mass Production
Cost:	523,286 marks
Manufacturer:	Northco
Use:	anti-infantry Gear
Height:	4.8 meters
Width:	3.8 meters (5.6 w/MRP)
Average Armor Thickness:	74 mm
Armor Material:	steel w/composite
Standard Operational Weight:	8572 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (60 kph)
Deployment Range:	380 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V790T
Horsepower:	780 Hp

Modifications

Add:	LGL (F, 60 shots), 2 x HMG (FF, 300 rnds each), APGL (F, 6 shots), Weapons Link (twin HMGs), AP Charges (Rating 2, 50 charges)
Remove:	HAC, LGM
Change:	n/a
Modified Threat Value:	814
Offensive:	1315
Defensive:	226
Miscellaneous:	902

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5

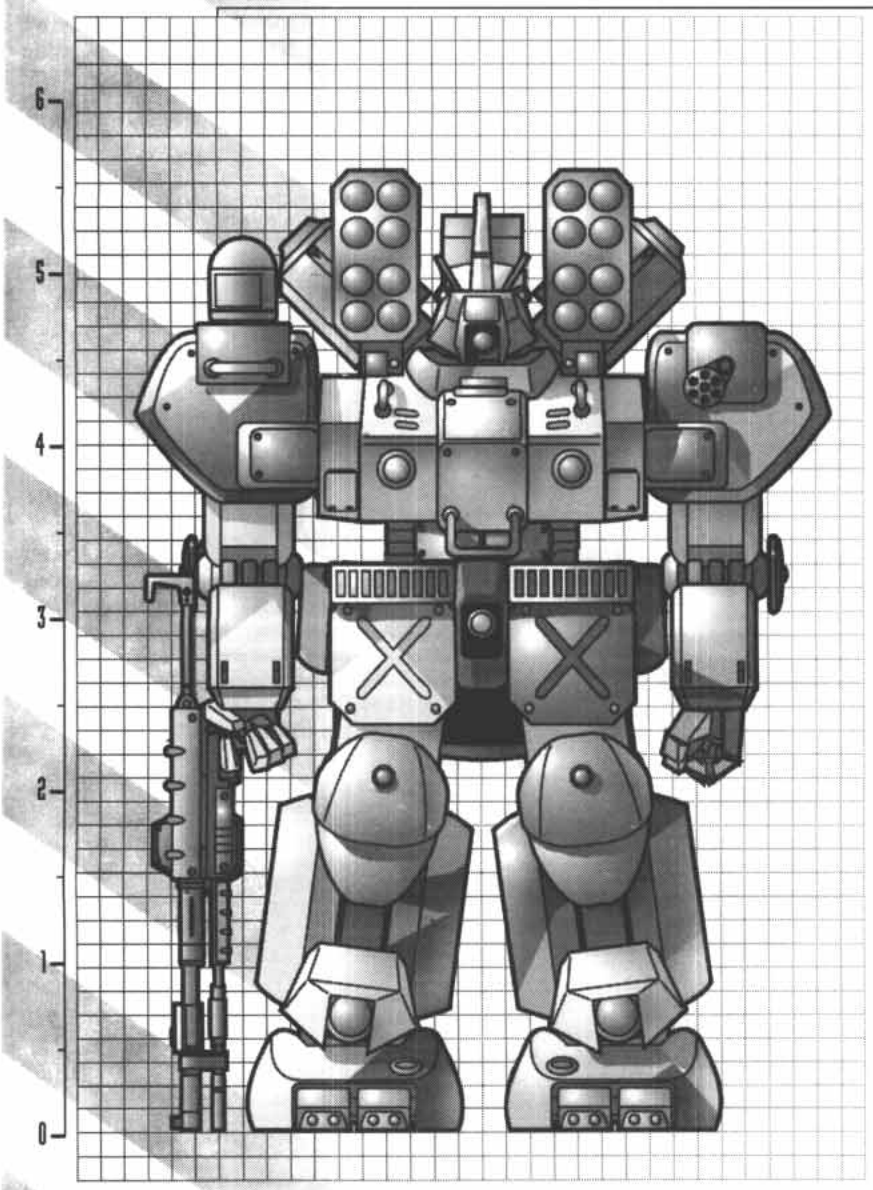


Bryce Hubbard (order #5318102)

4.11 HACS-01HG-ART DEN MOTHER

Produced at a time when new Gear chassis were designed every two or three cycles, the *Den Mother* was first a command-and-artillery control version of the *Bear* which evolved into its own design soon after. Modifications included the XVD-90A communication equipment (replacing the somewhat obsolete Rod-6 comm system), an MSU-010 satellite uplink, high resolution displays, long range camera sensors and a slightly higher performance secondary movement system (SMS), all of which necessitated significant internal reengineering. Several plates of armor were added, most of them to the front, but the armament remained identical to the *Bear*'s. In some later models, the guided mortar was removed to get ride of some excess weight which was impairing the machine's speed and combat performance. Several of the already-existing engine problems remained, however, and although the application of 475 HP S-V900K was considered as a permanent solution, pilot complaints about that engine's excess vibrations were enough to discourage the engineers. The shoulder-mounted GU-4 machinegun also had a muzzle flash problem which was never truly resolved and eventually abandoned as the engineers were assigned other projects. It was finally agreed that an anti-flash nozzle cannot be installed on a gatling-type weapon and that was the end of that problem.

The latest version of the *Den Mother* is equipped with the treaded feet of the *Grizzly*, as this type of movement system has been judged more efficient for such large, lumbering machines. Most pilots have found the *Den Mother* a reliable if slow machine. Its performance as an artillery or command unit is often praised, even if the machine's sheer bulk and size make it more noticeable than would be preferable. It should be noted that Northco has ceased producing spare parts for the *Den Mother*, as it has for the *Bear*, and has sold the maintenance rights and responsibilities to Neil Motor Works. This transfer of responsabilites has made replacement parts for these models somewhat more difficult to obtain and more expensive.



Vehicle Specifications

Code Name:	Den Mother
Production Code:	HACS-01HG-ART
Production Type:	Mass Production
Cost:	472,500 marks
Manufacturer:	Northco
Use:	artillery command and control Gear
Height:	4.8 meters
Width:	4.8 meters (5.6 w/MRP)
Average Armor Thickness:	74 mm
Armor Material:	molecular steel w/composite
Standard Operational Weight:	8615 kg
Primary Movement Mode:	Walk (35 kph)
Secondary Movement Mode:	Ground (57 kph)
Deployment Range:	360 km
Sensor Range:	40 hexes/2 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V790T
Horsepower:	780 Hp

Weapon Payload

Name	Ammunition Payload
M225 Autocannon	40 rounds
GH-10 Rocket Pod x 2	36 rockets each
GU-4 Machinegun	200 belted rounds
Harmon T-12 Mortar	8 shells
HW-VB1 Vibroblade	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

Like its predecessor, the *Bear*, the *Den Mother* has enjoyed quite an extended career. Even today, it is used as mobile artillery control Gear, and although it is much older than the *Grizzly*, it frequently serves as close fire support unit from time to time. It is now being replaced by a special variant of the *Grizzly*, though the latter's high cost slowed down the transition. As a result, the *Den Mother*'s latest version is very likely to remain in operation for another ten to twenty cycles. The initial release of the *Den Mother* was not equipped with satellite uplinks and its electronic components had not yet been perfected to the point at which they currently are, but the result was nonetheless a strong support Gear which was often favored by more prudent commanding officers. During the War of the Alliance, the initial Rod-6 communication system was replaced by the XVD-90A comm equipment, which turned the *Den Mother* into a very efficient command unit. Furthermore, as the war progressed and more weapon satellites became available to the Terranovan forces, the *Den Mother* was equipped with a satellite uplink designed to call in orbital fire or very long range fire support.

The *Den Mother* has one major claim to fame: Mayia DeLourdès. First known for her unbroken streak of victories on the Death Track 1000 field between TN 1904 and TN 1911, she performed all of her races in her customized *Den Mother*. At the beginning of the War of the Alliance, she was drafted into the Northern Guard and was allowed to keep her Gear (although some people tell another version of the story where she would have been forced to contribute her Gear to the war effort). She briefly participated in the Baja Campaign, but an elbow injury temporarily put her out of commission. She then met Field Marshal Anders von Breslau, who was impressed both by her attitude and her competence, and assigned her an dangerous sabotage mission behind enemy lines. Although she realized her chances of survival were slim, she went. and never returned. DeLourdès' life has often been serialized on trideo. Most of the times, her *Den Mother* Gear is portrayed.as a very alert and unusually responsive (some even say intelligent) machine. Although she is presumed dead, DeLourdès' exact fate remains unknown.

General Stats

Threat Value:	735
Offensive:	1391
Defensive:	225
Miscellaneous:	591
Size:	7
Original Default Size:	9
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	5
Top Speed:	10
Maneuver:	-1

Electronics

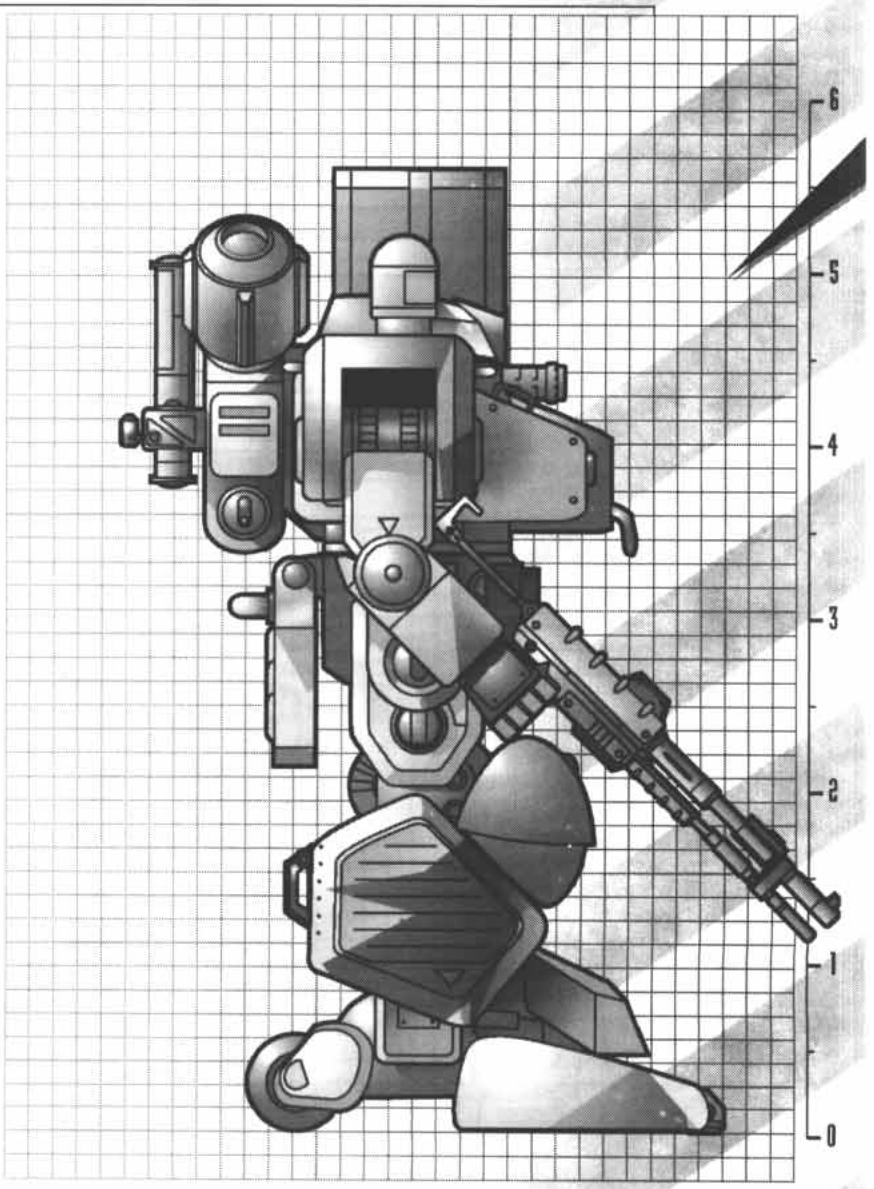
Sensors:	0
Communications:	+1
Fire Control:	0

Armor

Light Damage:	17
Heavy Damage:	34
Overkill:	51

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	3



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M225 Autocannon	HAC	Forward	1	40
GH-10 Rocket Pods	MRP/36	Fixed Forward	2	36/36
GU-4 Machinegun	LMG	Forward	1	200
Harmon T-12 Mortar	LGM	Forward	1	8
HW-VB1 Vibroblade	VB	Forward	1	

Perks

Name	Rating	Game Effect
High Towing Capacity	-	Can tow up to twice its own weight
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	7	Can punch
Reinforced Armor	1	Add: to base rating of front arc
Satellite Uplink	-	Allows orbital communicatio

Flaws

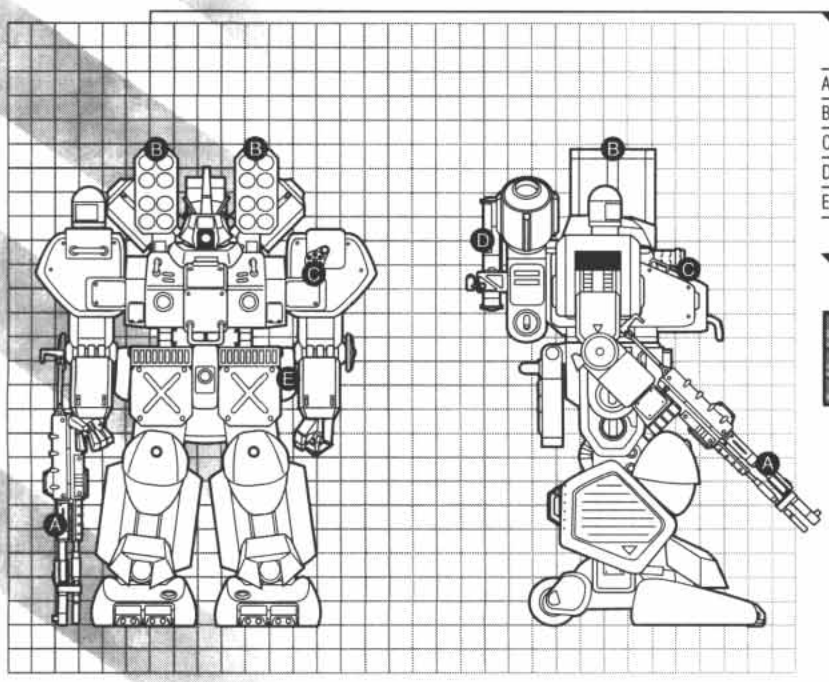
Name	Rating	Game Effect
Large Sensor Profile	1	Subtract from concealment

Defects

Name	Rating	Game Effect
Annoyance	-	Machinegun flash blinds pilot

Optional Equipment

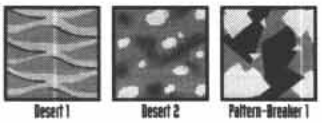
Name	Modified TV
Remove LGM, increase Walk Top speed to 7 (40 kph)	620
Add 3 Hand Grenades	746
Replace MRP/36 with AGM (FF, 2 missiles)	667
Add leg armor (Rugged Movement System)	805



Weapons Location Diagram

A	M225 Autocannon
B	GH-10 Rocket Pod x 2
C	GU-4 Machinegun
D	Harmon T-12 Mortar
E	HW-VB1 Vibroblade (not shown)

Typical Camouflage



Desert 1 | Desert 2 | Pattern-Breaker 1

Bryce Hubbard (order #5318102)

4.11.1 HACS-01HG-ART/A DEN MOTHER II

One of the longest-lasting main artillery machines in the Northern Guard, the *Den Mother* is still one Gear which has stood the test of time. Despite its age, it can still keep up with younger combat vehicles, such as the *Cheetah* and the *Jaguar*, and can hold its own against tough opponents such as the *Black Mamba* and the dreaded *Spitting Cobra*. During the early 1900s, in order to give "Old Reliable" a better fighting chance, the Northern military has invested some resources in refitting the remaining *Den Mothers* with minor upgrade options. As a result, many "Moms" currently in service are examples of the *Den Mother II* configuration. The traditional RU-L8 wheeled SMS has been pulled out and replaced with the sturdier NIX Seven tracked SMS. This propels the *Den Mother II* at a top speed slightly superior to the original model, and is easier to repair and maintain. Also, the model has been imrpoved with additional armor around the torso. A defensive housing around the head and antennae modules protects the communication system and improved built-in redundancy prevents the system from failing at the first few hits.

There were a few *Den Mother II* present during the War of the Alliance and their effectiveness encouraged the military to increase the conversion process. Because the original *Den Mother* was such a flexible and efficient design, it was easy to justify improving slightly on it using a DM2-X conversion kit and turn it into an even better machine. Considering the surprising maneuverability of the CEF hovertanks and the efficiency of the GREL soldiers, the *Den Mother II* performed very well. As soon as the Colonial Expeditionary Forces realized its weakness, however, they capitalized on it and focused their efforts on destroying it first when encountered in a squadron. Until the appearance of the *Thunder Grizzly*, during the last days of the War, it was considered a dirty job to get assigned to a *Den Mother II*. Given the slow deployment of the new *Thunder Grizzly* artillery command Gear (see p. 85), the *Den Mother II* is likely to remain common for the next few decades.

Vehicle Specifications

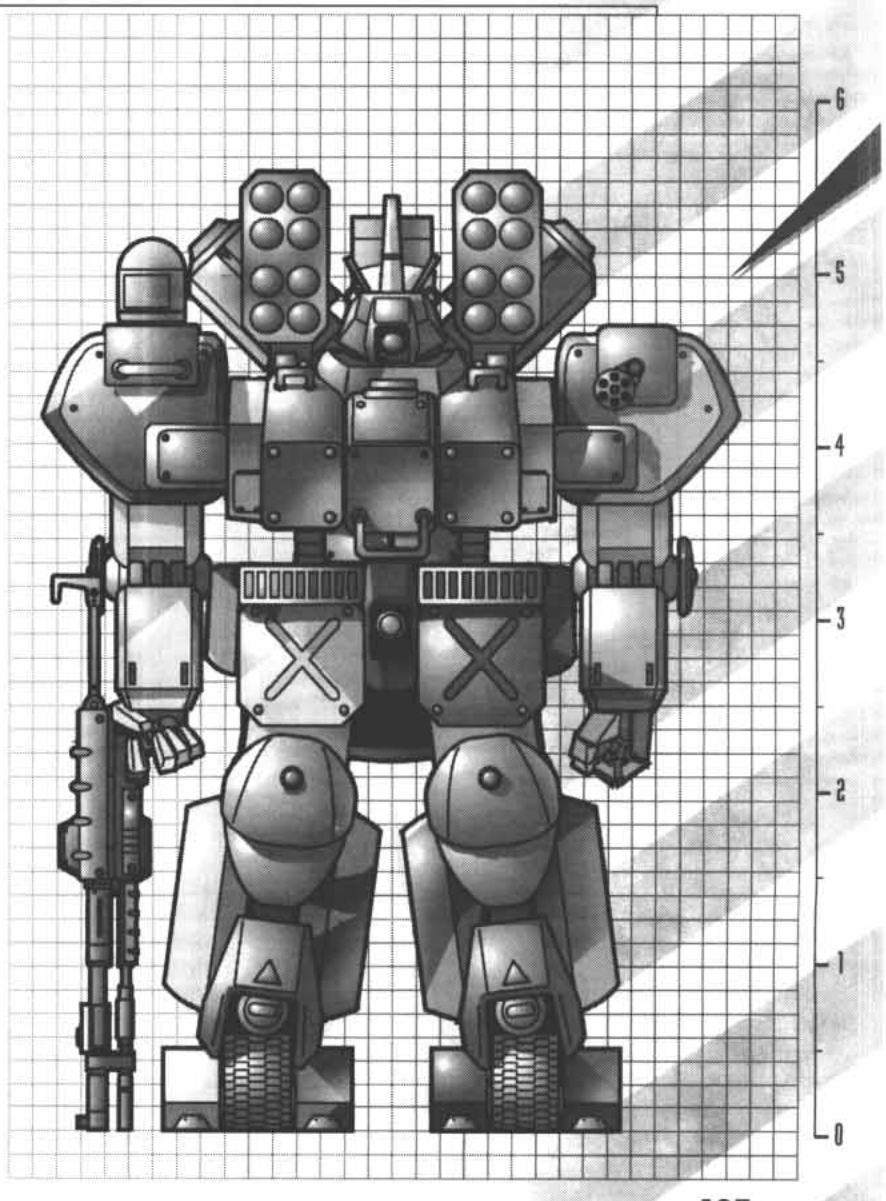
Code Name:	Den Mother II
Production Code:	HACS-01HG-ART/A
Production Type:	Mass Production
Cost:	532,929 marks
Manufacturer:	Northco
Use:	artillery command and control Gear
Height:	4.8 meters (5.6 w/MRP)
Width:	3.8 meters
Average Armor Thickness:	82 mm
Armor Material:	molecular steel w/composite
Standard Operational Weight:	8775 kg
Primary Movement Mode:	Walk (35 kph)
Secondary Movement Mode:	Ground (67 kph)
Deployment Range:	360 km
Sensor Range:	40 hexes/2 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V790T
Horsepower:	780 Hp

Modifications

Add:	Backup Communications System
Remove:	n/a
Change:upgrade Base Armor to 18, upgrade Ground Top Speed to 11 (67 kph)	
Modified Threat Value:	829
Offensive:	1391
Defensive:	252
Miscellaneous:	846

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	2

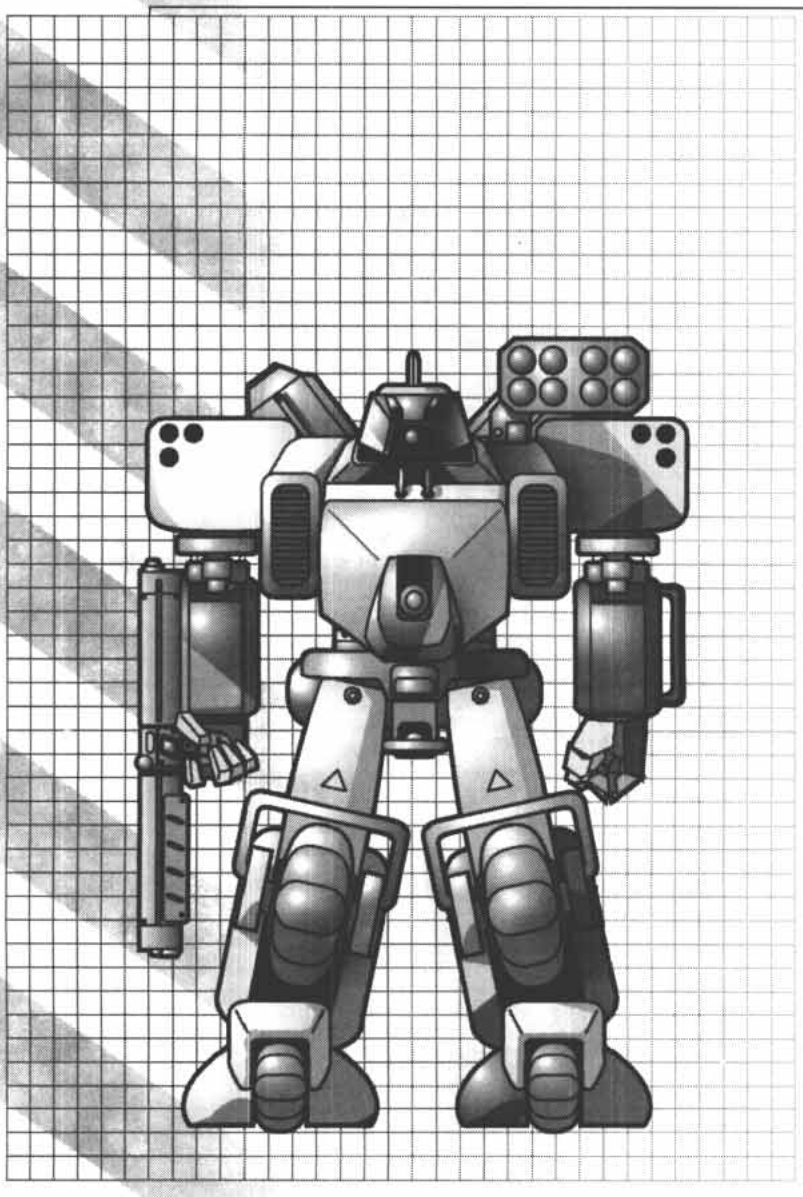


Bryce Hubbard (order #5318102)

4.12 HACS-03LG-SCT BOBCAT

The *Bobcat* is both an advanced Gear and a throwback to an earlier time. Developed in the beginning of the TN 1690s, the *Bobcat* was the first dedicated scout/recon Gear on Terra Nova. It featured an efficient electronic array, which included an ECM device, and is both faster and more maneuverable than a *Hunter*. In many ways the *Bobcat* was a revolutionary machine that opened the door for future developments. It featured a radical main body structure in which the pilot, instead of sitting in the main body of the Gear, laid down on his stomach on a special couch. The forward and top armor panels could be left open during movement, making the Gear's cockpit more comfortable. The large panels also facilitated egress from the vehicle. Unfortunately, the nearly horizontal posture of the pilot lead to frequent neck aches. The electronic equipment bay was housed just above the pilot's legs, underneath the vehicle's head. Whenever maintenance was required, the entire head and electronic bay assembly could be raised out of the body on twin hydraulic rails. The *Bobcat*'s compact head was a radical innovation for Northern designers who had employed a turret style head on the *Hunter*. The *Bobcat* design would eventually inspire more compact head designs even for Gears with normal sitting position.

The *Bobcat* also featured an innovative "kneel-down" SMS to counter a vertical balance problem. To engage its ground movement systems, the *Bobcat* would kneel forward and ride on wheels located in each knee and toes. This system provided excellent stability, but prevented the use of heavy armor plates on the leg assembly, exposing the movement system and chassis to potential damage. The weapon system was lighter than that of the *Hunter* with the introduction of the deployable pack gun (a collapsible light autocannon). The engineers, however, maintained the Pepperbox rocket pod of the older machine. Despite the fact that the alternate pilot positioning was abandoned and the *Bobcat*'s SMS layout was also discarded after the *Wildcat*, the first true scout Gear nonetheless paved the way for all future Northern light recon Gears.



Vehicle Specifications

Code Name:	Bobcat
Production Code:	HACS-03LG-SCT
Production Type:	Mass Production
Cost:	351,333 marks
Manufacturer:	Northco
Use:	scout/recon Gear
Height:	4.3 meters
Width:	2.9 meters
Average Armor Thickness:	34 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	5689 kg
Primary Movement Mode:	Walk (49 kph)
Secondary Movement Mode:	Ground (78 kph)
Deployment Range:	650 km
Sensor Range:	80 hexes/4 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V478B V-Engine
Horsepower:	385 Hp

Weapon Payload

Name	Ammunition Payload
M25 Pack Gun	30 rounds
RP-109 Pepperbox	24 rockets
M-2A Hand Grenade	4 grenades
HW-VB-1 Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The SC-01 *Bobcat* was first developed to replace the makeshift *Hunter Recon* that was used in the early years of the Gear's introduction and developed during the Merchant War. The *Bobcat* made its debut just after the war ended in TN 1688, rolling off the Northco production line in TN 1691. It was first adopted by the forces of the United Mercantile Federation Army. When the Confederated Northern City-States came into being, the *Bobcat* was sold to the Northern Lights Confederacy and the Western Frontier Protectorate. Despite the technical difficulties associates with its SMS, the *Bobcat* served well for several decades, but was eventually replaced by the *Ferret*. The *Bobcat* remained in circulation however, because it was somewhat more versatile than the *Ferret* and because of the investment made in it by the Western Frontier Protectorate Army.

Bobcats remained in service alongside the *Ferret* until the end of the TN 1790s, when Northco shut down its production line in favor of a new trooper Gear called the *Wildcat*. Spare parts were still produced in Rapid City until the TN 1850s, when the maintenance contract for the *Bobcat* was purchased by the Fort Henry's Karlston Engines. Most *Bobcats* were decommissioned at this time and sold to local militias or even to Badlands communities. The Timmins militia purchased a great number of those that had served with the Norlight Armed Forces and they continued to serve the CNCS protectorate until the War of the Alliance. In The TN 1930s, *Bobcats* can only be found in the WFP, were they continue to serve with Fort militias and in the Badlands, where most decommissioned Terranovan military hardware tends to accumulate. Many of the *Bobcats* located in the equatorial desert have been pressed into service as makeshift work Gears by homesteaders and were stripped of weapons. The secondary movement system is often non-functional on these machines because of its unique design and the lack of spare parts. Western ranchers who use the *Bobcat*, however, have access to spare parts from Fort Henry and continue to use the machine as a defense against rovers and poachers. These men and women have developed a great fondness for the model and often hold semi-official *Bobcat* races.

General Stats

Threat Value:	527
Offensive:	380
Defensive:	399
Miscellaneous:	801
Size:	6
Original Default Size:	8
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	4
Top Speed:	8
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	13
Maneuver:	+1

Electronics

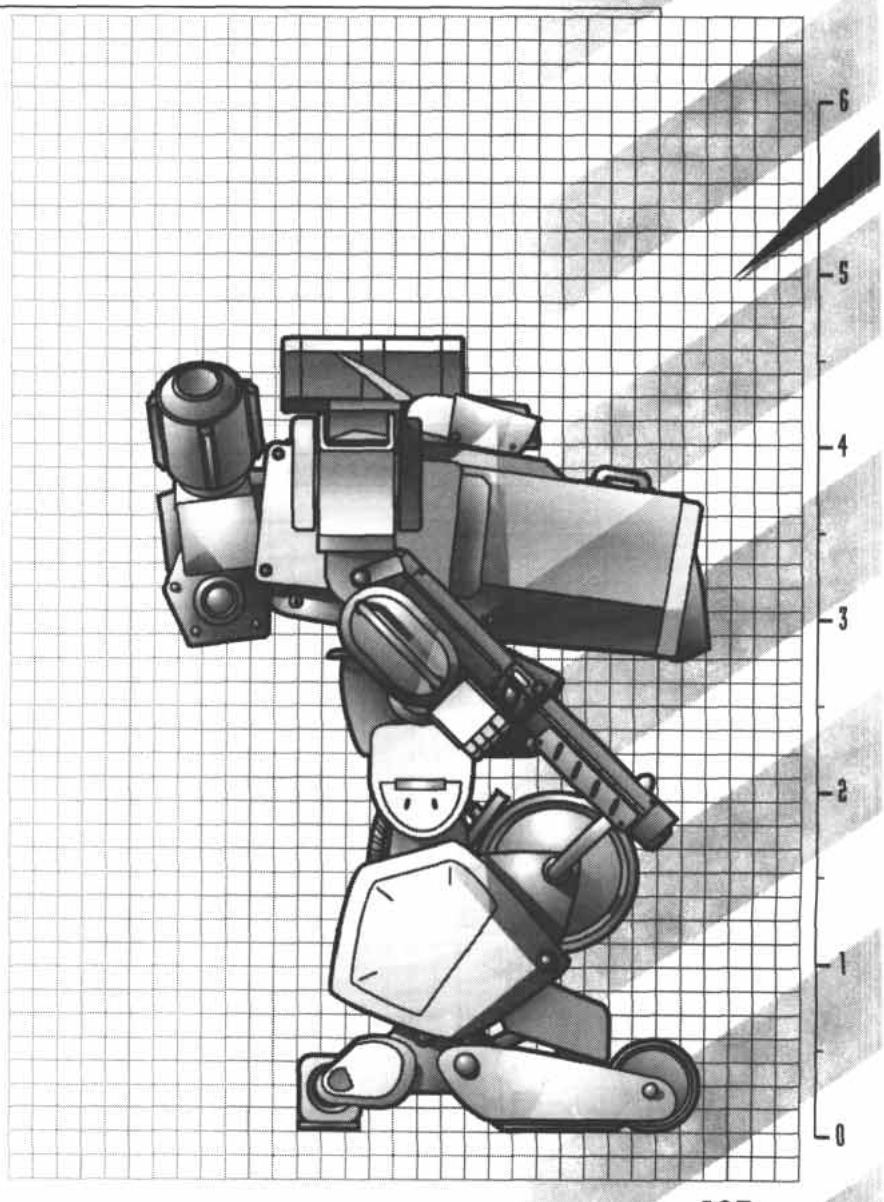
Sensors:	+1
Communications:	+1
Fire Control:	0

Armor

Light Damage:	13
Heavy Damage:	26
Overkill:	39

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M25 Pack Gun	DPG	Forward	1	30
RP-109 Pepperbox	LRP/24	Forward	1	24
M-2A Hand Grenade	HG	Forward	4	-
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effects
ECM	2	Offensive Electronic Warfare equipment
Hostile Environment Protection	-	Desert
Improved Rear Defense	-	Reduce rear defense penalties by one
Manipulator Arm x 2	6	Can punch
Target Designator	2	Used to target Guided weapons

Flaws

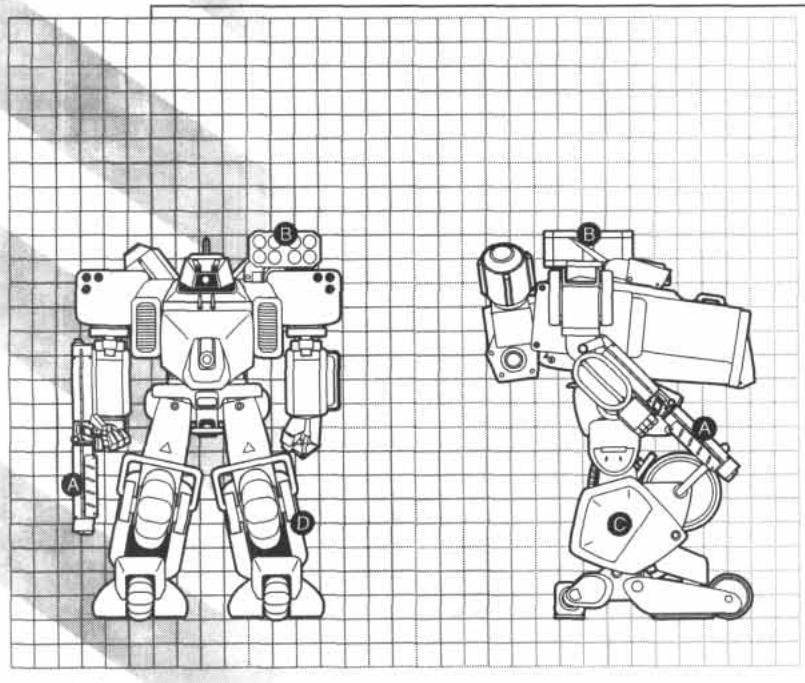
Name	Rating	Game Effects
Annoyance	-	Piloting posture is hard on the neck
Fragile Chassis	-	"Structure" hits are one step worse

Defects

Name	Rating	Game Effects
None	-	-

Optional Equipment

Name	Modified TV
Armor Jacket (Reinforced Location Armor 1, Crew)	535
Add AP Grenade Launcher (FF, 6 shots)	533
Replace DPG with LAC (F, 30 rounds)	545
Replace LRP/24 with MRP/9 (F, 9 rockets)	599



Weapons Location Diagram

A	M25 Pack Gun
B	RP-109 Pepperbox
C	M-2A Hand Grenade (not shown)
D	HW-VB-1 Vibroknife (not shown)

Typical Camouflage

Bryce Hubbard (order #5318102)

4.12.1 HACS-03LG-AA BIRD ARROW

The Western Frontier Protectorate Army developed the *Bird Arrow* variant of the *Bobcat* as a rapid-reaction, anti-aircraft system after they suffered terribly from air-to-ground assaults during St. Vincent's War. The modifications to the *Bird Arrow* were fairly complex and included stripping most of the standard *Bobcat* weaponry, replacing it with a turret-mounted Riley AA12 20 mm anti-aircraft gun. The turret placement was made possible by the *Bobcat*'s sloped cockpit and involved the redesign of the head assembly. The standard sensor head of the *Bobcat* was completely replaced by the AA12 cannon which was fitted with a long-range sensor package and placed over the electronics package of the *Bobcat*. The turret also featured the primary communications antenna. Short and medium-range sensors were placed in a secondary sensor pod placed forward on the torso, out of the way of the sweep of the AA12 cannon. This layout allowed a 360° radius of fire, but made the already uncomfortable *Bobcat* a very complex machine to exit. For a safe and easy exit, the AA12 had to be rotated to the side and the secondary sensor array slid forward along a special rail. Emergency egress was possible by opening only the nose-hatch of the cockpit and/or ejecting the secondary sensor pod.

The *Bird Arrow* served well as a light and rapid anti-aircraft unit with the WFP and some units of the Northern Guard. The complexity of its design made it unpopular with technicians and pilots and it never reached a wide distribution. The value of its tactical application was clear, though, and the *Cheetah Air Claw* is currently filling its shoes very well. Most *Bird Arrows* have now been decommissioned or made into civilian models. A few *Bird Arrows* can still be found in the Badlands and among Western militias, but even here the complexity of design has meant a certain number of breakdowns and the need for anti-aircraft weaponry is often very limited. For most people the *Bird Arrow* has become an example of making do with the available technology, a museum piece studied by engineers and Western enthusiast rather than an active part of Northern military forces.

Vehicle Specifications

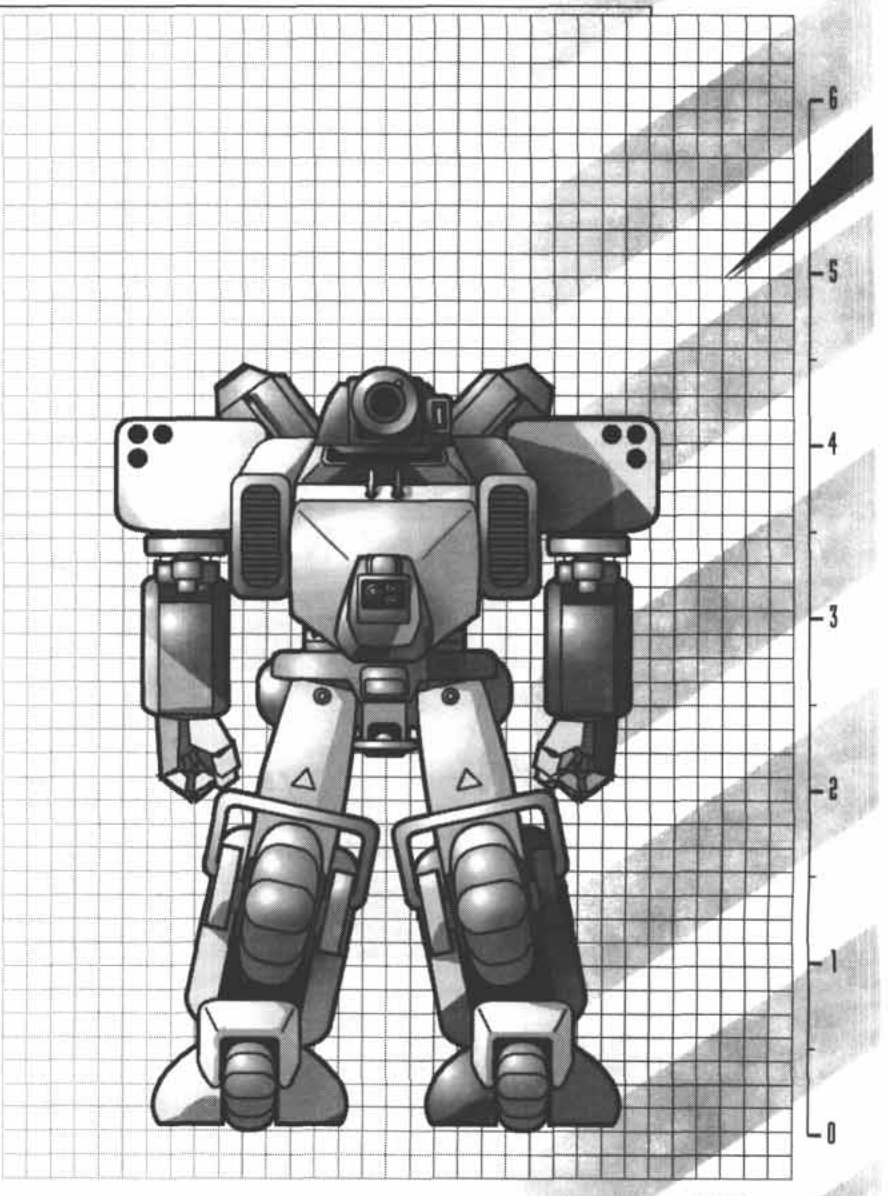
Code Name:	Bird Arrow
Production Code:	HACS-03LG-AA
Production Type:	Limited Production
Cost:	966,000 marks
Manufacturer:	Northco
Use:	anri-aircraft Gear
Height:	4.3 meters
Width:	2.9 meters
Average ArmorThickness:	34 mm
Armor Material:	durasheet w/alloy
Standard operational Weight:	5575 kg
Primary Movement Mode:	Walk (49 kph)
Secondary Movement Mode:	Ground (78 kph)
Deployment Range:	650 km
Sensor Range:	80 hexes/4 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V478B V-Engine
Horsepower:	385 Hp

Modifications

Add:	LAAC (T, 160 shells)
Remove:	DPG, LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	414
Offensive:	341
Defensive:	399
Miscellaneous:	503

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

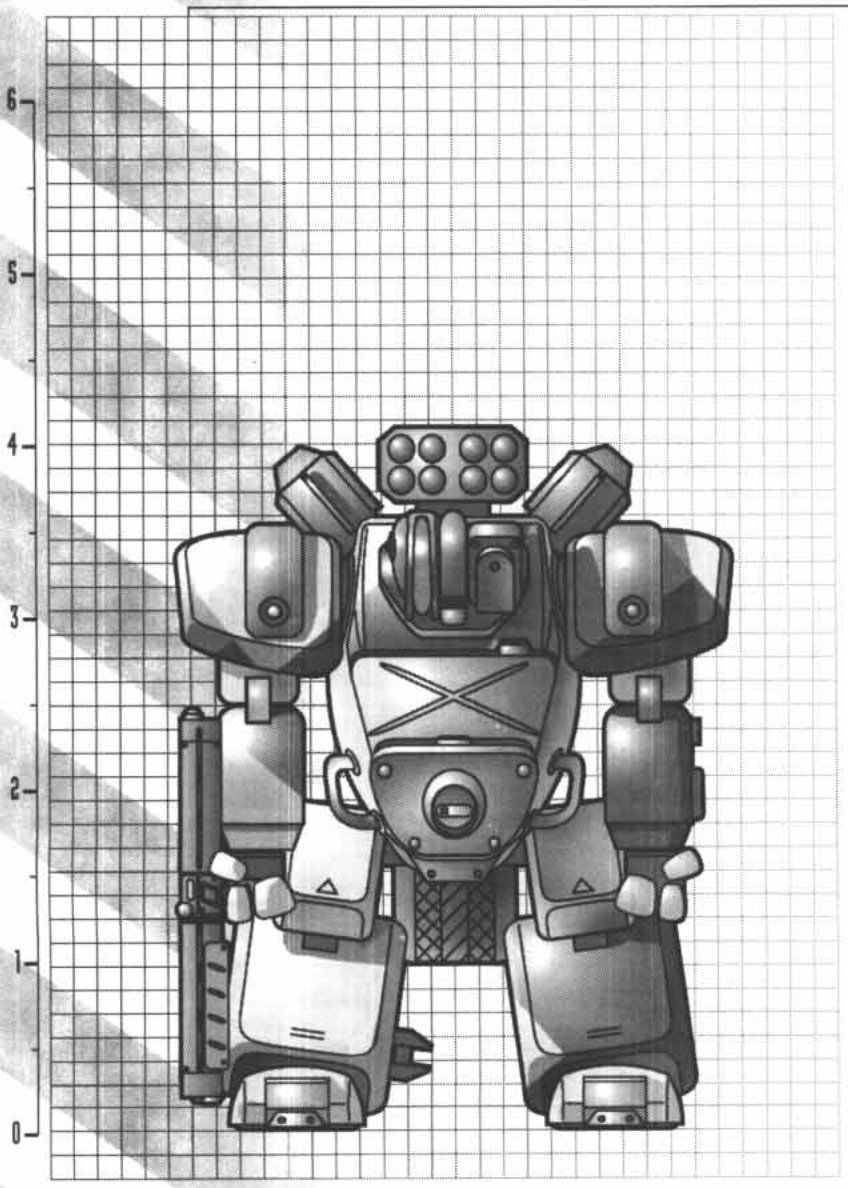


Bryce Hubbard (order #5318102)

4.13 HACS-02LG-SCT FERRET

The *Ferret* is one of the most unique Gears ever put in service on Terra Nova. Its design was probably influenced by that of the *Bobcat*, the first dedicated scout Gear of the Northern forces. The *Bobcat* featured a problematic secondary movement system based around oversized wheels powered by core motors on each of its knees. *Bobcat* pilots only had to kneel their machines and engage the core motors to acquire both low signature and great speed. Despite the structural flaws of the *Bobcat* this combination of stealth and speed seduced the military and they asked for a more specialized scout machine that could match these features and resolve its difficulties. Two prototypes were submitted to the military. The first, called the *Fennec*, was presented by Northco; although well designed, it was nothing more than a revamped *Bobcat* and the military refused it. The work on the *Fennec* would later be refurbished for the development of the *Wildcat* general purpose combat Gear. The *Fennec*'s competition was an even more unique design proposed by the then largely unknown Keimuri Gear, which had built itself in the market of high performance motorcycles and custom Gear refits.

The *Ferret* that was proposed by Keimuri showed the unique outlook of he young company. Led by Liayna Keimuri, owner and mechanical design genius, the Keimury team created a machine that had the traits of both a Gear and a motorcycle. The *Ferret* was capable of two quite distinct modes of travel, which were referred to as Gear and Cycle. In Gear mode, the *Ferret* stood about 3.6 meters tall and walked on small, sturdy legs. In Cycle mode, the machine "sat" on a rear-mounted oversized drive wheel and locked its legs together, dropping its height to a mere 1.79 meters and assuming the characteristics of an oversized motorcycle. Designed as a light scout and recon vehicle, the *Ferret* was lightly armed, wielding almost identical weaponry as the *Bobcat*, namely a M25 pack gun and RP-109 Pepperbox rocket pod, supplemented by a vibroknife and one M-2A hand grenade. Like the *Bobcat* the *Ferret* also wielded a laser target designator, allowing it to tag targets for fire-support units.



Vehicle Specifications

Code Name:	Ferret
Production Code:	HACS-02LG-SCT
Production Type:	Mass Production
Cost:	226,100 marks
Manufacturer:	Keimuri Gear
Use:	scout/recon Gear
Height:	3.6 meters (standing), 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4210 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V620K V-engine
Horsepower:	400 Hp

Weapon Payload

Name	Ammunition Payload
M25 Pack Gun	30 rounds
RP-109 Pepperbox	24 rockets
M-2A Hand Grenade	-
HW-VB-1 Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The *Ferret* was an innovative design, but was far from perfect. Notably, the size of the cockpit, which was extremely cramped, requiring the use of pilots of very small stature. The unique design also displayed a certain lack of the flexibility associated with the *Hunter*'s humanoid design. Nevertheless the machine filed a need in the Northern market and it was the standard light Gear used throughout the nineteenth Terranovan century. The heyday of the *Ferret* was the middle of the century, when it was paired with fire support units such as the *Bear* to devastating effect against Southern units. When the *Cheetah* was introduced, however, many saw the *Ferret* as instantly obsolete. Featuring technology from a century in the past, the little "butt wheel" design could not compete with Shaian's high-technology recon Gear. Chronic financial difficulties at Keimuri had also guaranteed that little effort was being put into modernizing the *Ferret*, making it even more obsolete. Keimuri has returned to the Gear development stage, however, and has entered into a strategic alliance with their old competitors at Northco. While much of the new partners' energy is focused on the high-technology *Weasel* line of Gears — which was derived from the *Ferret* — a new edition of the *Ferret* has been released to positive reviews.

Despite the Gear's military origin, the *Ferret* has acquired a phenomenal following among Northern civilians. Mass-market editions — stripped of weaponry of course — have been available for generations, but the *Ferret* never seems to go out of style. Customized versions are in many a well-to-do person's garage and jet-black "racing *Ferrets*" featuring chrome highlights and oversized tires are the traditional result of a Norlight mid-life crisis. Customized *Ferret* shows are very popular and adolescents who get access to modified and refurbished models often hold drag races. Keimuri Gear also sponsors a series of animated holofilms and morning trideo shows featuring the adventures of Freddy The Ferret, presumably a (according to the advertising text) "highly evolved and precocious Gear and his cavalcade of amazing friends." Freddy the Ferret action figures and video games are consistent top sellers with Northern children and rumors of a "Freddyland" amusement park being built outside Franklin Harbor are currently running rampant.

General Stats

Threat Value:	323
Offensive:	347
Defensive:	319
Miscellaneous:	302
Size:	5
Original Default Size:	7
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	13
Maneuver:	+1

Electronics

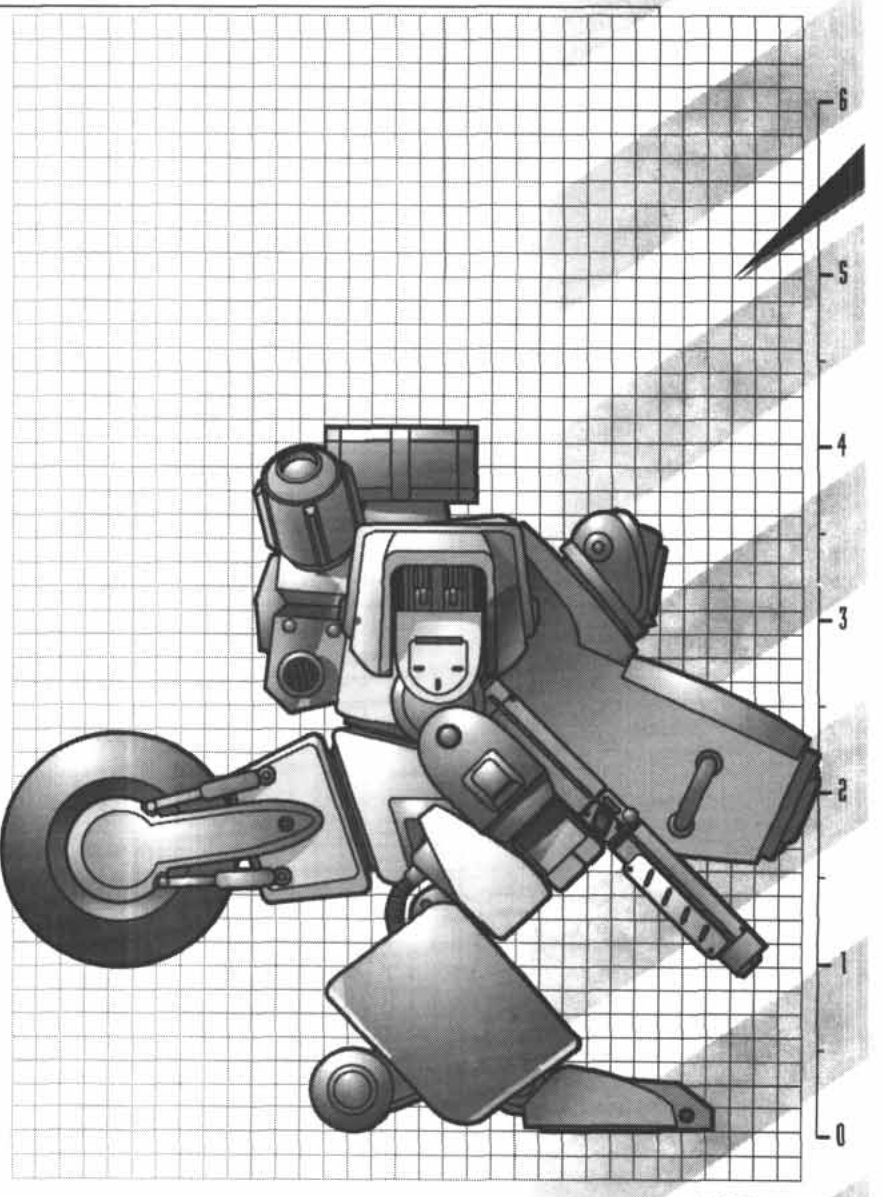
Sensors:	+1
Communications:	+1
Fire Control:	0

Armor

Light Damage:	12
Heavy Damage:	24
Overkill:	36

Vehicle Availability

Availability Threshold:	4
Maximum Number of Units in the Field:	Unlimited



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M25 Pack Gun	DPG	Forward	1	30
RP-109 Pepperbox	LRP/24	Forward	1	24
HW-VB-1 Vibroknife	VB	Forward	1	
M-2A Hand Grenade	HG	Forward	1	

Perks

Name	Rating	Game Effect
Hostile Environment Protection	-	Desert
Low Profile	-	+1 Concealment while under cover (SMS mode only)
Manipulator Arm x 2	6	Can punch
Target Designator	2	Designate target for guided weapons

Flaws

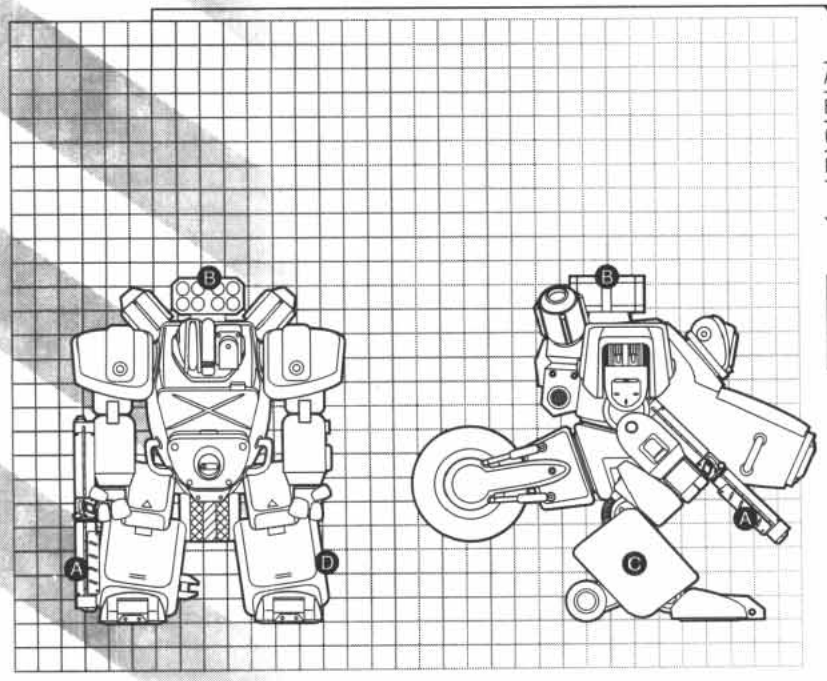
Name	Rating	Game Effect
Annoyance	-	Cramped cockpit; maximum pilot Build is -1
Annoyance	-	Low Profile only applicable in Cycle Mode
Decreased Maneuverability	2	Subtract from maneuver when walking
Exposed Movement System	-	Movement damage is one step worse

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

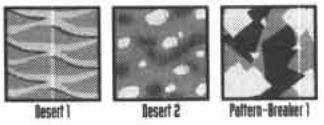
Name	Modified TV
Replace DPG with LAC (F, 30 rounds)	341
Add Camo Netting	329
Replace DPG with VLAC (F, 60 rounds), add 2 grenades	332



Weapons Location Diagram

A	M25 Pack Gun
B	RP-109 Pepperbox
C	M-2A Hand Grenade (not shown)
D	HW-VB-1 Vibroknife (not shown)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.13.1 HACS-03LG-DEM SABOTEUR FERRET

The unique *Ferret* no longer serves as the CNCS' standard reconnaissance Gear, that role having been filled by the *Cheetah*, but many *Ferrets* still remain in service, often in specialized roles that bring their unusual abilities into play. One of the most effective variants is the *Saboteur Ferret*, a sneaky demolitions unit capable of hand-delivering very heavy payload of timed explosives to a target location, be it a bridge, a cliff face, or an AST field outpost. The *Saboteur* makes very good use of its ability to transform into a low profile, cycle mode no taller than a standing infantryman, and roll quietly through the jungle or forest toward its goal. The *Saboteur* uses a set of DC-IX gel charges that can be used to devastating effect, also carrying a M222 autocannon. Add:itional camouflage netting allows the already sleek *Ferret* to become even stealthier. The biggest drawback of the design however, is that the charges are simply attached to the *Ferret*'s chassis, making the chances of devastating detonation caused by enemy fire a real possibility of the *Saboteur* is discovered.

The *Saboteur* has been used by commando units since the TN 1880s and is still in use today. Never a common machine, its inexpensive chassis means that most units wishing to use it can get a hold of one in relatively short order. The *Saboteur* is principally used as part of an initial action against fortified enemy positions. By setting their charges at strategic locations, a team of *Saboteur Ferrets* can create a well-coordinated and massive wave of destruction, taking down fortifications and creating panic. This is usually followed by a assault by armored columns of assault Gears. *Saboteur* pilots are sometimes called "mad midgets" because of the danger involved in their duty and the small stature that is required to pilot a *Ferret*. The "midgets" are a rare breed and tend to form unofficial cliques within and between the official unit they are deployed within. Retired *Saboteur* pilots maintain this *esprit de corps* and often belong to a private veteran's club known as the MM Corps.

Vehicle Specifications

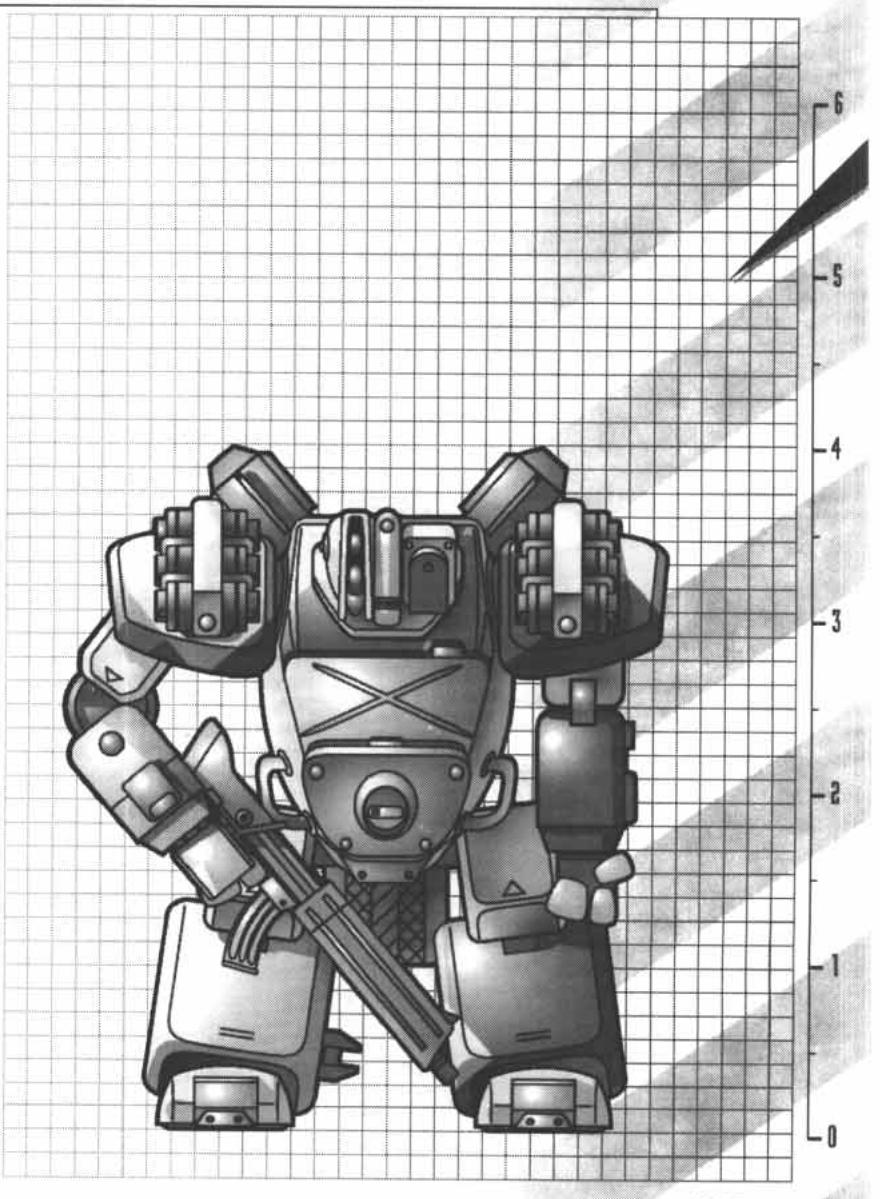
Code Name:	Saboteur Ferret
Production Code:	HACS-02LG-DEM
Production Type:	Mass Production
Cost:	252,700 marks
Manufacturer:	Keimuri Gear
Use:	covert demolitions Gear
Height:	3.6 meters (standing), 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4210 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V620K V-engine
Horsepower:	400 Hp

Modifications

Add:	LAC (F, 40 rnds), 6 x SDGs, Camouflage Netting, Hazardous Ammo/Fuel Storage
Remove:	All weapons except VB
Change:	n/a
Modified Threat Value:	361
Offensive:	513
Defensive:	319
Miscellaneous:	249

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	1

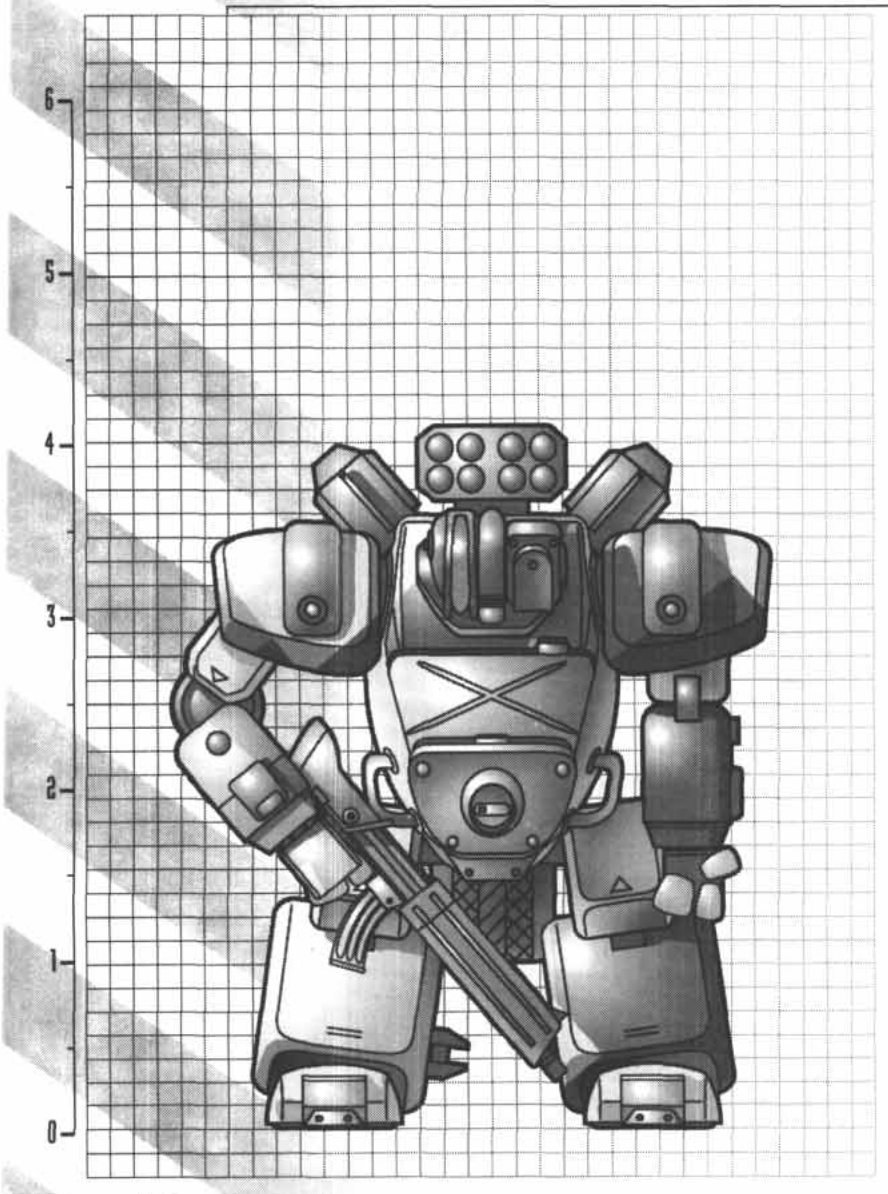


Bryce Hubbard (order #5318102)

4.13.2 HACS-02LG-SCT/A FERRET MK. II

With the introduction of the *Cheetah*, the *Ferret* became instantly obsolete. Still sporting technology developed over a century before, the *Ferret* could not compare with the speed, maneuverability and general performance of the Shaian Mechanics *Cheetah*. Keimuri Gear and its new partner Northco realize that the basic design of the *Ferret* is sound for a fast scout unit and have cooperated to rebuild the machine from the ground up, using the latest materials, electronics and sub-systems. The result is the *Ferret* Mk II, released onto the military market in TN 1933. The outward appearance of the Mk II is much the same as the traditional *Ferret*, the primary changes having been made to the internal systems. An improved sensor suite has been added and the movement system now features far sturdier parts, allowing for a higher operational speed without compromising structural integrity. The most important of the changes, however, was made to the engine. An upgraded engine design based on long term performance charts of the *Ferret*'s power usage has increased the speed of the Mk II to almost 100 kph, beyond the stability capabilities of most foot-mounted SMS systems. The same performance ratings allowed engineers to better calibrate the engine for endurance, managing to gain almost 15% more deployment range. The only drawback is the necessity of slightly increased engine maintenance. The weapon pack of the *Ferret* has been maintained , except that the M25 pack gun has been replaced with a more durable M222 autocannon.

The *Ferret* MK II is a small, fast and nasty Gear. Although still ungainly when moving on its legs, minor improvements of the power transfers, actuator timing and the prudent removal of a few extraneous safety precautions have made the MK II somewhat less awkward. The primary mission profiles for the Mark II, however, should not require it to hobble about much. As a scout, it performs extremely well. In tests between a *Ferret* MK II and a *Cheetah*, the MK II kept pace with the Shaian Mechanics design with relative ease and even left it behind on several occasions. The MK II has already begun to enter service in some Northern Guard units.



Vehicle Specifications

Code Name:	*Ferret Mk II*
Production Code:	HACS-02LG-SCT/A
Production Type:	Mass Production
Cost:	265,300 marks
Manufacturer:	Keimuri Gear/Northco
Use:	scout/recon Gear
Height:	3.6 meters (standing) , 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4517 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (96 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V750KWZ V-engine
Horsepower:	490 HP

Modifications

Add:	LAC (F, 30 rounds)
Remove:	DPG
Change:	Sensors to +2, Top Ground Speed to 16, Deployment Range to 800 km
Modified Threat Value:	379
Offensive:	401
Defensive:	355
Miscellaneous:	380

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	Unlimited

Bryce Hubbard (order #5318102)

4.13.3 HACS-03LG-EW WILD FERRET

The *Wild* variant of the Keimuri *Ferret* served as the North's main electronic warfare Gear from the middle of the nineteenth century all the way through the War of the Alliance. The *Wild Ferret* featured a back mounted Terrion electronic warfare pod which provided both white signal-noise generation and signal boosting capabilities. The placement of the pod required the removal of the *Ferret*'s RP-109 rocket pod, but the *Wild* maintained its M25 pack gun for defensive purposes. The laser target designator was seen as useless in a unit not designed to be deployed in forward observing duties. The *Wild Ferret* was the first Gear-based dedicated electronic warfare system and was inspired by the success of the ECM features of the Northco *Bobcat*. Many *Wild Ferrets* served first as standard models and were refitted with the Terrion pod during service upgrades or by unit technicians. The modular design and small size of the *Wild Ferret* did not permit the ECM/ECCM pod to be properly armored, however and it was quite vulnerable to damage in combat. Consequently, the *Wild* was rarely deployed ahead of other units.

By the end of the War of the Alliance, it was clear that the *Wild Ferret* was long overdue for a replacement. A renewed Keimuri Gear was contracted to produce the *Weasel*. In the meantime, Shaian Mechanics produced the *White Cat* to replace the *Wild Ferret*. These new units have largely forced the *Wild Ferret* into retirement, much to the chagrin of some veteran pilots. Some have found their way into local militias and second-line units, but a surprising number have been purchased by private *Ferret* enthusiasts and military museums. The Northern Guard has also initiated a program to recycle the Terrion ECM/ECCM pod for use in secondary units. A series of patrol *Antelopes* have already been fitted with the pod and patrol the desert around Red Sands, using their EW capabilities to help disable rover gangs in the region. One of the most dangerous local gangs, known as Garrick's Golden, have unfortunately hijacked several of the vehicles and may fit the pods onto their battle-ready Gears.

Vehicle Specifications

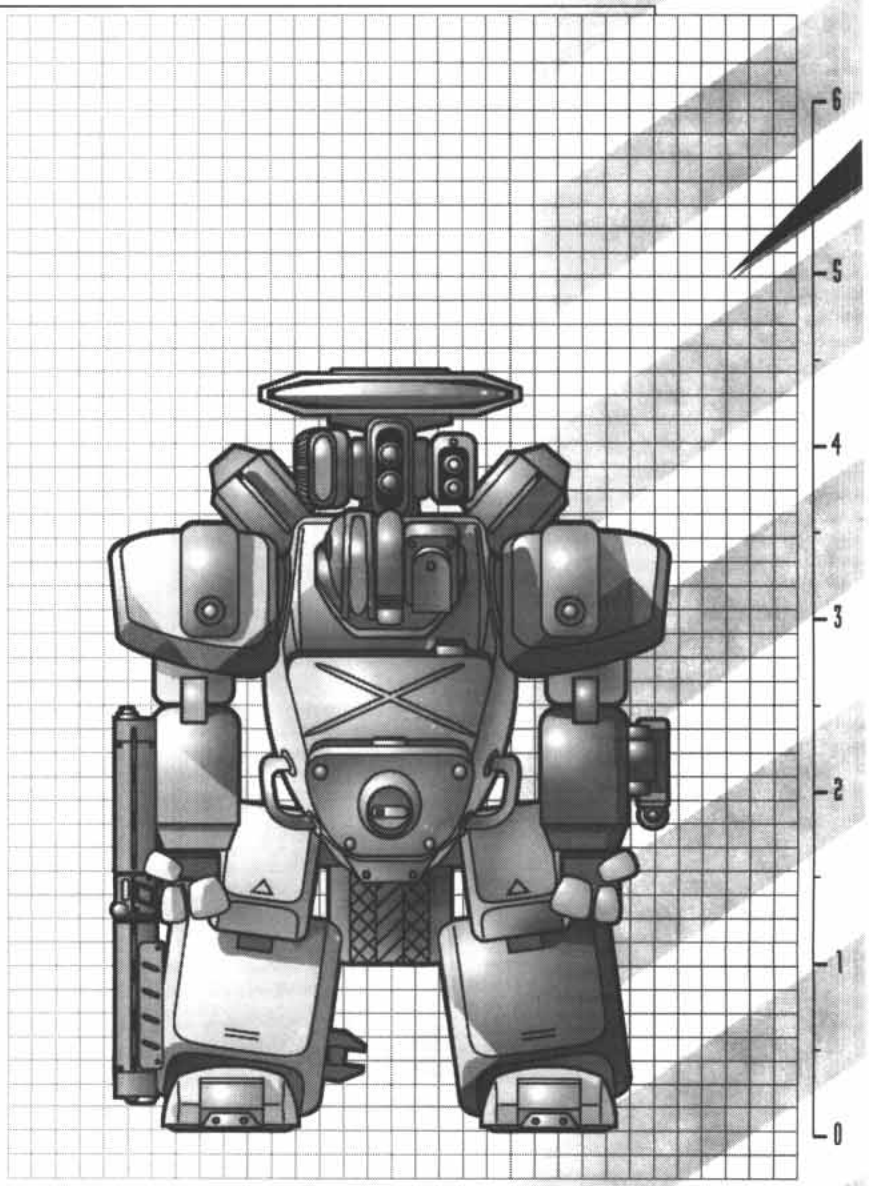
Code Name:	Wild Ferret
Production Code:	HACS-02LG-EW
Production Type:	Mass Production
Cost:	137,400 marks
Manufacturer:	Keimuri Gear
Use:	electronic warfare Gear
Height:	3.6 meters (standing), 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4100 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V620K V-engine
Horsepower:	400 Hp

Modifications

Add:	ECM 2, ECCM 2, Satellite Uplink, Exposed Auxiliary Systems, Vulnerable to Haywire
Remove:	LRP/24, Target Designator
Change:	n/a
Modified Threat Value:	229
Offensive:	108
Defensive:	319
Miscellaneous:	260

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

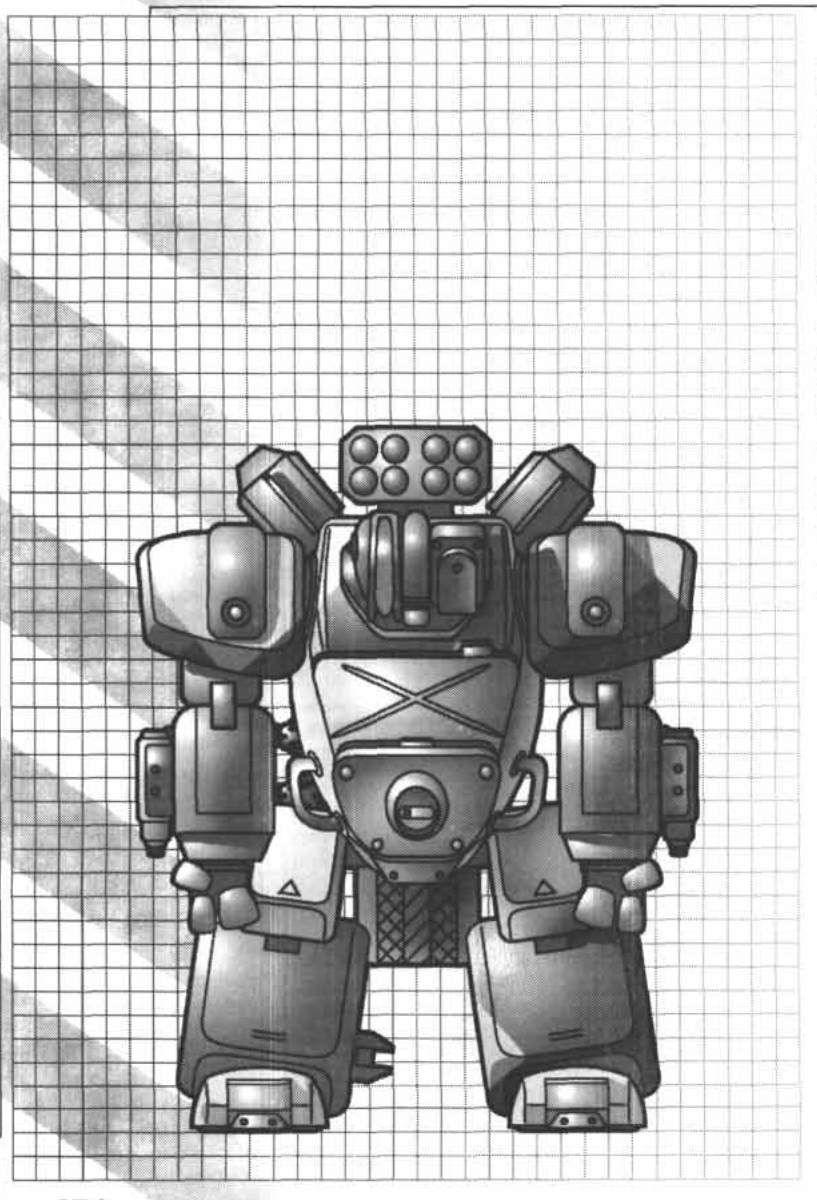


Bryce Hubbard (order #5318102)

4.13.4 HACS-02LG-AST RABID FERRET

When the first *Rabid Ferret* was rolled out of the factory, many soldiers were appaled that the engineers and technicians "could transform something so cute and seemingly so harmless into such a monster." They were referring, of course, to the *Rabid Ferret*'s anti-personnel specialization. This variant of the small Gear kept the overall body layout of the standard *Ferret*, but sported twin grenade launchers carried on forearm mounts for a wide field of fire. Each grenade launcher was belt-fed from an ammunition drum attached to the side and under the barrel of each launcher, giving the machine comically huge forearms. The Gear's traditional pack gun was removed, since it could not be easily used in conjunction with the grenade launchers, but the light rocket pods was kept to ensure that at least some offensive punch remained in the design. A pair of light panzerfausts was often also added, strapped to the Gear's back, to provide extra anti-vehicular capacity.

Rabid Ferrets were never produced in great number since they were considered underarmed and underequipped for most large scale military actions. They did excel at their assigned mission, however. The machine's small size, low silhouette and radio signature, and its high speed made it a perfect "search and destroy" unit in urban landscapes, where enemy troopers might be ambushed around every corner. For a time, it was customary to send a pair of *Rabid Ferrets* into a possibly hostile city before entering it, in the hope of clearing as many marauding infantry units as possible. The speed of the machines was usually more than enough to keep them out of tight spots. Some *Rabid Ferrets* also marched along side friendly infantry squads, acting as escort and mobile support units when no infantry fighting vehicles were available. Pilots assigned to such machines often became quite close to the "footsloggers" they were assigned to protect, and more than one pilot woke up one morning to find the word "Mother Hen" painted on the torso of his machine. As the practice spread, the *Rabid Ferrets* assigned to infantry units often came to be identified by that moniker.



Vehicle Specifications

Code Name:	Rabid Ferret
Production Code:	HACS-02LG-AST
Production Type:	Mass Production
Cost:	230,300 marks
Manufacturer:	Keimuri Gear
Use:	assault/anti-personnel Gear
Height:	3.6 meters (standing), 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4079 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V620K V-engine
Horsepower:	400 Hp

Modifications

Add:	2 x APGL (F, 30 shots each), 2 x LPZ (F)
Remove:	DPG, HG
Change:	n/a
Modified Threat Value:	329
Offensive:	366
Defensive:	319
Miscellaneous:	302

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	3

Bryce Hubbard (order #5318102)

4.13.5 HACS-02LG-DL MAULER FERRET

The *Mauler Ferret* is not strictly speaking an "official" variant of the stubby little Northern scout. Rather, it is a strange dueling field modification that has gained a significant amount of fame and recognition on the Khayr ad-Din underground circuit. A *Mauler Ferret* invariably starts life in an underground "chop-shop;" be it battlefield salvage or a brand new model stolen on a Northern Guard base a cycle ago, it does not matter. All weaponry and unnecessary electronic systems are first removed to save on weight, making the machine more mobile. The Gear and its actuators are then finely tuned up, boosting the Ferret's otherwise poor maneuverability into something more acceptable. Finally, the replacement of one of the Gear's manipulators by a fearsome Mauler Fist adds some spice to the design. The Fist's grinding and whirring spiked wheels are powered by their own independant motor and are quite capable of crushing armored plates between their carbide teeth.

While the Gear's combat performances are just average, the sight of such a little walker agressively charging into close combat greatly amuse the public, and many arenas now routinely schedule exhibition matches. Some of them are played for laughs, with one or several *Ferrets* pitted against a much larger opponent. There were times, however, when the sight of the *Mauler* inspired much more; the brief career of Embo Mottlett is still talked about in the seedy dives of the city of Duelists. Mottlett was a short and stout man, an ex-Norlight soldier who had come to the desert settlement in search of fame and fortune. His small physical stature made life difficult at first. After an aimless two seasons in Khayr ad-Din, Mottlett's luck changed; he met and befriended Jerome Peihft, an old mechanic who was looking for a pilot for his customized *Ferret*. Mottlett jumped on the opportunity. He proved devastatingly proefficient with the machine, and would have crunched and mauled his way to a championship had he not been killed in a stupid traffic accident. His *Mauler Ferret* is still stored somewhere in the city, awaiting a new master who will be able to use its full combat abilities.

Vehicle Specifications

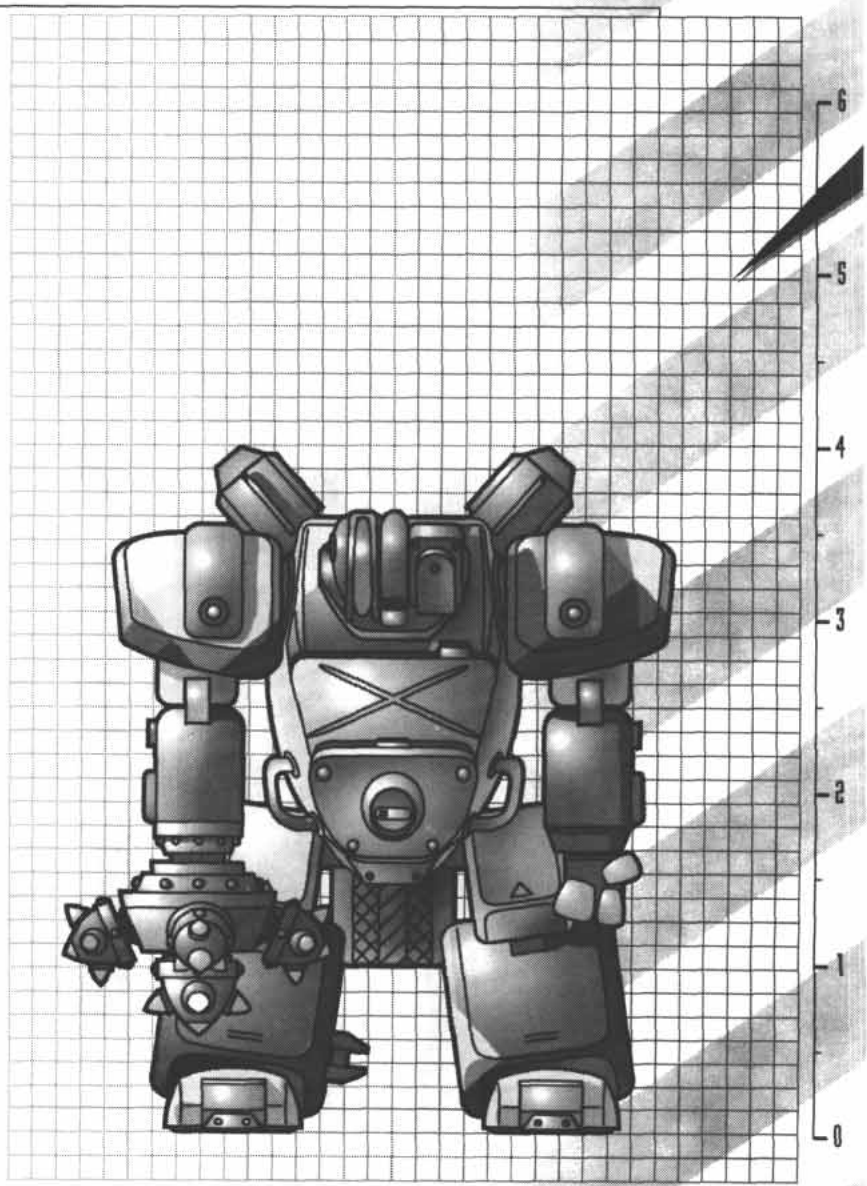
Code Name:	Mauler Ferret
Production Code:	HACS-02LG-DL
Production Type:	Limited Production
Cost:	595,200 marks
Manufacturer:	Keimuri Gear/independent technicians
Use:	dueling/close combat Gear
Height:	3.6 meters (standing), 1.8 meters (cycle mode)
Width:	3.2 meters
Average Armor Thickness:	28 mm
Armor Material:	durasheet w/alloy
Standard Operational Weight:	4210 kg
Primary Movement Mode:	Walk (36 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	700 km
Sensor Range:	100 hexes/5 km
Communication Range:	500 hexes/25 km
Powerplant:	S-V620K V-engine (remachined)
Horsepower:	410 Hp

Modifications

Add:	MF, Battle Arm (Rating 5, can punch),
Remove:	All weapons, one Manipulator Arm, Decreased Maneuverability
Change:	n/a
Modified Threat Value:	248
Offensive:	74
Defensive:	319
Miscellaneous:	351

Vehicle Availability

Availability Threshold:	9
Maximum Number of Units in the Field:	2

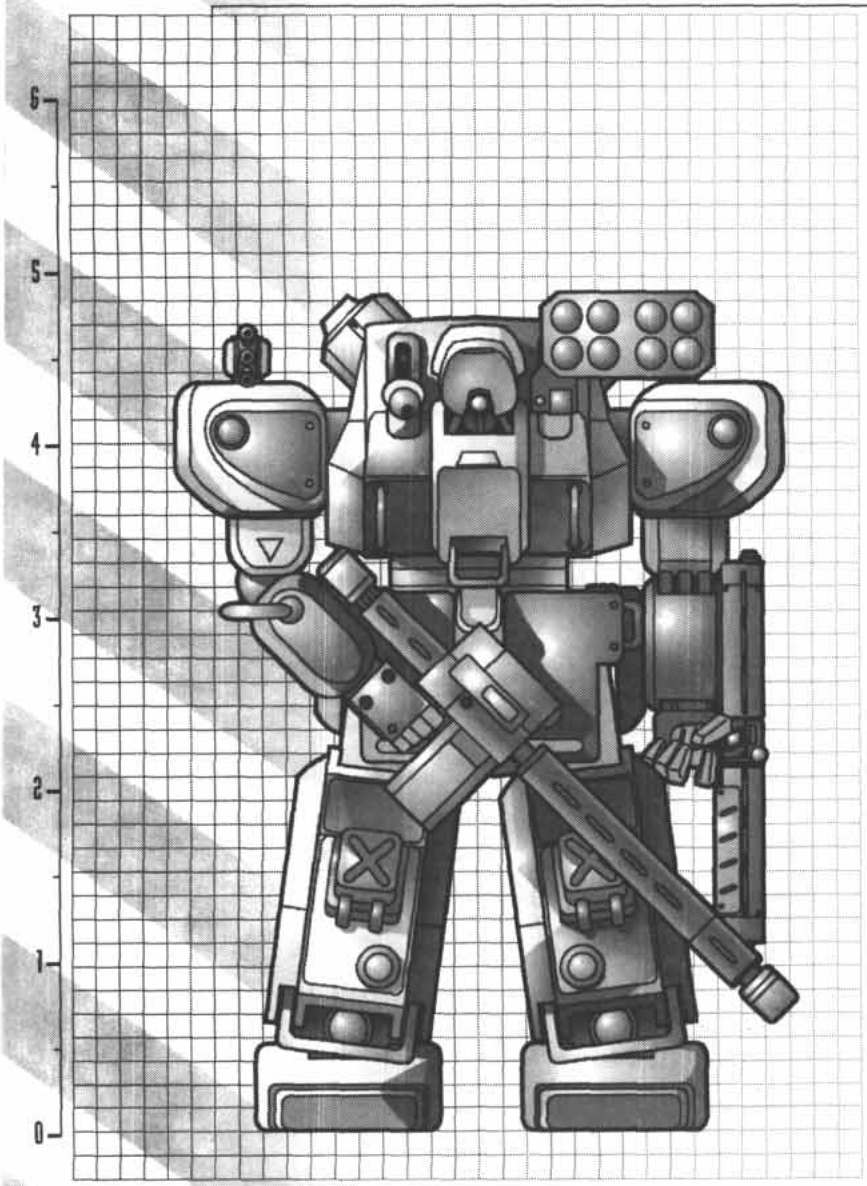


Bryce Hubbard (order #5318102)

4.14 HACS-04HG-AST RAZORBACK

By its first hundred cycles of use, the *Hunter* had spawned dozens of different field variants to fill a great number of operational niches. One of the first totally original designs to come out was the *Razorback*. The *Razorback* was a heavily built machine, with a stock, blockish appearance. The Northco designers were conservative and used flat armor plating throughout. The main body was angled to deflect incoming rounds and the cockpit was completely sunken into the torso. Most of the sensor equipment was mounted in a small turreted head placed just in front of the pilot's compartment. The *Razorback*'s weapon complement was no less impressive. Its main weapon was a potent Paxton LGPC 106 mm snub cannon, held in a rifle-like manner in the Gear's huge manipulators. Adding long-range firepower was a rocket launcher attached to a shoulder hardpoint, usually a 70 mm pod with nine rockets. Together, these weapons made the *Razorback* a devastating anti-armor unit. A 7 mm rapid-fire machinegun was mounted in the torso right next to the cockpit, although it was so close to the pilot's head that it is uncomfortable to fire for an extended period of time. Coupled with the standard APGL, the machinegun made the Razorback a superior anti-personnel vehicle. Finally, a pack gun was provided as a backup weapon and attached to a leg hardpoint. Some pilots used it regularly against opponents "unworthy" of the firepower of the snub cannon.

The *Razorback* did suffer from limited speed and maneuverability, often a crippling difficulty against fast moving targets. The design's thick steel alloy armor largely compensated for these drawbacks, however. More importantly was a serious flaw in the sensor pod of the *Razorback* which led to regular fluctuations in effectiveness. The *Razorback* was usually deployed against slow-moving and less-than-subtle armored columns, making its flaws less of a hindrance. The sensor difficulties of the *Razorback* were associated with the miniaturization involved in the use of a small head pod and led Northco developers to become dedicated to the "head-in-head" design of the *Hunter*, in which the pilot's head was within the sensor pod of the Gear.



Vehicle Specifications

Code Name:	Razorback
Production Code:	HACS-04HG-AST
Production Type:	Mass Production
Cost:	285,714 marks
Manufacturer:	Northco
Use:	assault Gear
Height:	4.7 meters
Width:	3.2 meters
Average Armor Thickness:	80 mm
Armor Material:	steel alloy w/ceramic
Standard Operational Weight:	8134 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (61 kph)
Deployment Range:	350 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V1070 V-engine
Horsepower:	750 Hp

Weapon Payload

Name	Ammunition Payload
Paxton LGPC 106 mm Snub Cannon	10 shells
Forge Weapon Co. 71 mm Rocket Pack	9 rockets
GU-05 9 mm Machinegun	100 shells
Riley M25 Pack Gun	30 shells
Mark IV AP Grenade Launcher	6 grenades

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The *Razorback* served in the armies of all three Confederated Northern City-States member-leagues as well as in the Northern Guard, though it was always more numerous in the United Mercantile Federation. It served with distinction in a variety of roles and was so successful that many Southern Gears designs — most notably the *Boa*, *Anaconda* and *Python* family — can be traced to a fear and appreciation of the *Razorback*. The Gear was originally designated as the FS-01 *Razorback* and was expected to serve as the first dedicated heavy assault/fire support Gear; while it excelled at the first task, the machine was less than impressive at the latter. Its limited supply of rockets (and their relatively light payload when compared to artillery pieces) made the *Razorback* an unimpressive fire-support platform. This weakness would inspire the design of the *Bear* and later the *Grizzly*, who use guided mortars as indirect fire weapons and dispense with the snub cannon, a purely direct-fire and close-range anti-armor weapon. The heavy assault mission profile remained the purview of the *Razorback*, however, until the War of the Alliance. The venerable Gear was the first choice for dealing with the rapid armor of the Colonial Expeditionary Force (in conjunction with other tank-hunters such as the *Hunter Zerstörer*) and a great number of units were destroyed in the early cycles of the war. The front-line units would receive newly designed *Assault Grizzlies* or *Strike Jaguars* to replace their old *Razorbacks*, finally forcing the grandfather of that class of Gears into retirement.

In the post-war years, the *Razorback* can still be found in some regiments. Second-line units may still have old *Razorbacks* and the United Mercantile Federation Army still has a fair number of them despite programs to replace them with *Grizzly* variants. More than a few front-line units, however, keep some *Razorbacks* as part of their arsenal in order to bring the power of the snub-cannon (still unparalleled in short-range firepower) to bear in dedicated anti-tank squadrons. Once the heart of the Guard's heavy firepower Gear forces, the *Razorback* is now regarded as a highly specialized tank-hunter that is largely unsuited to patrol, anti-Gear or anti-infantry operations. The *Razorback* went on to inspire several Gears such as the *Bear* and *Grizzly* series.

General Stats

Threat Value:	500
Offensive:	1123
Defensive:	302
Miscellaneous:	75
Size:	7
Original Default Size:	8
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movement Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	5
Top Speed:	10
Maneuver:	-1

Electronics

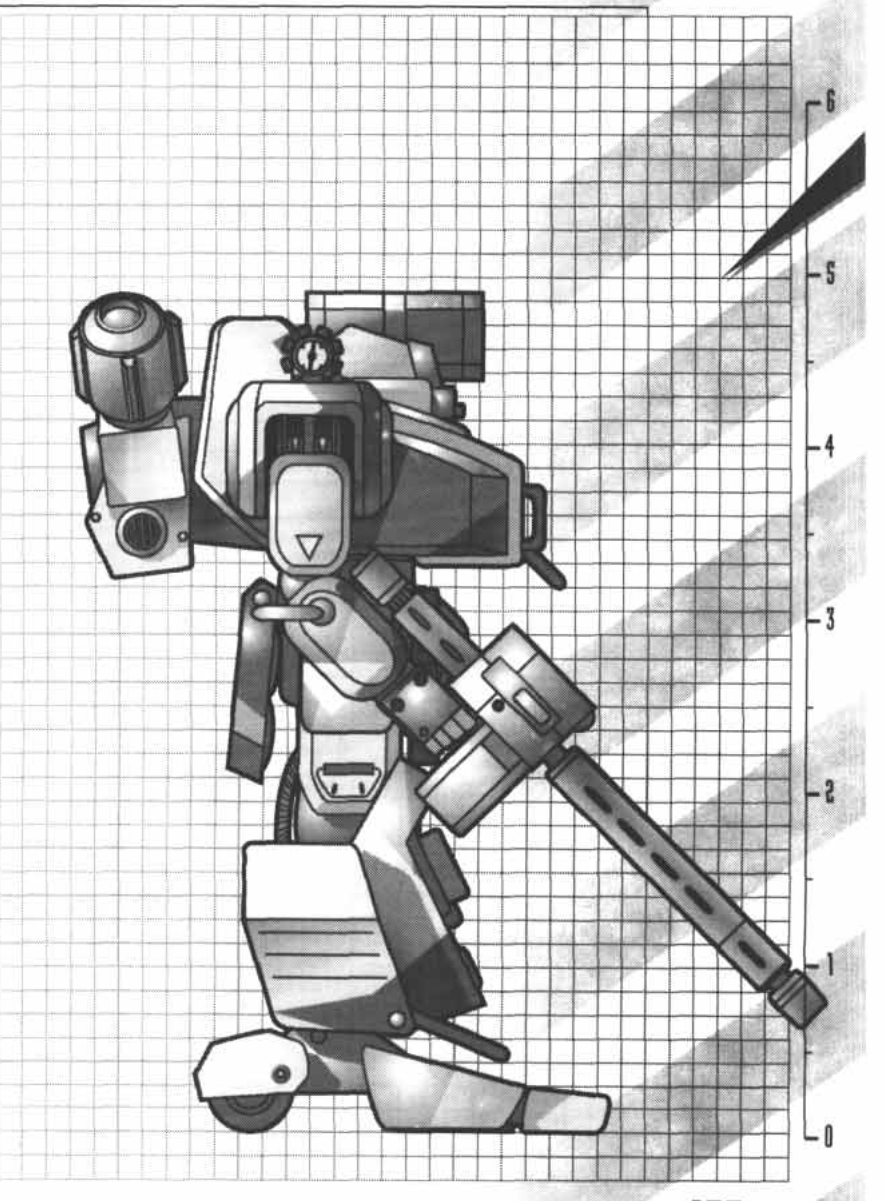
Sensors:	0
Communications:	0
Fire Control:	0

Armor

Light Damage:	20
Heavy Damage:	40
Overkill:	60

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
LGPC 106mm Snub Cannon	SC	Forward	1	10
Co. 71mm Rocket Pack	MRP/9	Forward	1	9
GU-05 9mm Machinegun	LMG	Fixed Forward	1	100
Riley M25 Pack Gun	DPG	Forward	1	30
Mark IV AP Grenade Launcher	APGL	Fixed Forward	1	6

Perks

Name	Rating	Game Effect
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	7	Can punch

Flaws

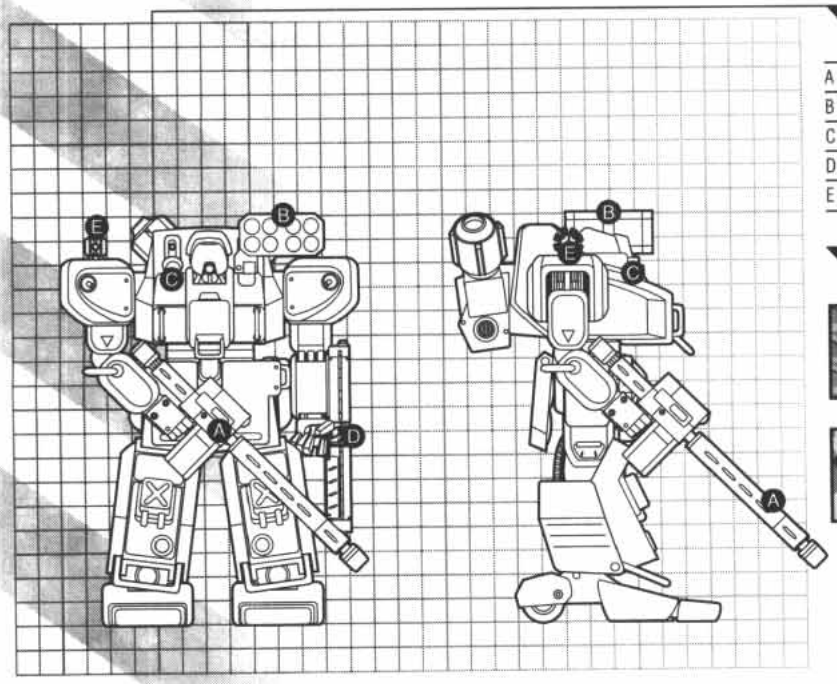
Name	Rating	Game Effect
Annoyance	-	MG's blast is deafening due to its position
Defective Active Sensor	1	Roll vs. 2 on 2 dice or suffer rating as modifier
Large Sensor Profile	1	Easier to Detect

Defects

Name	Rating	Game Effect
Annoyance	-	Cramped forward cabin

Optional Equipment

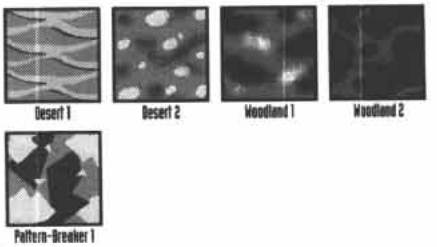
Name	Modified TV
Add second Deployable Pack Gun (30 shots)	521
Add vibroblade	505
Add one grenade	504
Add second MRP/9	646
Replace DPG with MAC (F, 30 rounds)	539



Weapons Location Diagram

A	Paxton LGPC 106 mm Snub Cannon
B	Forge Weapon Co. 71 mm Rocket Pack
C	GU-05 9 mm Machinegun
D	Riley M25 Pack Gun
E	Mark IV AP Grenade Launcher

Typical Camouflage



Bryce Hubbard (order #5318102)

4.14.1 HACS-04HG-FS PEACEMAKER RAZORBACK

The *Razorback* remained the heart of most Northern heavy firepower Gear squadrons until the introduction of the *Grizzly* and even with the introduction of the *Bear* many pilots and technicians sought to press the *Razorback* into a fire-support or combined assault/fire-support role. Of the countless conversions made in the field for this purpose, the so-called "peacemaker" package is the best known for historical reasons. The first *Peacemaker Razorback* was piloted by Captain Reynalds "Wild Bill" William of the Western Frontier Protectorate Army, one of the most flamboyant and famous Northern Gear pilots of the TN 1800s. Reynalds led his company of *Razorbacks* and *Bears* — the 157th *Mad Slashers* — to spectacular victories in the Protectorate's frequent Badlands skirmishes with the Southern Republic. Reynalds' trademark Gear was a well-disciplined, slate-gray *Razorback* called "Peacemaker" that he had converted to sport a powerful back-mounted 85mm rocket pack, as well as spiked knuckles and a massive, waist-mounted MR-95 Vulcan autocannon system originally scrounged from a destroyed Western light tank. While the Vulcan cannon was the most visually obvious feature of "peacemaker" it was the heavy rocket pack which gave the Gear the indirect fire and long-range firepower the main design was missing. With the direct-fire power of the Vulcan added to the mix, Reynalds' Gear was a truly devastating machine.

As Reynalds and his *Mad Slashers* gained more and more recognition, other pilots and technicians began to imitate his conversion until, by TN 1835, the *Peacemaker* was a common *Razorback* variant in the WFP and in Western-influenced regiments of the Northern Guard. Like the standard *Razorback*, the *Peacemaker* suffered heavy losses during the War of the Alliance. It did fair somewhat better, however, because of its increased range and the fact that the Vulcan cannon was quite effective against GREL units. Nevertheless, the *Peacemaker* was largely decommissioned by the Northern Guard in favor of the *Rabid Grizzly* as the premier combined assault/fire-support unit. It can now be found mostly in Western Fort militias (where it retains a powerful historical mystique) or in less-favored units.

Vehicle Specifications

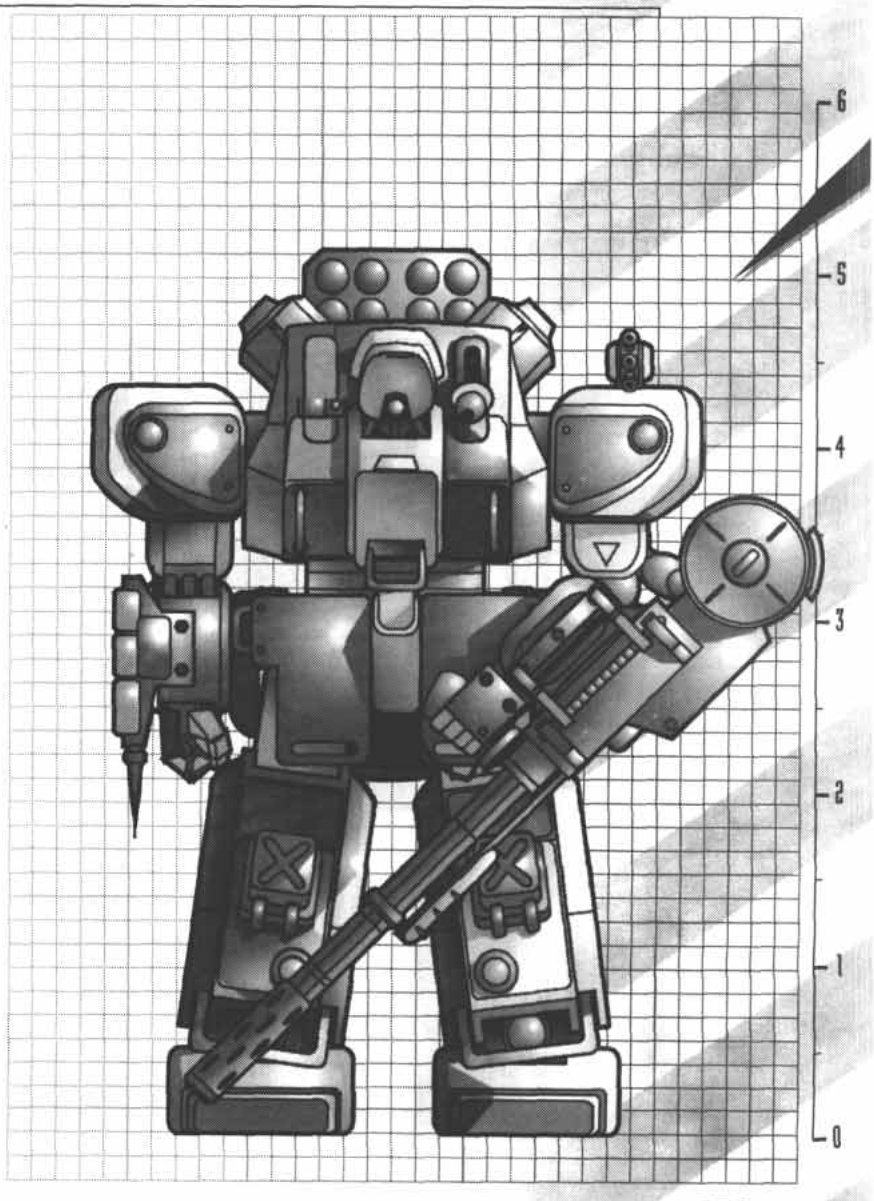
Code Name:	Razorback Peacemaker
Production Code:	HACS-04HG-FS
Production Type:	Mass Production
Cost:	298,286 marks
Manufacturer:	Northco
Use:	assault/fire support Gear
Height:	4.7 meters
Width:	3.2 meters
Average Armor Thickness:	80 mm
Armor Material:	steel alloy w/ceramic
Standard Operational Weight:	10,108 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (61 kph)
Deployment Range:	350 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V1070 V-engine
Horsepower:	750 Hp

Modifications

Add:	VHAC (F, 80 rnds), HRP/24 (F, 24 shots), CR
Remove:	SC, MRP/9
Change:	n/a
Modified Threat Value:	522
Offensive:	1190
Defensive:	302
Miscellaneous:	75

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	3

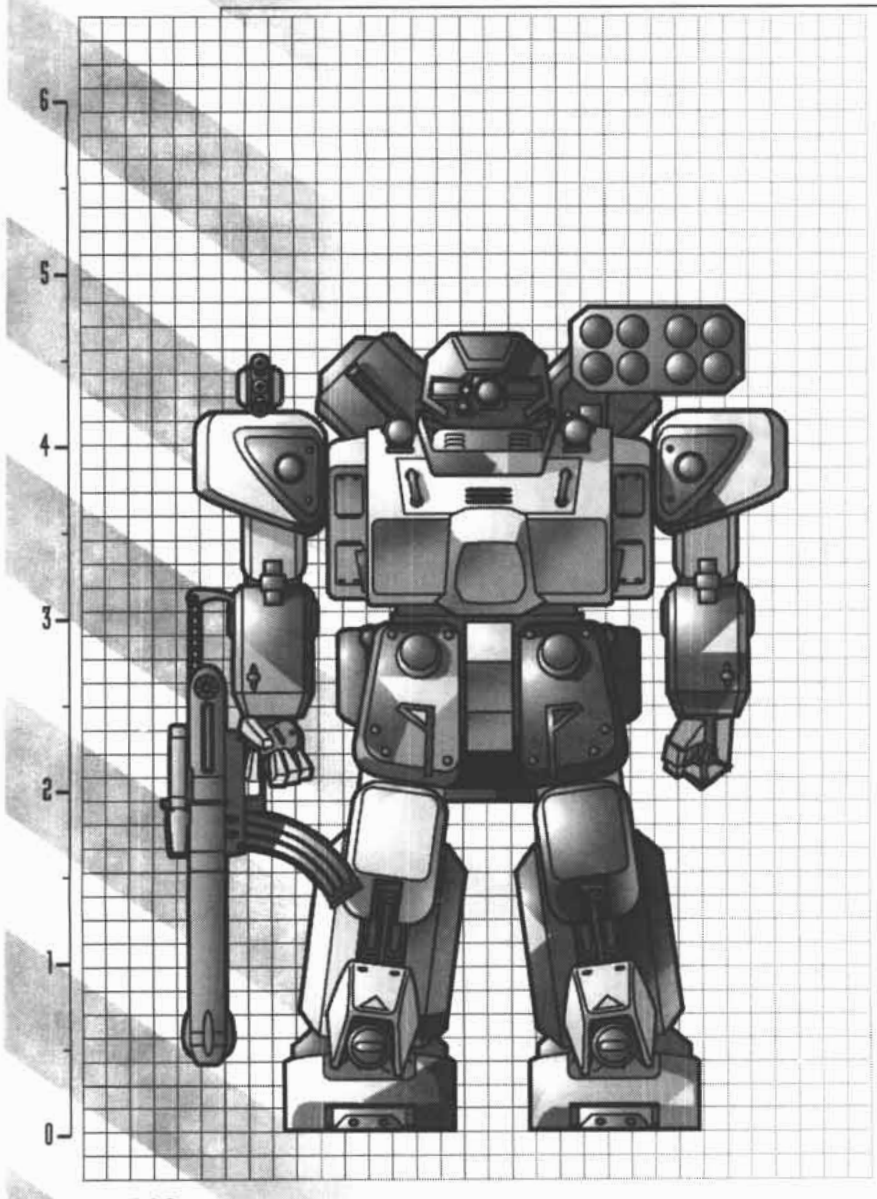


Bryce Hubbard (order #5318102)

4.15 HACS-08MG-MP TIGER

The *Hunter* and *Wildcat* Gears used by the armies of the Northern hemisphere were good machines, but neither used the many technological advances that had occurred after their entry into military service. The United Mercantile Federation Army did not have the budget to commission new designs, and neither the Northern Lights Confederacy nor the Western Frontier Protectorate could be convinced to invest in a joint venture. The updating of the *Hunter* in the 1850s — with the release of the *Hunter* Mk II — further stalled development of a high-technology trooper Gear. This changed in TN 1862, when a group of Mercantile businessmen and corporate CEOs, concerned with the safety of the state, offered to finance part of a new Gear project in exchange for a small share of the profits. Several of these business leaders were involved in the financing of the UMFA as a whole and their offer convinced the military leadership to approve the commissioning of a new cutting-edge Gear. An advanced design called the *Tiger* from Northco was the result.

The *Tiger* had a thicker armor than either the *Hunter* or *Wildcat*, made from the newest composite materials then available. It also had exceptionally strong and fluid articulation systems for its time, which gives it very good maneuverability for a machine of its bulk. The *Tiger*'s engine was a marvel of compactness. It powered a strong secondary movement system that gave the machine a higher than average combat speed, which, coupled with its good maneuverability, made it a fearsome adversary. The weapon complement consisted of an autocannon rifle and a 70 mm shoulder-mounted rocket pack. The AR-25 autocannon rifle, firing 30 mm shells, was unusually powerful for a mass produced Gear and heralded an era of heavier weaponry for trooper Gears.. A standard anti-personnel grenade launcher was mounted on the left shoulder for defense against marauding infantry. All this cutting edge technology did make the *Tiger* expensive to produce, but those who were able to pilot it always reported that it was well worth the expense. Indeed, the *Tiger* outperformed the *Hunter* Mark II in many important ways and served for several decades as the best Gear on Terra Nova.



Vehicle Specifications

Code Name:	Tiger
Production Code:	HACS-08MG-MP
Production Type:	Mass Production
Cost:	468,750 marks
Manufacturer:	Northco
Use:	general purpose Gear
Height:	4.6 meters
Width:	3.4 meters
Average Armor Thickness:	58 mm
Armor Material:	durasheet w/composite
Standard Operational Weight:	7320 kg
Primary Movement Mode:	Walk (50 kph)
Secondary Movement Mode:	Ground (74 kph)
Deployment Range:	500 km
Sensor Range:	60 hexes/3 km
Communication Range:	240 hexes/12 km
Powerplant:	S-V1000A V-engine
Horsepower:	550 Hp

Weapon Payload

Name	Ammunition Payload
AR-25 30 mm autocannon rifle	40 shells
Forge Weapon Co. 71 mm Rocket Pack	9 rockets
Mark III AP Grenade Launcher	6 grenades

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The *Tiger* was an extremely advanced Gear design, and many consider it to have been well ahead of its time. This sophistication meant it was expensive to produce and the *Tiger* was always distributed sparingly. The only military force to ever have plentiful *Tigers* was the United Mercantile Federation Army which has signed the original contract for its production. Crack teams of the Northern Guard and some units of the other Northern national armies did purchase some *Tigers*, however. The 7th Northern Guard Gear regiment — known as the *Cat's Paws* — built much of its deadly reputation on the *Tiger*. Previously known only to the Southern forces they had faced in combat, the *Paws* used the introduction of the *Tiger* to the Northern Guard in TN 1870 as a vehicle to increase their own prestige. Several of their operations — featuring *Tigers* — were recorded for media usage and served in both advertising campaigns for Northco and in recruiting campaigns from the Northern Guard. It was these images that first established the notion that the *Cat's Paws* were the best of the best within the Northern psyche.

Since the introduction of the *Jaguar*, the *Tiger* has found itself eclipsed by even greater performance. The increased production and distribution of the War of the Alliance propelled the *Jaguar* across the armies of the North, virtually guaranteeing that the *Tiger* would fade into the background in near-record time. The model has refused to vanish into obscurity, however, and remains a favorite among Gear pilots. Northco continues to dedicate a small production line to the *Tiger* and the United Mercantile Federation Army still field it extensively, no longer as an elite commando unit (for which they use *Jaguars*) but as a "heavy trooper" which can replace the *Hunter* for more demanding missions. The *Cat's Paws* and other units which made the *Tiger* famous have also refused to part with machines that have served them well. The *Paws*, who have access to almost any Gear model, still use the *Tiger* as their standard training Gear. Northco has also begun to sell the *Tiger* to independent forces such as city-state militias and Badlands homesteading counties, ensuring that the machine will continue to have a long life.

General Stats

Threat Value:	625
Offensive:	1336
Defensive:	384
Miscellaneous:	155
Size:	6
Original Default Size:	9
Indv. Lemon Dice:	3
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	4
Top Speed:	8
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	12
Maneuver:	0

Electronics

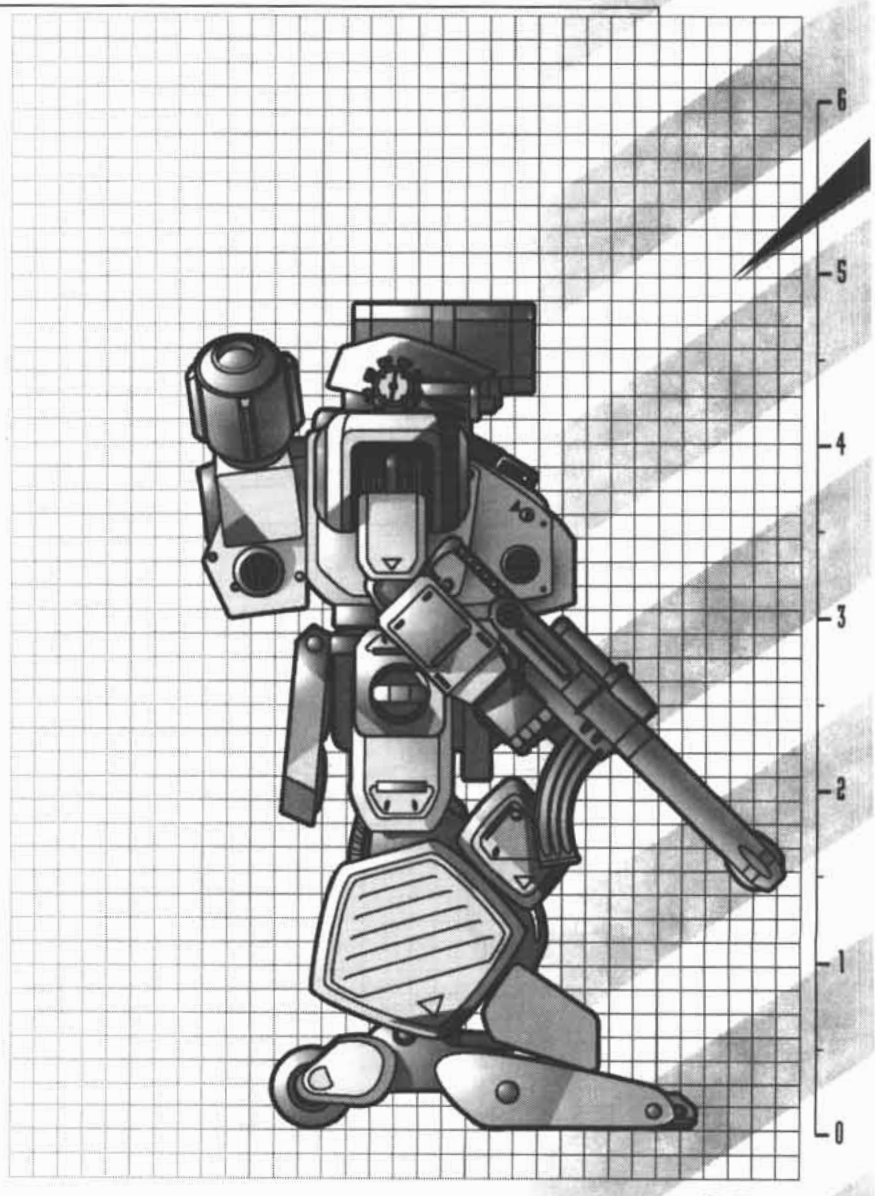
Sensors:	0
Communications:	0
Fire Control:	+1

Armor

Light Damage:	17
Heavy Damage:	34
Overkill:	51

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	unlimited



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
AR-25 30mm autocannon rifle	MAC	Forward	1	40
Co. 71mm Rocket Pack	MRP/9	Forward	1	9
Mark III AP Grenade Launcher	APGL	Forward	1	6

Perks

Name	Rating	Game Effect
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	6	*Can punch*

Flaws

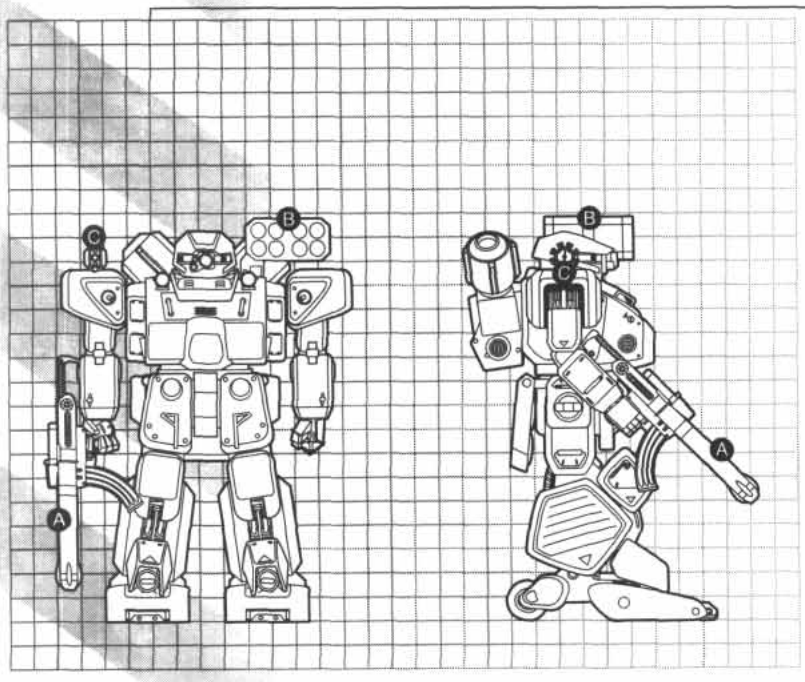
Name	Rating	Game Effect
None	-	-

Defects

Name	Rating	Game Effect
Annoyance	-	Cramped forward cabin

Optional Equipment

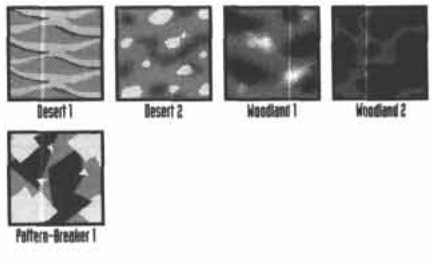
Name	Modified TV
Add leg armor (Reinforced Location Armor 1, Movement)	628
Add second AP Grenade Launcher (F, 6 shots)	645
Add vibroblade	636
Add three hand grenades	647
Add 10-shot smoke launcher and Camo Netting	636
Replace MAC with MBZK (F, 10 shots)	786
Add second MRP/9 (F, 9 rockets)	916
Armored Jacket (Reinforced Location Armor 1, Crew)	628
Add CR and LMG (F, 600 rounds)	674



Weapons Location Diagram

A	AR-25 30 mm autocannon rifle
B	Forge Weapon Co. 71 mm Rocket Pack
C	Mark III AP Grenade Launcher

Typical Camouflage



Bryce Hubbard (order #5318102)

4.15.1 HACS-08MG-C SABERTOOTH

The command and communications variant of the *Tiger*, the *Sabertooth* was introduced in TN 1873 based on upgrade packages produced in the field by the technicians of the United Mercantile Federation Army. Just as the *Tiger* was designed to have an edge over the *Hunter*, so the *Sabertooth* was designed to exceed the specifications of the *Headhunter*. Like the *Headhunter*, the *Sabertooth* saw a new head-assembly designed for it, this one including a raised crest which housed a Garimas 3500 communications array with a range superior to the *Headhunter*'s own. To prevent vulnerability to enemy electronic warfare equipment, the Garimas 3500 featured signal boosters and frequency scanners dedicated to defeating enemy jamming. The *Sabertooth* maintained the same weaponry as the standard *Tiger*, although it was supplemented by a standard vibroknife and a M25 pack gun. The pack gun was included in order to serve as a back-up weapon for the unit commander or a squadron mate who may have lost his AR-25 autocannon. To help ensure the survival of the junior officers piloting most *Sabertooth*, overlapping durasheet plates were installed inside the cockpit, giving the pilot extra protection.

The *Sabertooth* was adopted very quickly by units already fielding *Tigers* and became part of the standard package when providing units with the new model. Consequently the *Sabertooth* remains in action almost everywhere that the *Tiger* does, leading general purpose and strike squadrons of the United Mercantile Federation Army and commanding companies of local militias who have acquired the units more recently. The elite 7th HG Regiment *Cat's Paws*, historically one of the heaviest users of the *Tiger* class, fields a pair of seasoned *Sabertooth* dating back to the variant's first production run. The ECCM package included with the *Sabertooth* makes it unique enough that the Gear has also found a market in units that do not feature *Tigers*. The *Headhunter*, *Tattletale* and *Jaguar Command* do not feature ECCM systems and unit commanders who have had problems with interrupted communications often seek out the *Sabertooth* for its electronic warfare abilities, even if they are limited when compared to dedicated electronic warfare Gears such as the *White Cat* or *Weasel*.

Vehicle Specifications

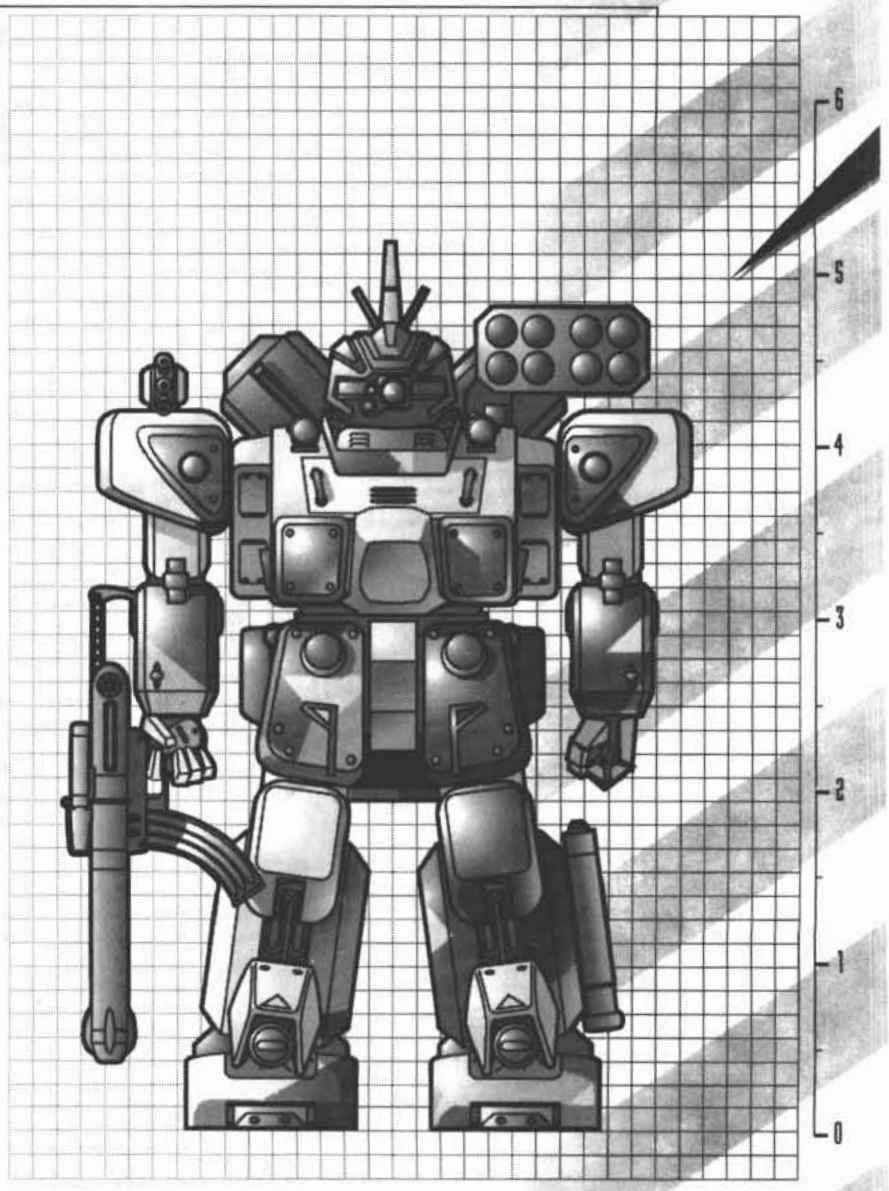
Code Name:	Sabertooth
Production Code:	HACS-08MG-C
Production Type:	Mass Production
Cost:	462,214 marks
Manufacturer:	Northco
Use:	field command Gear
Height:	4.6 meters (5.15 m w/ antenna)
Width:	3.4 meters
Average Armor Thickness:	58 mm
Armor Material:	durasheet w/composite
Standard Operational Weight:	7320 kg
Primary Movement Mode:	Walk (50 kph)
Secondary Movement Mode:	Ground (74 kph)
Deployment Range:	500 km
Sensor Range:	60 hexes/3 km
Communication Range:	360 hexes/18 km
Powerplant:	S-V1000A V-engine
Horsepower:	550 Hp

Modifications

Add:	DPG (F, 30 shots), VB, ECCM 2, Reinforced Location: Crew (Rating 2)
Remove:	n/a
Change:	Upgrade Communications to +1, Range 18 km
Modified Threat Value:	719
Offensive:	1493
Defensive:	384
Miscellaneous:	279

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

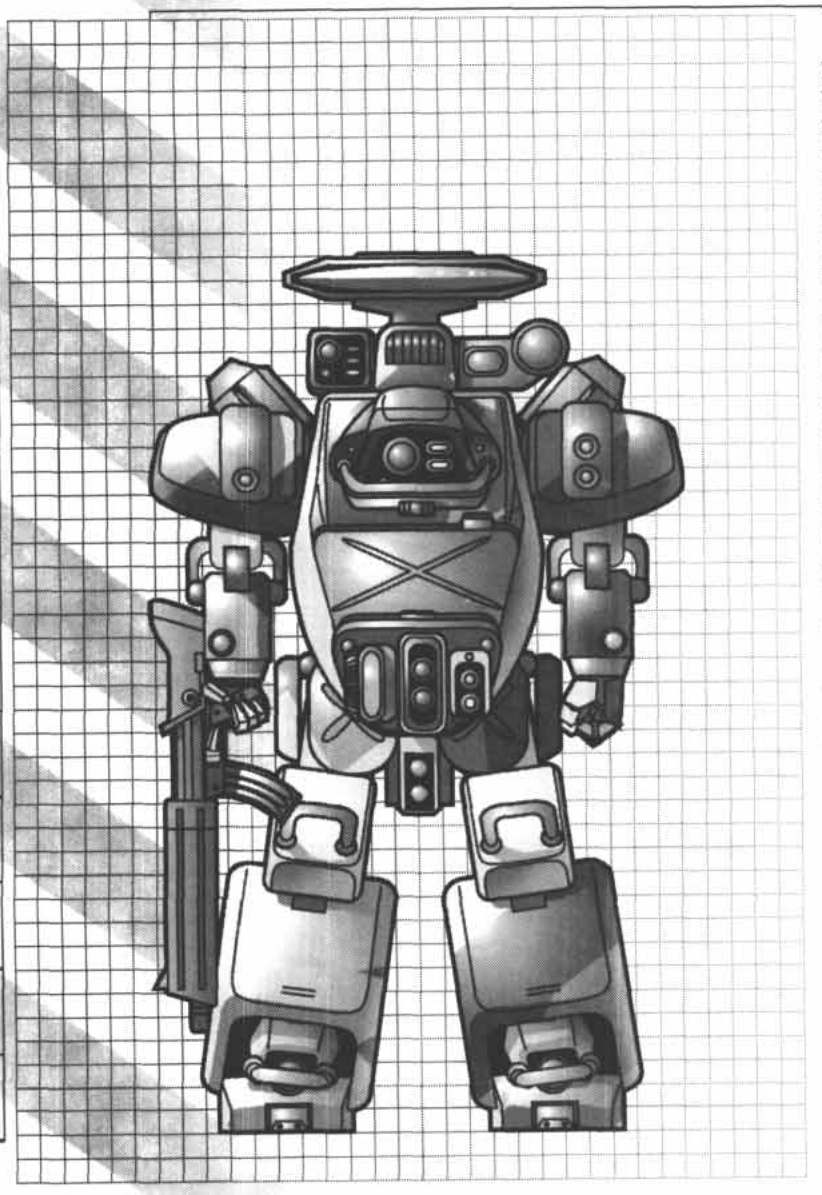


Bryce Hubbard (order #5318102)

4.16 HACS-05LG-EW WEASEL

An outgrowth of the classic *Wild Ferret* electronic warfare (EW) Gear that once served as the principal electronic warfare platform of Northern Gear formations, the *Weasel* is also indirectly responsible for the existence and success of the *White Cat*, a *Cheetah* EW variant developed as a stop gap during the development of the new Gear. Indeed, the *Weasel* was commissioned from a reborn Keimuri Gear (the *Ferret* designers) and was intended to replace the *Wild Ferret*. The development of the Gear lasted nearly 9 cycles, however, and it was often interrupted by long periods of shelving, caused either by Keimuri's financial difficulties or technical problems. The replacement of the unique leg and power train assembly of the *Ferret* family by a more standard Gear lower body caused many problems, especially in finding away to move with speed an agility that exceeded the *Ferret*. The United Mercantile Federation Army had also insisted that the *Weasel* retain a relatively low profile, not exceeding 4.3 meters in height. The cockpit set-up had to be adapted from the *Ferret* with a "lie-back" position for the pilot which allowed for relatively long legs and a low height. While the power-train and chassis engineers delved into these problems, Keimuri's electronics subcontractors had plenty of time to produce a top-notch ECM/ECCM pod for the new machine. Even during the delay in production the EW pod was sold to the military for use in the *Hunter Commando EW* refits.

A dedicated specialist Gear, the *Weasel* was designed to carry a very light weapons load. The M25 pack gun long used by the *Ferret* family was replaced by a more powerful M225 autocannon with an extended clip of 50 rounds. The only other weapons provided were a Mk IV anti-personnel grenade launcher, a vibroblade weapons and a single M-2A hand grenade. This light weapons load was made more paltry by the below-average targeting computer of the *Weasel*. Nevertheless, the Gear is very good at its assigned task, able to jam enemy transmissions while keeping friendly electronics clear as almost no other unit can do. A back-mounted satellite dish allows for long range communications for command, control and forward observation duties.



Vehicle Specifications

Code Name:	Weasel
Production Code:	HACS-05LG-EW
Production Type:	Limited Production
Cost:	896,500 marks
Manufacturer:	Keimuri Gear
Use:	electronic warfare Gear
Height:	4.3 meters
Width:	3.1 meters
Average Armor Thickness:	40 mm
Armor Material:	steel alloy
Standard Operational Weight:	6457 kg
Primary Movement Mode:	Walk (41 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	500 km
Sensor Range:	200 hexes/10 km
Communication Range:	1000 hexes/50 km
Powerplant:	S-V670KWZ V-engine
Horsepower:	440 Hp

Weapon Payload

Name	Ammunition Payload
M222 Autocannon	50 rounds
Mk IV Grenade Launcher	6 grenades
M-2A Hand Grenade	1 grenade
HW-VB-1 Vibroknife	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The Keimuri *Weasel* was expected to quickly become the standard electronic warfare Gear of the Northern armies, smoothly replacing the out-dated *Wild Ferrets* and ensuring the bright future of the newly reborn Keimuri. The lengthy production delays of the Gear opened the door, however, to competition from Keimuri's Kenema rivals at Shaian Mechanics. Using the successful *Cheetah* chassis, Shaian fielded what was to be an interim electronic warfare specialist variant called the *White Cat*. Yet, as the *Weasel* was pushed further and further back, the *White Cat* system was refined and came to be appreciated as a real combat asset. Featuring a weapons load heavier than the *Weasel* as well as increased speed, maneuverability and targeting capacities, the *White Cat* was only out performed in the amount of armor that protected the machine. The final blow came when, with the release of the *Weasel* ready for production in TN 1931, Keimuri was forced to liquidate half its production facilities and could only deliver a fraction of the military's orders of *Weasels*. This not only burned some important bridges with the commanders dealing with Keimuri, but forced the corporation to sell the Gear at a premium making the *White Cat* — based on the mass-produced *Cheetah* chassis — the affordable alternative. The delays of the *Weasel* have allowed Shaian to get a serious grip on the EW market, even fielding such *White Cat*-derived Gears as the *Silver Cat* and *White Cat EWH*.

Keimuri's solution to all these problems has been to sign a strategic alliance with Northco to share development costs and production facilities. This has made Shaian, which believed Keimuri to be down for the count, to sit up an take notice. Already the *Tattletale* variant of *Weasel* has been assembled at the Rapid City plants of the industrial giant and the next production run of *Weasels* will be done with Northco backing and on a Northco line — creating a highly competitive price-comparison with the *White Cat*. Once a larger number of cheaper *Weasels* hit the market the *White Cat* may find itself phased out of duty — something Shaian wishes to avoid at almost any costs. Bidding wars for military contracts to develop highly specialized Gears are now common place with Shaian seemingly trying to ruin their competitors.

General Stats

Threat Value:	384
Offensive:	93
Defensive:	275
Miscellaneous:	784
Size:	6
Original Default Size:	7
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	4
Top Speed:	7
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	13
Maneuver:	0

Electronics

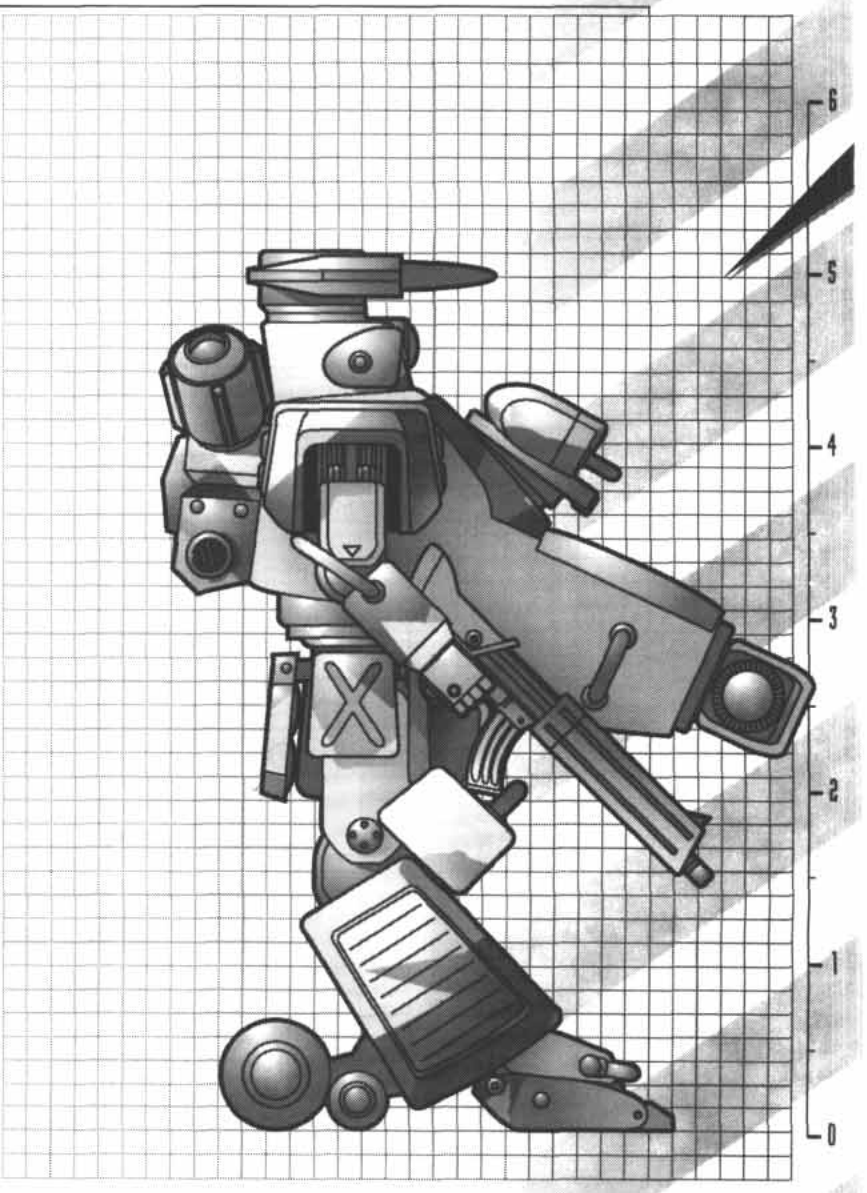
Sensors:	0
Communications:	+2
Fire Control:	-1

Armor

Light Damage:	14
Heavy Damage:	28
Overkill:	42

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
M222 Autocannon	LAC	Forward	1	50
Mk IV Grenade Launcher	APGL	Fixed Forward	1	6
HW-VB-1 Vibroknife	VB	Forward	1	
M-2A Hand Grenade	HG	Forward	1	

Perks

Name	Rating	Game Effect
ECM	4	Offensive electronic warfare
ECCM	4	Defensive electronic warfare
Hostile Environment Protection	-	Desert
Manipulator Arm x 2	6	Can Punch
Satellite Uplink	-	Allows orbital communications

Flaws

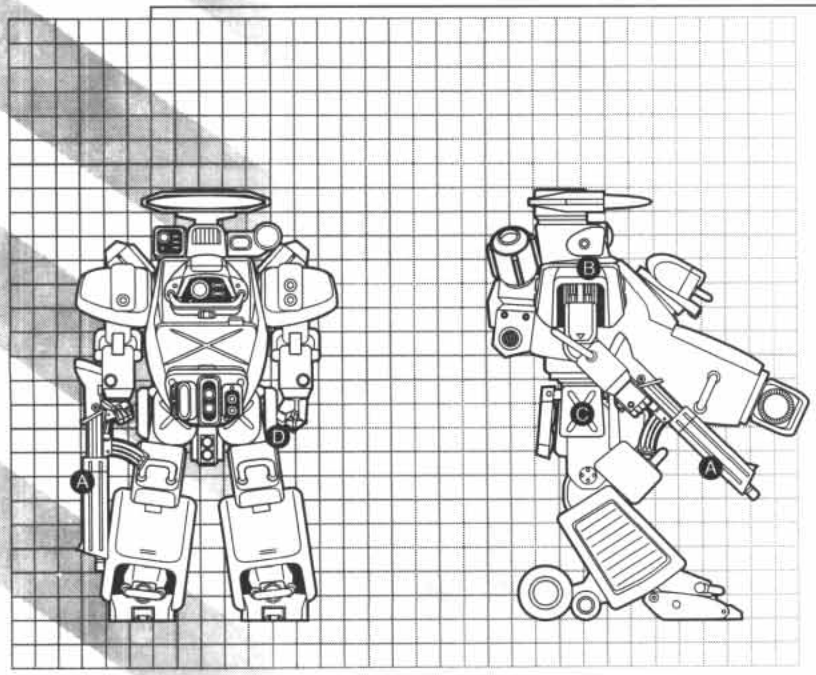
Name	Rating	Game Effect
Annoyance	-	Cramped cockpit; maximum pilot Build is 0
Exposed Auxiliary System	-	Auxiliary damage is one step worse
Vulnerable to Haywire Effects	-	Haywire causes three damage rolls

Defects

Name	Rating	Game Effect
None	-	-

Optional Equipment

Name	Modified TV
Replace LAC with MAC (F, 30 rounds)	393
Add 2 Hand Grenades	390
Add 2 Light Panzerfausts	388



Weapons Location Diagram

A	M222 Autocannon
B	Mk IV Grenade Launcher (not visible)
C	M-2A Hand Grenade (not shown)
D	HW-VB-1 Vibroknife (not shown)

Typical Camouflage


Woodland 1


Woodland 2


Pattern-Breaker 1

Bryce Hubbard (order #5318102)

4.16.1 HACS-05LG-C TATTLETALE

The *Tattletale* was designed as a very advanced command unit. Based on the *Weasel* chassis, it was the first fully cooperative effort between Keimuri Gear and Northco. The *Tattletale* retains some of the electronic warfare equipment of the previous design, but uses a more powerful communications and sensor array. Most of the extra electronic is located in armored pods mounted on the right shoulder and backpack of the Gear. The main communication set is a XLR-80 wide band long range radio. A sophisticated, encryption/decryption computer is built directly into the communication system. The secondary radio is a Werner Multicron-30SiG that can reach a receiver up to 30 kilometers away in battlefield conditions. Under clear conditions, with no interference and some relay, it is said that there is no limit to how far a signal can be bounced. The sensor array of the unit is also quite remarkable. The sophisticated Intel-7 Extra-wide Angle Camera Pod located on one of the arms is equipped with visual discrimination software and can be coupled with the various laser sensors carried in the *Tattletale*'s head to supply additional information about the machine's surroundings. The *Tattletale* uses a light weapon layout, often similar to the *Weasel*'s own. Some pilots prefer to replace the autocannon by a 60 mm frag cannon, a weapon whose shorter barrel is less cumbersome to use.

The *Tattletale* is a relatively recent addition to Northern arsenals and has not yet participated in any significant operations. Although Northco has advertised the *Tattletale* as a mixed command and control unit, most commanders have chosen to deploy it as a dedicated communications specialist, often pared with a *Headhunter* command unit, a *Weasel* or *White Cat* electronic warfare specialist and two standard combat units as defenders. Together this unit forms an effective command squadron, able to issue multiple orders and keep a Gear company coordinated and functioning while interfacing with regimental or brigade command units. Some commanders known for their distaste of over-specialized units have expressed concerns about the *Tattletale*'s relatively light armor and weapons load.

Vehicle Specifications

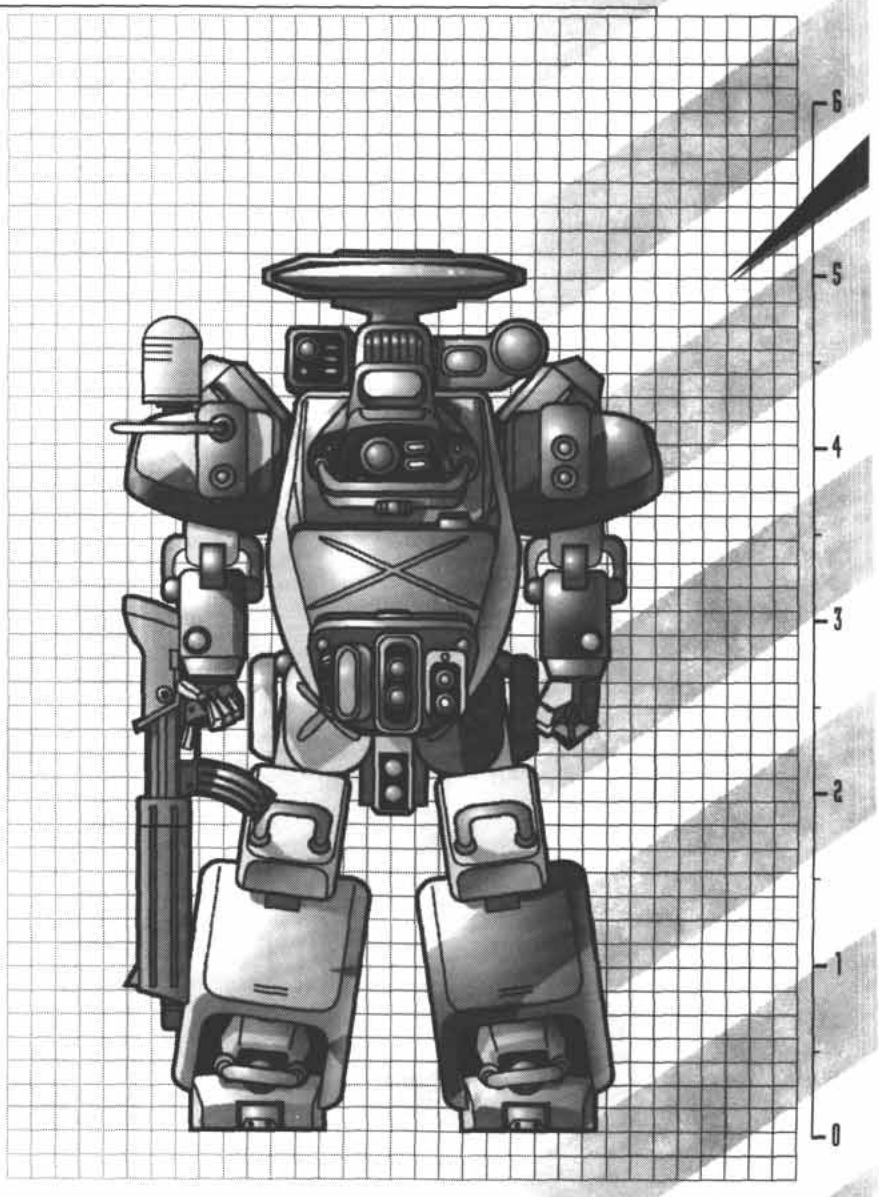
Code Name:	Tattletale
Production Code:	HACS-05LG-C
Production Type:	Mass Production
Cost:	163,333 marks
Manufacturer:	Keimuri Gear
Use:	communications Gear
Height:	4.3 meters
Width:	3.1 meters
Average Armor Thickness:	40 mm
Armor Material:	molecular steel alloy
Standard Operational Weight:	6572 kg
Primary Movement Mode:	Walk (41 kph)
Secondary Movement Mode:	Ground (80 kph)
Deployment Range:	500 km
Sensor Range:	200 hexes/10 km
Communication Range:	1000 hexes/50 km
Powerplant:	S-V670KWZ V-engine
Horsepower:	440 Hp

Modifications

Add:	1xHG
Remove:	ECCM
Change:	Upgrade Communications to +3/50 km, Sensors to +1/10 km, downgrade ECM to Rating 2
Modified Threat Value:	280
Offensive:	98
Defensive:	275
Miscellaneous:	468

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	1

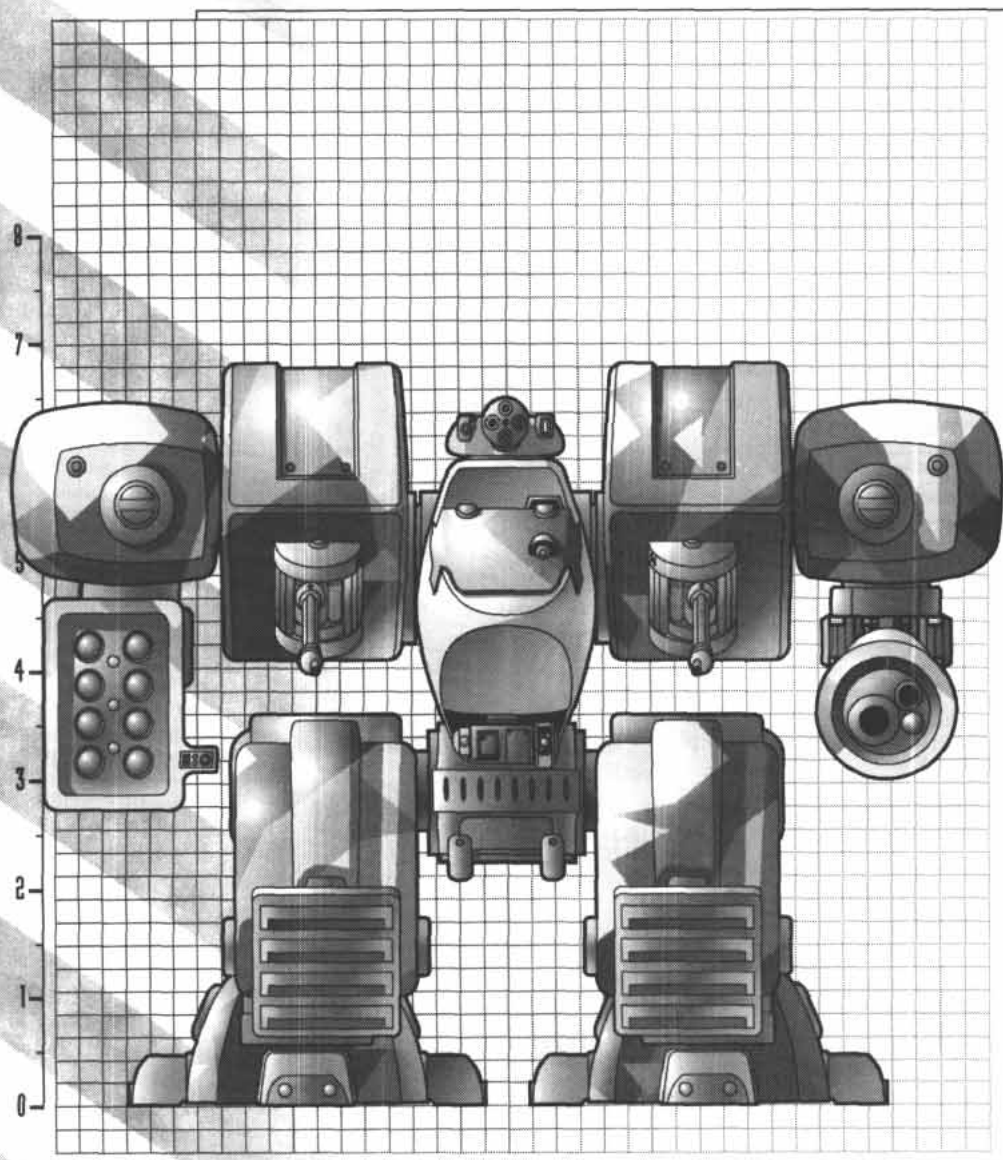


Bryce Hubbard (order #5318102)

4.17 WACS-01FS-AST MAMMOTH

The *Mammoth* is the most common strider unit used by the forces of the CNCS. Originally a Norlight design, the *Mammoth* is now built under license by no less than three companies throughout the Northern Hemisphere, although Hartmore Motor Company continues to hold the primary production license. The machine is rugged and tough, and its large clawed feet and balance plates are perfectly suited to the rocky environment of the North. The bent heavy legs of the *Mammoth* give it a loping walk that can be difficult for crews to adapt to and that is responsible for the development of the name "strider." There are two crewmen (one pilot and one system operator/gunner) who sit in a tandem configuration similar to the layout of a helicopter gunship: the pilot sits at right and the gunner at left, with the former placed ahead of the latter. Some units reverse this positioning (although this is more common in the *Assault Mammoth* variant), but this has little effect on combat efficiency. The *Mammoth* is sturdy and well armored, featuring heavy durasheet plates supplemented by additional ceramite layers designed to redirect shaped-charge ammunition and to burn off or deflect laser-fire. The armored casing of the crew compartment is broken only by very small vision slits (and even they are usually protected by reinforced shutters) forcing the crew to depend on the vehicle's sensor array for information. The Mammoth uses an AFLIC sensor pod mounted on the nose of cockpit as its main array, supplemented by several redundant systems to prevent the strider from being blinded in combat.

The weapon systems of the *Mammoth* are based on a mixed heavy-assault and fire-support mission profile. The primary fire-support weaponry is a Fireball-II guided missile launcher located in the right battle arm. The launcher carries a load of eight anti-tank missiles and features a side-mounted laser targeting device. This combination allows the *Mammoth* to paint its own targets for the Fireball missiles or to accept such information from a friendly forward observer. The left arm houses a devastating SB-90 Assault Gun with a 20-shot drum magazine. Light anti-armor capability is assured by a turreted GU-20 autocannon, while close defense and anti-infantry needs are met by a pair of KJ-16 miniguns capable of filling the air in front of the *Mammoth* with a sheet of small-caliber fire.



Vehicle Specifications

Code Name:	Mammoth
Production Code:	WACS-01FS-AST
Production Type:	Limited Production
Cost:	3,666,667 marks
Manufacturer:	Hartmore Motor Company
Use:	fire support/assault strider
Height:	6.8 meters
Width:	9.2 meters
Average Armor Thickness:	145 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	21,880 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	60 hexes/3 km
Communication Range:	240 hexes/12 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Weapon Payload

Name	Ammunition Payload
GU-20 Autocannon	200 rounds
2 x KJ-16 Minigun	800 rounds each
Fireball II Launcher	8 missiles
SB-90 Assault Gun	20 shells

Bryce Hubbard (order #5318102)

SERVICE RECORD

The *Mammoth* was the first mass-produced "strider" to enter service with the armies of the North and remains the heart of strider units to this day. First released in TN 1848, the *Mammoth* has seen many battles and undergone many refitting and modernization programs. The original release of the strider was less maneuverable than the current model and featured a less secure armored compartment. Its armament was also slightly different, with a concentration on warhead based systems. An older Fireball-I launcher was still integrated in the right arm, while the left arm featured a very large Garickson 48 unguided rocket pod. The current format of the *Mammoth* was introduced in TN 1901 and has remained roughly unchanged except for an update of the AFLIC sensor system and the control software. The success of the *Mammoth* has made striders into an integral part of the Northern and Southern arsenals and opened the way for the development of many different large walker designs. Northern developers, however, have remained faithful to the basic systems of the *Mammoth* and the chassis has been used for a number of variants.

The *Mammoth* began as a Norlight design and was used by the Norlight Armed Forces almost exclusively until the Northern Guard decided to adopt the new weapons system in TN 1855. The Guard's decision was reached after a NAF task force, consisting primarily of *Mammoths* and new *Hunter* MK IIs was used to suppress a bandit army being raised outside Timmins. Since then the *Mammoth* has been a mainstay of almost all Northern Guard armored regiments and found a similar place in the UMFA and WFPA. To meet the demand resulting from the success of their model, Hartmore Motor Company agreed to subcontract some production runs to Mercantile and Western corporations. This decision ensured that the supply of *Mammoths* has always been high. Like all Terranovan combat vehicles, the *Mammoth* was pressed into service during the War of the Alliance. The strider proved itself effective against hovertank columns when used in conjunction with fast moving scout units using target designators, or when they could take advantage of terrain. When fighting the fast-moving CEF hovertanks on open ground, however, the lumbering *Mammoths* fared poorly because they were consistently outmaneuvered by their enemies.

General Stats

Threat Value:	1500
Offensive / Defensive:	3393 / 313
Miscellaneous:	794
Size:	9
Original Default Size:	11
Indv. Lemon Dice:	3
Crew:	2
Bonus Actions:	0

Movement

Primary Movement Mode:	Walk
Combat Speed:	3
Top Speed:	5
Secondary Movement Mode:	n/a
Combat Speed:	-
Top Speed:	-
Maneuver:	-2

Electronics

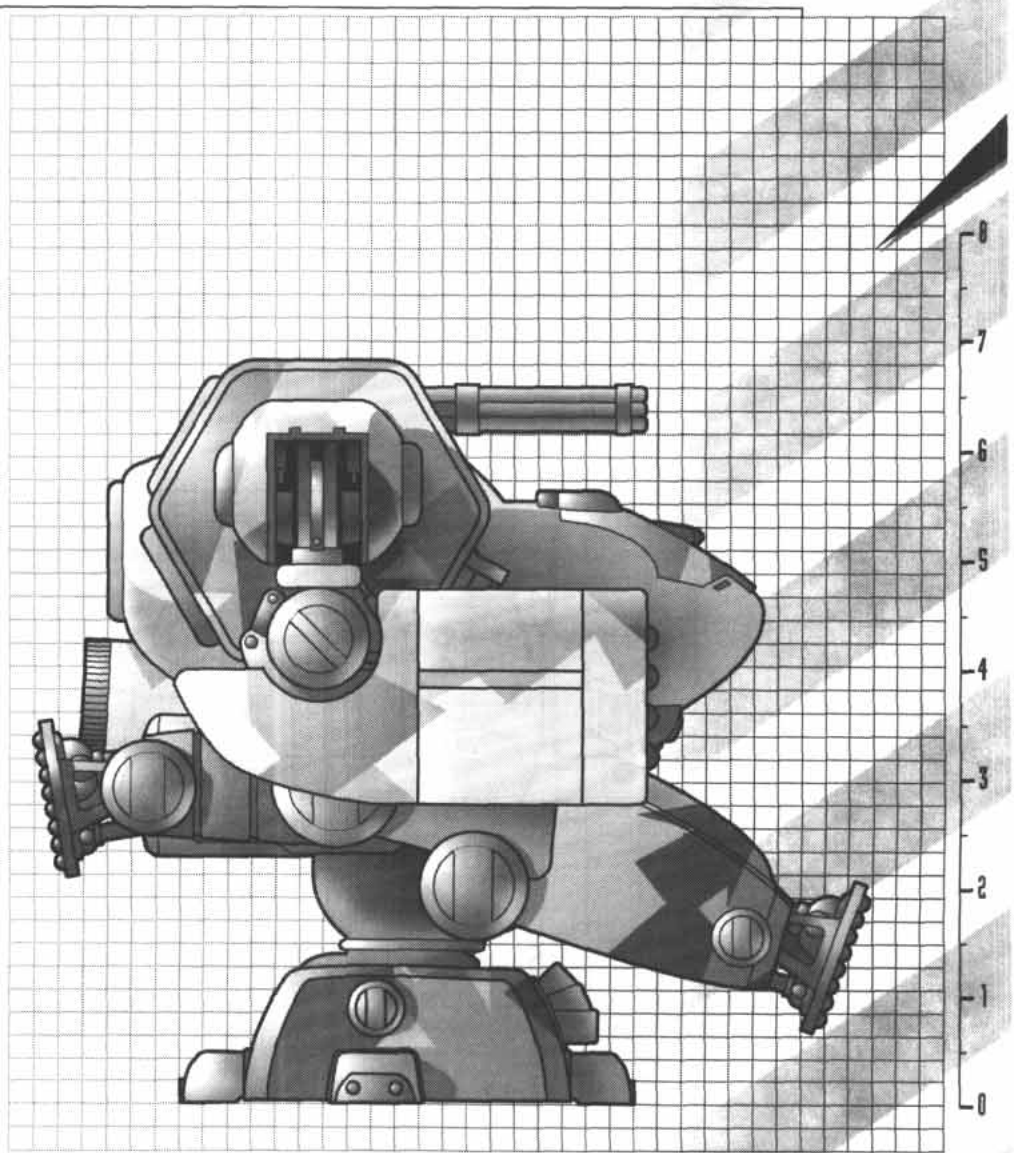
Sensors:	+1
Communications:	0
Fire Control:	0

Armor

Light Damage:	25
Heavy Damage:	50
Overkill:	75

Vehicle Availability

Availability Threshold:	5
Maximum Number of Units in the Field:	5



Bryce Hubbard (order #5318102)

NORTHERN COMBAT VEHICLES

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
GU-20 Autocannon	MAC	Turreted	1	200
KJ-16 Minigun	LMG	Fixed Forward	2	600 each
Fireball II Launcher	ATM	Forward	1	8
SB-90 Assault Gun	SC	Forward	1	20

Perks

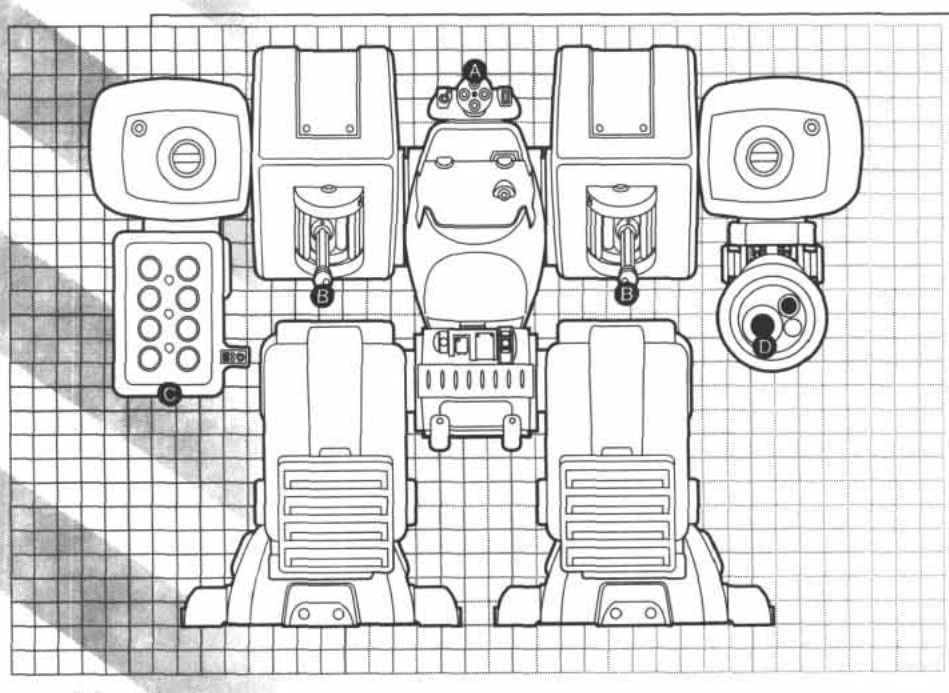
Name	Rating	Game Effect
Ammo/Fuel Containment System	-	Subtract 2 from "Am,mo/Fuel" hit rolls
Back-up Sensors	-	Absorbs firts "Sensor" hit
2 x Battle Arm	9	Can punch
HEAT-resistant armor	5	Add to Armor against HEAT attacks
Hostile Environment Protection	-	Desert
Improved Off-Road Ability	-	-1 MP in hexes w/costs greater than 1
Limited Life Support	-	Provides support for up to a week
Reinforced Armor	2	Front
Target Designator	1	Designate targets for Guided weapons

Flaws

Name	Rating	Game Effect
Annoyances	-	Continual lurching movement when walking; stale smellin life-support system
Large Sensor Profile	2	Easier to detect
Sensor Dependent	-	Must rely on sensors in combat

Defects

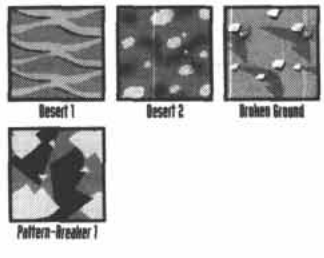
Name	Rating	Game Effect
None	-	-



Weapons Location Diagram

A	GU-20 Autocannon
B	2 x KJ-16 Minigun
C	Fireball II Launcher
D	SB-90 Assault Gun

Typical Camouflage



Bryce Hubbard (order #5318102)

4.17.1 WACS-01FS-HAST ASSAULT MAMMOTH

The *Assault Mammoth* is a close-combat variant of the standard model and is designed to fight in confined environments such as cities and canyons. To this end, the *Assault Mammoth* is even more sturdy and well armored than the standard *Mammoth*, with additional frontal armor. The crewmen, one pilot and one system operator/gunner, sit in a tandem configuration, with the pilot on the right and the gunner on the left, just above him. Some production runs reverse this set-up, although the machine's performance is unaffected. With the exception of the turret-mounted, 40 mm heavy autocannon, which has a decent range, the *Assault Mammoth*'s armament is designed with brutal, short range combat in mind. Instead of the mixed missile/snub cannon payload of the basic *Mammoth*, the machine carries twin snub cannons, one in each battle arm. The awesome firepower of these virtually ensure that the *Assault Mammoth* will destroy anything placed in front of its barrels, even a heavy tank. Each gun draws its ammunition from a twenty-five-shot heavily armored magazine mounted right behind the barrel assembly. Like in the standard model, two swivel-mounted machineguns on either side of the body protect the vehicle by picking up any troublesome infantry units, hopefully before they can use a missile launcher, which remain dangerous despite the *Assault Mammoth*'s heavy armor.

The *Assault Mammoth* is almost as old as the *Mammoth* design itself. Its time in the spotlight came during the vicious city-clearing fights of the War of the Alliance, where *Assault Mammoths* were extensively used against hovertanks and enemy infantry alike. Armed with anti-armor and canister ammunition, they were often the first to wade in and the last to come out. *Assault Mammoths* and their crews served especially valiantly during the Battle of Baja in TN 1916, when war-correspondent Konnor Garysson made them famous thanks to trideo reports from the front. While many *Mammoths* were switched to *Assault* configuration during the war, the proportion of *Assaults* has steadily dropped since then. In the Badlands operations more common to current strategy, the lack of ranged firepower is a critical weakness for the *Assault*, especially when deployed against missile or field-gun equipped *Nagas*.

Vehicle Specifications

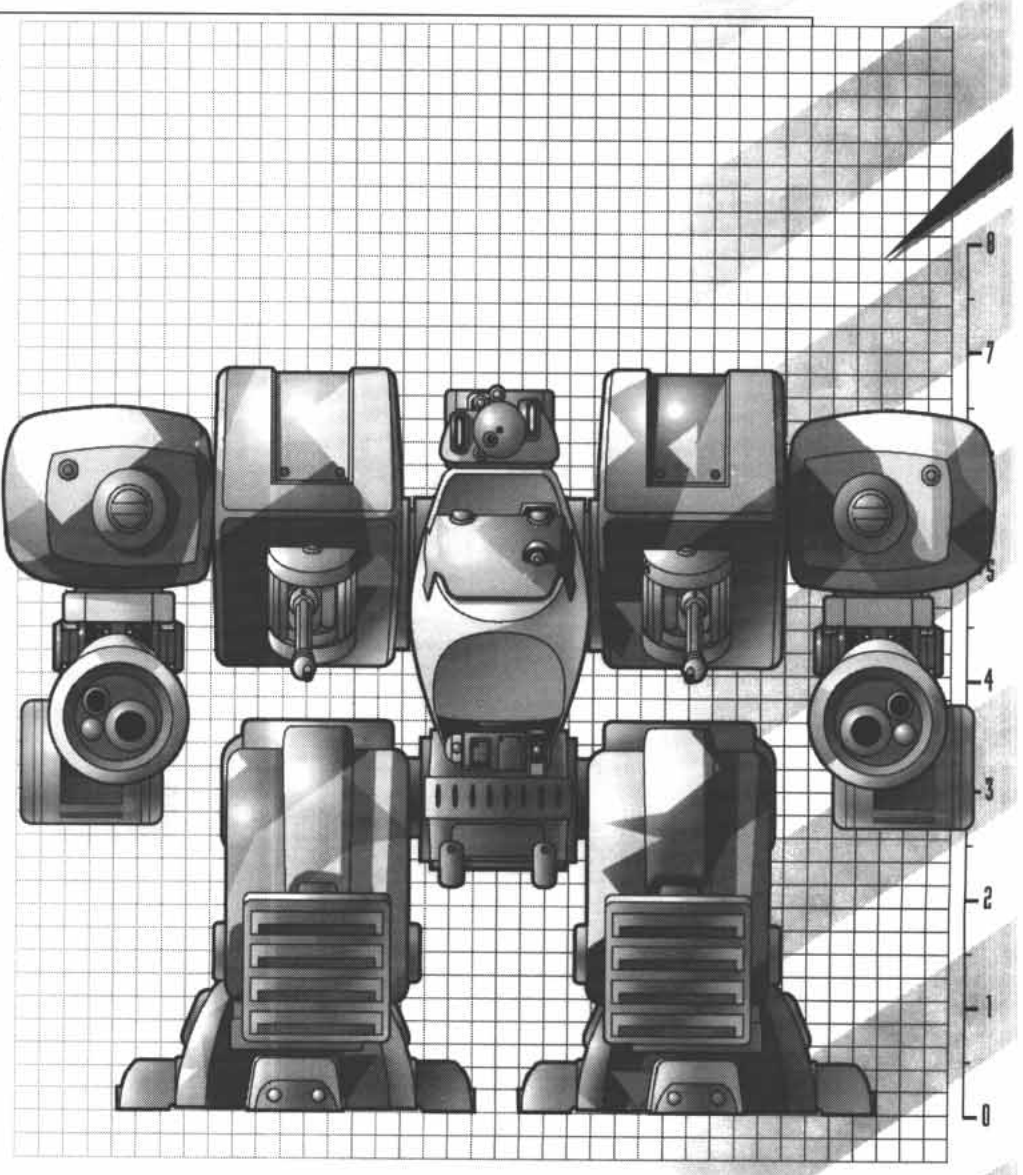
Code Name:	Assault Mammoth
Production Code:	WACS-01FS-HAST
Production Type:	Limited Production
Cost:	2,202,632 marks
Manufacturer:	Hartmore Motor Company
Use:	fire support/assault
Height:	6.8 meters
Width:	9.2 meters
Average Armor Thickness:	145 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	22,600 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	HAC (T, 150 rnds), SC (F, 25 rnds)
Remove:	ATM, MAC
Change:	Upgrade original SC ammo to 25, Reinforced Armor to Rating 4, Downgrade Comm to 0/10 km, Sensors to 0/2 km
Modified Threat Value:	991
Offensive / Defensive:	1814 / 313
Miscellaneous:	846

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	3

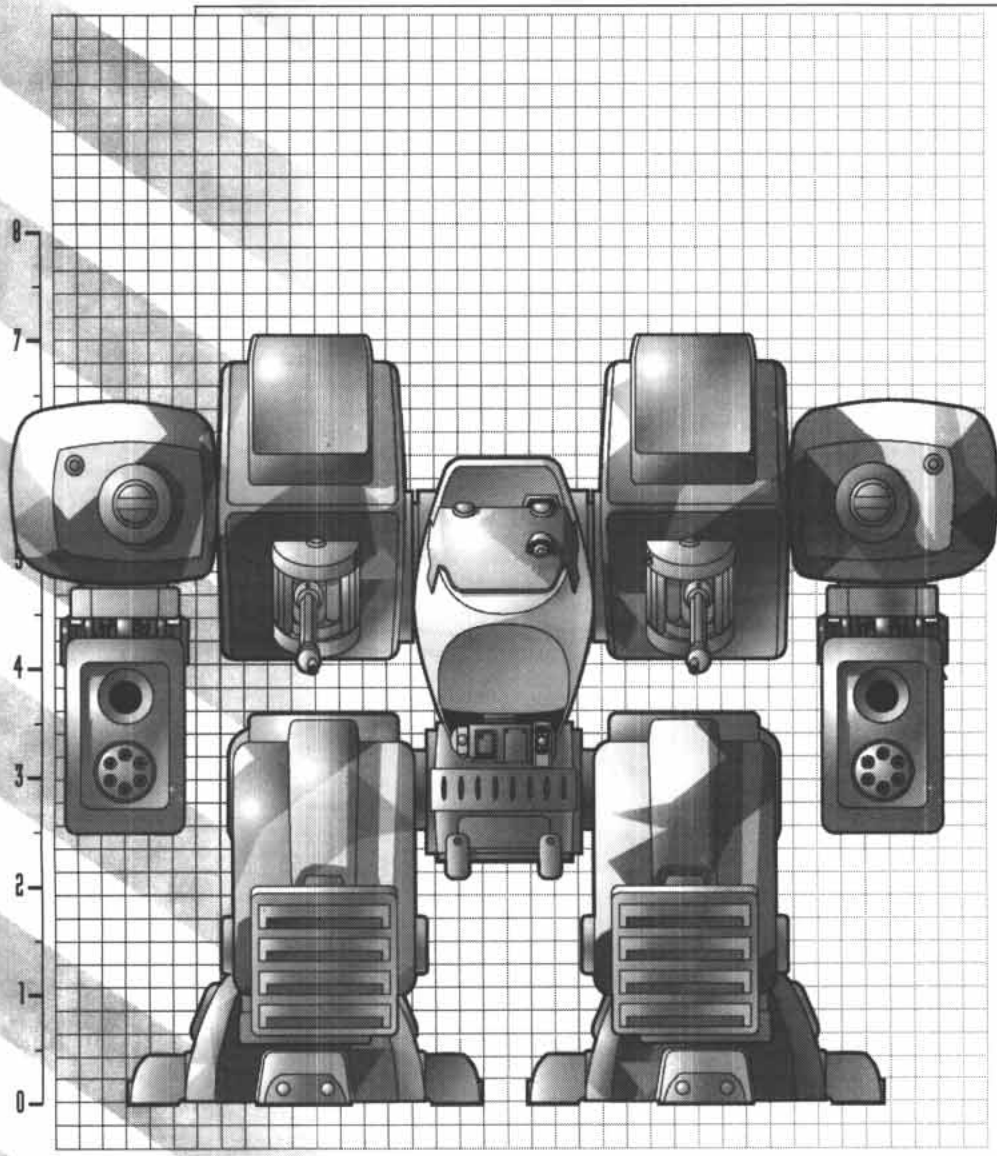


Bryce Hubbard (order #5318102)

4.17.2 WACS-01FS-SRT BRAWLER MAMMOTH

A derivation of the *Assault Mammoth* dating back to the urban warfare typical of the early stages of the Terranovan counter-offensive during the War of the Alliance, the so-called *Brawler Mammoth* was designed to serve as a platform for lighter weaponry designed for saturation fire against infantry and lightly-armored targets rather than the devastating anti-armor firepower of the *Assault Mammoth* and *Mammoth* striders. The arm-mounted Fireball II anti-tank missile launcher and SB-90 assault gun were replaced by new fragmentation 'shotgun cannons' released by Northco, capable of delivering a shower of flechette rounds into light targets. The turret-mounted GU-20 autocannon on the *Mammoth*'s top was removed and a piar of heavier GU-20s, which could not only be used to powerful effect against light armor, but be pressed into anti-aircraft service if necessary, were installed in the arms. This relatively light weaponry was supplemented by two large shoulder-mounted DiMaean Saber-16 rocket bays containing a stunning number of light rockets capable of mowing down an entire street's worth of enemy infantry and vehicles in a blinding hail of explosions and shrapnel. Some variants even went into battle with one of the missile pods reversed, providing a devastating distraction for pursuers.

Brawler Mammoths (along with their *Assault Mammoth* brothers) saw some of the dirtiest and bloodiest city combat during the War of the Alliance. They have been criticized in recent years for filling a niche best left to Gears, but *Brawlers* answered a real need for a well-armored, anti-GREL platform and served with distinction during the War. *Brawlers* are now somewhat rare because of the end of the conflict they were designed to fight, but some do remain in service. Northern Guard and national army units assigned to face rovers and other bandits often appreciate the *Brawler* because it can be safely driven into the heart of a base and devastate any or all of the lightly armored vehicles used by these outlaws. As the units prepare for conflict against the armored columns of the MILICIA and Republican Army, however, many units are requesting that their *Brawlers* be returned to standard *Mammoth* or *Assault Mammoth* configurations, with their heavy anti-tank weaponry.



Vehicle Specifications

Code Name:	Brawler Mammoth
Production Code:	WACS-01FS-SRT
Production Type:	Limited Production
Cost:	1,397,451 marks
Manufacturer:	Hartmore Motor Company
Use:	assault strider
Height:	6.8 meters
Width:	9.2 meters
Average Armor Thickness:	145 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	21,890 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	60 hexes/3 km
Communication Range:	240 hexes/12 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	2 MACs (F, 150 rounds each), 2 VLRP/128s (F, R, 256 rounds each), 2 FGCs (F, 20 rounds each)
Remove:	All weapons except for the two LMGs
Change:	n/a
Modified Threat Value:	699
Offensive / Defensive:	1360 / 313
Miscellaneous:	423

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	3

Bryce Hubbard (order #5318102)

4.17.3 WACS-01FS-C COMMAND MAMMOTH

Nicknamed "Commy" and easily identified by its large, transparent tandem cockpit canopy, the *Command Mammoth* appeared in the last phase of the War of the Alliance as a command vehicle to fill the Northern Guard's pressing need for a mobile coordination unit capable of defending itself against attack. The command package of the *Command Mammoth* included a state-of-the-art Hyperion Werks sensor array and a Lynton Electronics XP-12 communications system. An Abaline Tactical Systems TOC-27 multiplexed tactical coordination computer featuring a full range of command software and integrated communications and resource management subroutines made unit command from the cockpit of the "Commy" very efficient.

Often rebuilt from the chassis of heavily damaged *Mammoths*, *Command Mammoths* carried substantially less armor than their predecessors, instead relying on new ECM and anti-missile systems, supplied in kit form by Hartmore, for defense and concealment purposes. Electronic warfare equipment was packaged in a small jamming pod added to the *Mammoth*'s standard communication array, while the anti-missile defense system came in the form of an automated, high rate-of-fire machinegun in a secondary turret mounted on top of the GU-20 autocannon turret. Not intended for direct combat use, "Commies" featured reduced frontal armor in exchange for a clear canopy allowing better battlefield coordination. They often "donated" their heavy weapons to other units in desperate need of them, though many carried an additional grenade launcher for use against possible GREL hunters. Most *Command Mammoths* kept the SB-90 assault gun as a main weapon, but not the Fireball-II missiles. The right battle arm was often replaced with a simple manipulator arm adding versatility to the *Command* variant and allowing it to reload its assault gun. The strider became the ideal "battlefield office" for battalion commanders managing the front and saw a great deal of action among the armored units that led the drive in the Barrington Basin. Although the TOC-27 command computer and other sub-systems are no longer as cutting edge as they once were, *Command Mammoths* remain perennial favorites among front-line commanders.

Vehicle Specifications

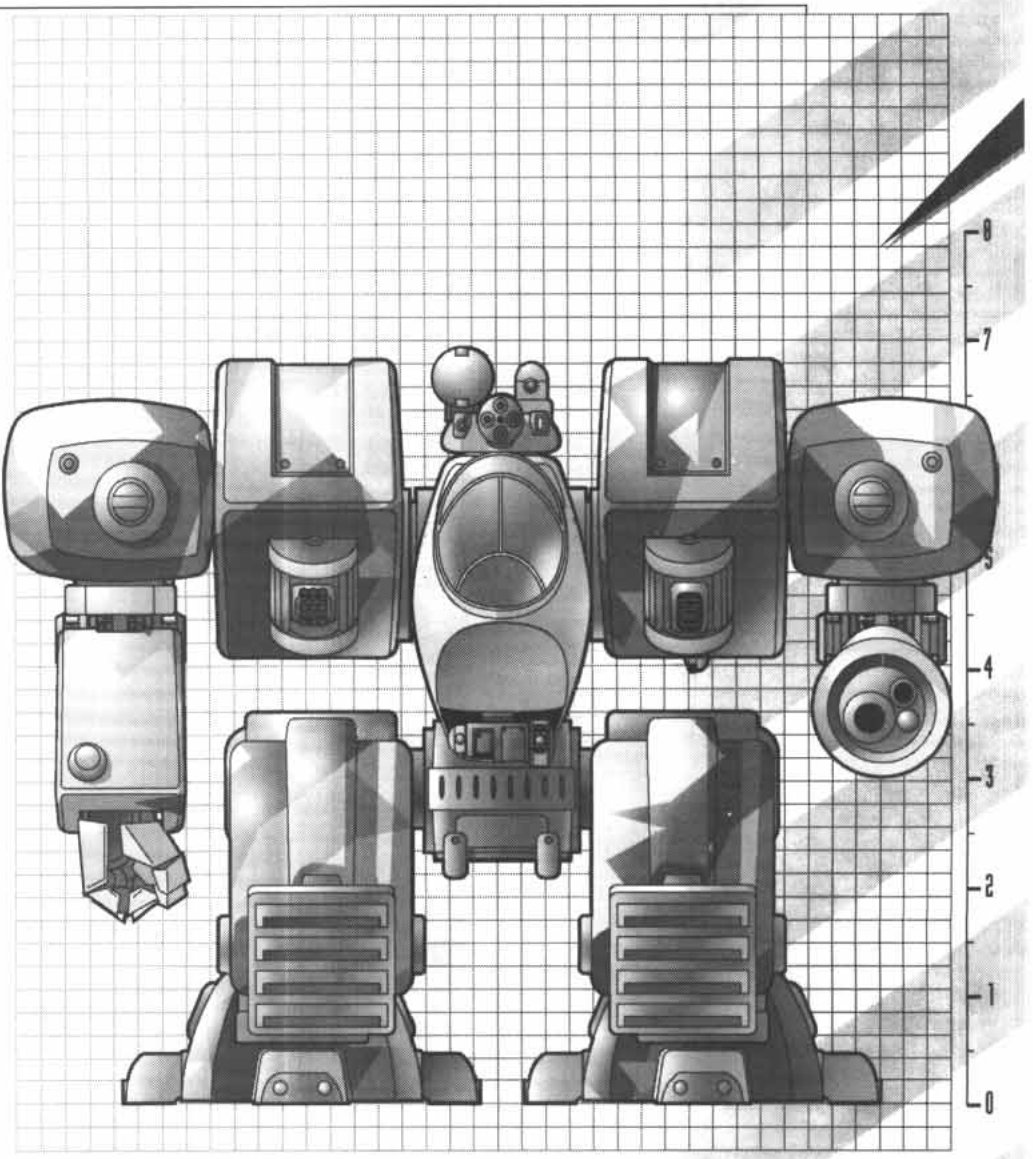
Code Name:	Command Mammoth
Production Code:	WACS-01FS-C
Production Type:	Limited Production
Cost:	4,676,554 marks
Manufacturer:	Hartmore Motor Company
Use:	command strider
Height:	6.8 meters
Length:	9.2 meters
Average Armor Thickness:	140 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	21,700 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	120 hexes/6 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	APGL (F, 12 shots), Manipulator Arm (Size 9, can punch), ECM (Rating 2), Laboratory: Leadership (Rating 1), Anti-Missile System (Rating 1, 50 rnds).
Remove:	Right Battle Arm, both LMGs, ATM, Target Designator, Reinforced Armor (Front), Sensor-Dependent
Change:	Upgrade Sensor to +2/6km, Communication to +1/20km
Modified Threat Value:	1754
Offensive / Defensive:	1032/313
Miscellaneous:	3916

Vehicle Availability

Availability Threshold:	7
Maximum Number of Units in the Field:	1

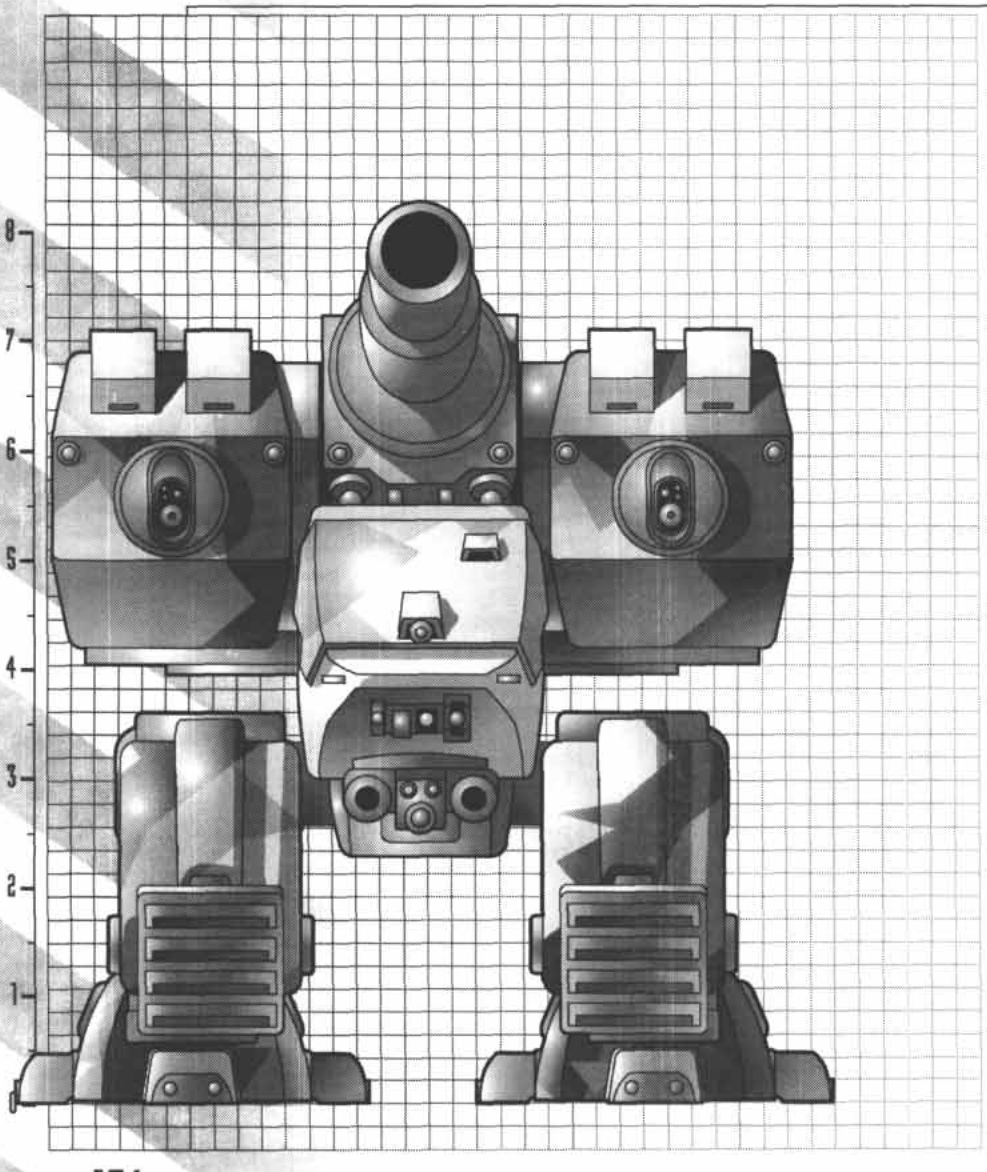


Bryce Hubbard (order #5318102)

4.17.4 WACS-01FS-ART DAMOCLES

The *Damocles* is a new artillery strider being developed by the engineers at Hartmore. Although based on the basic structural frame of the standard *Mammoth* strider, it features a more massive torso and sheds the two battle arms that normally carry the majority of the armament. The crewmen, one pilot and one system operator/gunner, still sit in the classic tandem configuration. The *Damocles*'s armament is designed with long-range fire-support in mind. The rear body of the machine has been entirely reconfigured to house the large KLG-675 artillery gun. The gun draws its ammunition from a twenty-shot heavily armored clip magazine mounted underneath, where the auxiliary engine is normally located on the *Mammoth*. The shells are grouped in four salvoes of five, ready to be loaded into the gun. Reliable Sergon Optics laser turrets are placed on the shoulders to protect the unit against air strikes and counter-battery fire. Finally, two underslung machineguns protect the vehicle from any troublesome infantry units. The chassis does not have the battle arms normally used by the standard *Mammoth*, which often cause problems to inexperienced pilots trying to get the machine back on its feet after a fall. The stabilizer pads of the original design are still present and are put to good use by the *Damocles*.

Although the *Damocles* is still a relatively new design, several test variants of the basic chassis have been designed and tested by the project's engineers. Among those, a command unit, equipped with a satellite uplink, seems to be the most promising, though the system interface has caused many problems that have yet to be solved. Ideally, each battery of *Damocles* would have at least one of these in its ranks, enabling them to answer fire mission requests from almost anywhere within firing range. A few artillery units of the Northern Guards are now fielding the *Damocles* for evaluation and combat trials. Unfortunately, all models currently in existence seem to suffer from some kind of flaw, not a few of them being directly related to the unorthodox body layout chosen for the machine. High Command hopes thse field trials will help the Hartmore engineers figure things out. For its part, Hartmore Motor Company has hired a team of third-party consultants to help solve the problems which seem to be plaguing their new machine.



Vehicle Specifications

Code Name:	Damocles
Production Code:	WACS-01FS-ART
Production Type:	Early Production
Cost:	719,708 marks
Manufacturer:	Hartmore Motor Company
Use:	artillery strider
Height:	6.8 meters (8.5 m w/ LAG)
Width:	6.7 meters
Average Armor Thickness:	145 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	23,450 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	LAG (FF, 4 salvoes), 2 x SLC (F, 15 shots ea.), 2 x HMG (F, 250 rnds ea.)
Remove:	All weapons, both Battle Arms, Improved Off-Road Ability, Target Designator
Change:	Upgrade HEAT Resistant Armor to rating 6, Reinforced Armor: Front to Rating 4, change Defects to Annoyance(-1 Piloting to get back up) and Problem Prone
Modified Threat Value:	913
Offensive / Defensive:	1663 / 313
Miscellaneous:	763

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	5

Bryce Hubbard (order #5318102)

4.17.5 WACS-01FS-ART/A DAMOCLES A2

The *Damocles* fire-support strider has been heavily tested during the past few seasons. While none have been placed in true combat situations, numerous wargames and extended field exercises have left the strider and support crew with an intimate knowledge of the capacities and limitations of the vehicle. The engineers at Hartmore relied heavily on the field reports gathered by the units to which the pre-production *Damocles* had been assigned when doing further work on the strider, and the result is a sterling improvement of the original. The A2 production model differs in a number of ways from its predecessor, but a great majority of the changes are minute and concern only with the placement of some internal systems for increased accessibility. The AMA2100 databus connectors were also exchanged for the more common AMA2080, which simplified maintenance and resupply.

What is definitely different from the A1 pre-production model is the external appearance of the *Damocles A2*. Twin manipulator arms, adapted from an upscaled Heavy Gear arm structure, have been installed to allow some operational flexibility to *Damocles* crew. The arms are triple-jointed and quite dexterous for their size, allowing the machine to field reload its own ammunition magazines. The arms also make it easier to maintain the machine's balance and bring it back to its feet after a fall (one of the most common complaints about the *Damocles* was how hard it was to get back up). Twin auxiliary generators have also been installed in bulges in the rear torso; the additional power provided to the drive train allows the *Damocles* to make its way through rougher terrain just like its *Mammoth* cousin. The rest of the armament, namely the large KLG-675 howitzer and the pair of close defense Sergon Optics laser turrets have both performed admirably after a rocky shakedown period. The A2 version is slated to be the final mass-production model of the fire-support vehicle. Chem Harleall, Chief Engineer of Production at the Hartmore plant, is confident that the new model will be in full production within the next two cycles. He has already arranged for the first production run of the A2 to be delivered to the Northern Guard, on condition that the current trials continue to go well.

Vehicle Specifications

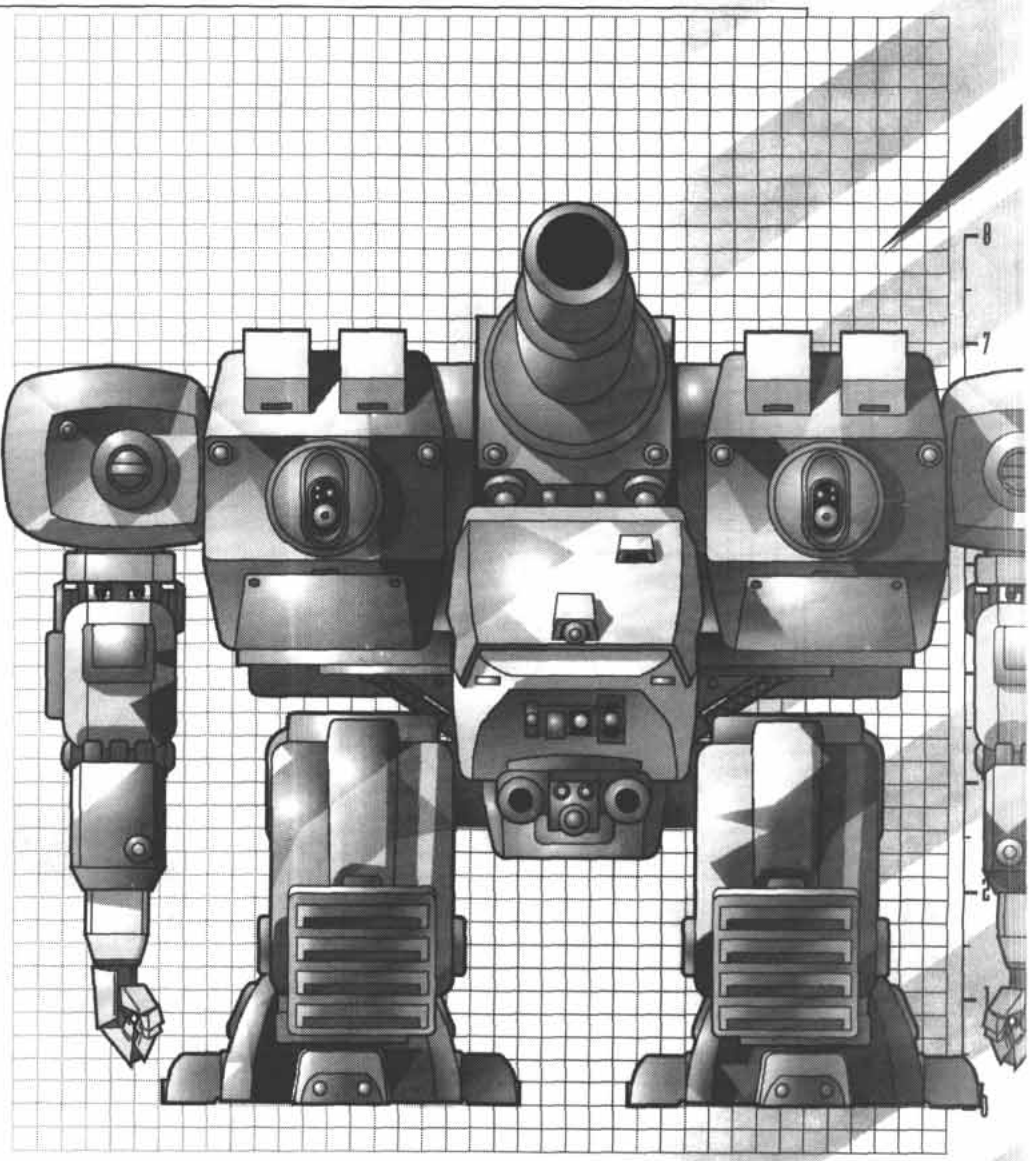
Code Name:	Damocles A2
Production Code:	WACS-01FS-ART/A
Production Type:	Limited Production
Cost:	2,029,573 marks
Manufacturer:	Hartmore Motor Company
Use:	artillery strider
Height:	6.8 meters (8.75 m w/ LAG)
Width:	8.9 meters
Average Armor Thickness:	145 mm
Armor Material:	durasheet w/ceramic
Standard Operational Weight:	23,700 kg
Primary Movement Mode:	Walk (31 kph)
Deployment Range:	320 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2700T V-engine x 2, ceramic IC x 1
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	LAG (FF, 4 salvoes), 2 x SLC (F, 15 shots ea.), 2 x HMG (F, 250 rnds ea.), 2 x Manipulator Arm (Rating 8, can punch)
Remove:	All weapons, both Battle Arms, Target Designator
Change:	Upgrade HEAT Resistant Armor to rating 6, Reinforced Armor: Front to Rating 4, upgrade Communication to 0/15km
Modified Threat Value:	913
Offensive / Defensive:	1663 / 313
Miscellaneous:	763

Vehicle Availability

Availability Threshold:	8
Maximum Number of Units in the Field:	5

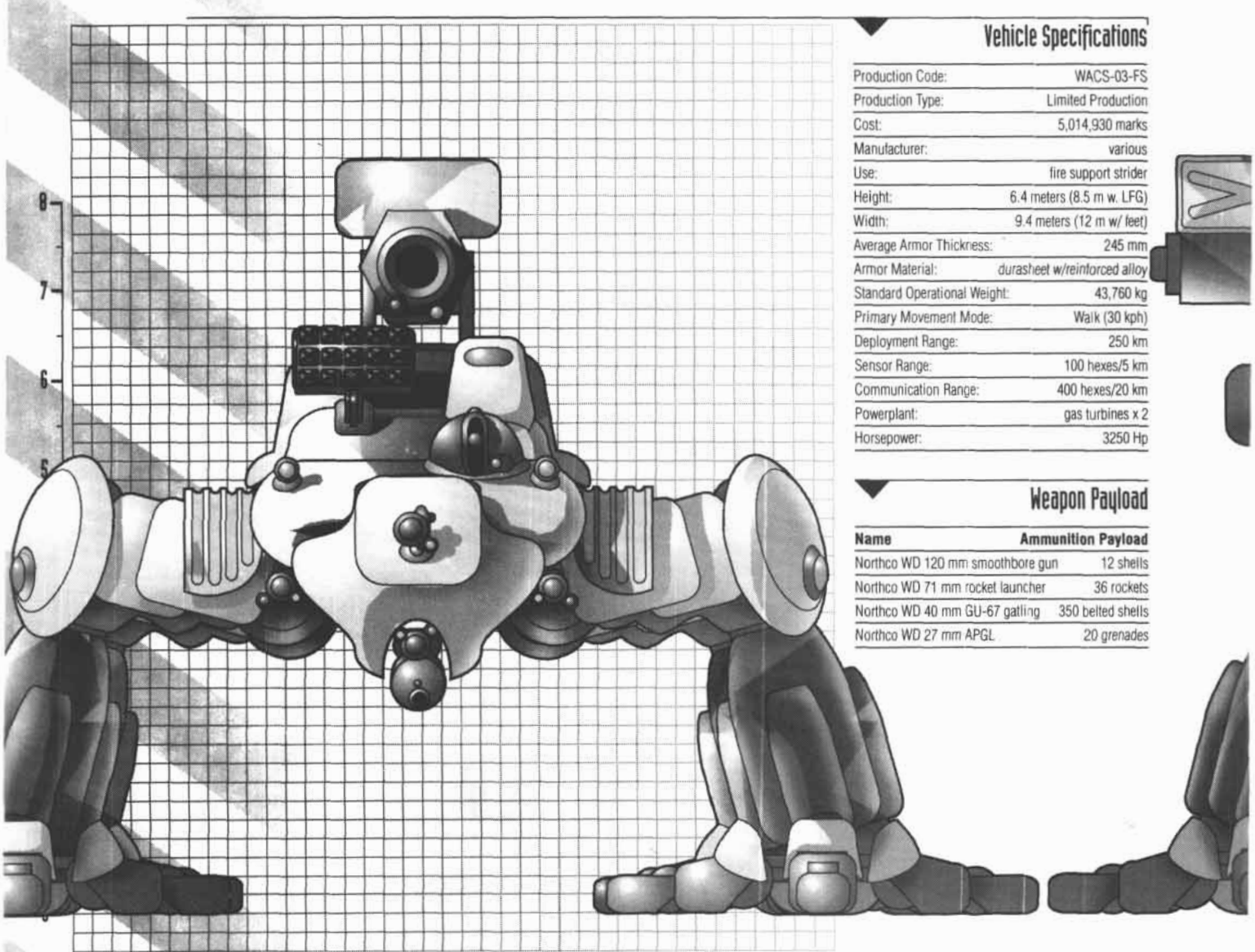


Bryce Hubbard (order #5318102)

4.18 WACS-03-FS THUNDERHAMMER

The basic layout of the *Thunderhammer* is a rectangular chassis carried by four massive legs placed at each corner. Each leg ends in a stubby claw capable of finding purchase on the roughest ground. The entire vehicle is covered with thick armor plating that is evenly spread on all locations, front and back. The two crewmen, the commander/pilot and the system operator/gunner, ride in a fully enclosed armored cockpit located on top of the main hull. The sensor array is divided into several pods located at various points across the body, which makes the sensor equipment very hard to take out with just one shot. The *Thunderhammer* features an elaborate system of automatic loading and secondary systems that allow two crewmen to operate the massive strider with very little difficulty and allow the *Thunderhammer* to launch several shells in short order.

The main armament of the *Thunderhammer* is the large Northco Weapons Division 120 mm smoothbore gun carried on its back on a 360° mount. The 12 rounds of ammunition are carried within an armored box that moves with the gun, reducing damage to the main body should the ammunition be hit. The ammunition clip can be replaced very rapidly by a crane-equipped support vehicle, and the clip can accept a large variety of ammunition types. A 40 mm autocannon mounted in a small turret at the front and a 71 mm rocket launcher placed beside the cockpit act as backups and close-defense weapons. A small belly turret contains a 27 mm light grenade launcher for use against infantry and other soft targets that come too close. The armament of the *Thunderhammer* is designed for close fire-support duties rather than pure artillery duty, a function covered by the *Damocles* strider and tracked vehicles such as the *Verder*. The *Thunderhammer* is thus deployed near the cutting edge of a Northern advance and is usually accompanied by a shielding squadron of Gears to prevent tank-hunting units from taking advantage of the strider's low mobility. The *Thunderhammer*'s close-defense weaponry is impressive enough, however, that the shielding squadron can be spared if strictly necessary. Whenever possible, *Thunderhammer* crews will also use rough terrain as a shield for their vehicle, taking advantage of its ability to move across broken ground with surprising ease.



Vehicle Specifications

Production Code:	WACS-03-FS
Production Type:	Limited Production
Cost:	5,014,930 marks
Manufacturer:	various
Use:	fire support strider
Height:	6.4 meters (8.5 m w. LFG)
Width:	9.4 meters (12 m w/ feet)
Average Armor Thickness:	245 mm
Armor Material:	durasheet w/reinforced alloy
Standard Operational Weight:	43,760 kg
Primary Movement Mode:	Walk (30 kph)
Deployment Range:	250 km
Sensor Range:	100 hexes/5 km
Communication Range:	400 hexes/20 km
Powerplant:	gas turbines x 2
Horsepower:	3250 Hp

Weapon Payload

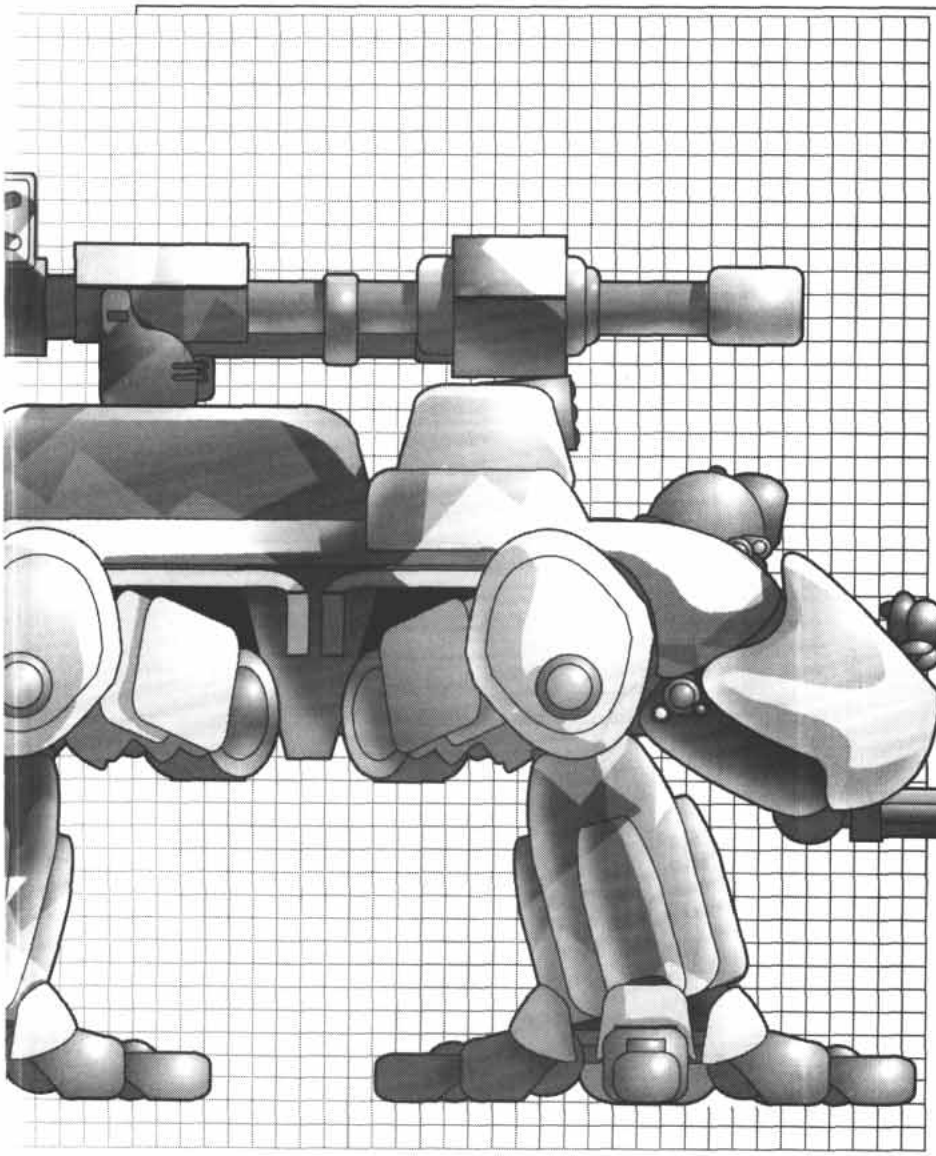
Name	Ammunition Payload
Northco WD 120 mm smoothbore gun	12 shells
Northco WD 71 mm rocket launcher	36 rockets
Northco WD 40 mm GU-67 gatling	350 belted shells
Northco WD 27 mm APGL	20 grenades

Bryce Hubbard (order #5318102)

SERVICE RECORD

The *Thunderhammer* was introduced in the TN 1870s and has served with distinction ever since. A joint venture of many different manufacturers, the *Thunderhammer* quickly found its way into the arsenals of all the Northern armies. Its finest hours undoubtedly came during the War of the Alliance. *Thunderhammer* crewmen were known to take their machines into the densest mountain terrain to rain shells upon Colonial Expeditionary Force positions on the plains below, using the cover of the rocks to escape scouts and counter-battery fire. The greatest of these campaigns occurred at the end of the war, when a combined Terranovan force comprised of *Thunderhammers* paired with *Desert Viper* and *Alpine Hunter* mountain Gears made their way through the Westridge Range clearing out the areas occupied by the CEF. This attack was part of the initial stage of the final drive into the Barrington Basin and was a resounding success, cutting the CEF off from the valuable occupied communities in the regions that could supply food and supplies for the beleaguered invasion force. According to joint Terranovan press releases, more vehicles were lost to piloting accidents in the treacherous gorges than to enemy fire during the Westridge campaign.

In the years since the War of the Alliance, the *Thunderhammer* has continued to be one of the keystones of the strider forces of the North. The massive weapons platform has seen action in the Badlands in recent cycles and is currently returning the sight of its greatest accomplishment. The Westridge Range is an important North-South rail axis and has become the birthplace of an Arthurian-sponsored coalition of independent communities. Both polar leagues have moved significant military resources into the region to help convince locals that they must choose sides if they are to survive and to guard their strategic interests. *Thunderhammers* can currently be found deployed in strategic locations from Wounded Knee to Prince Gable. The striders have been paired with the more recent *Mountain Jaguars* which provide excellent escort and scout services, forming dangerous mountain teams capable of calling down massive firepower. Locals have made several complaints to Northern diplomats about the presence of Northern military might, especially after teams of *Thunderhammers* were placed in clear sight overlooking the Fort Neil to Wounded Knee rail link.



General Stats

Threat Value:	2315
Offensive / Defensive:	5490 / 613
Miscellaneous:	841
Size:	12
Original Default Size:	13
Indv. Lemon Dice:	2
Crew:	2
Bonus Actions:	2

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	5
Secondary Movement Mode:	n/a
Combat Speed:	-
Top Speed:	-
Maneuver:	-2

Electronics

Sensors:	0
Communications:	0
Fire Control:	+1

Armor

Light Damage:	35
Heavy Damage:	70
Overkill:	105

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2

Bryce Hubbard (order #5318102)

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
WD 40 mm GU-67 Gatling	HAC	Forward	1	350
WD 120 mm Smoothbore Gun	LFG	Turreted	1	12
WE 71 mm rocket launcher	MRP/36	Forward	1	36
WD 27 mm APGL	APGL	Turreted	1	20

Perks

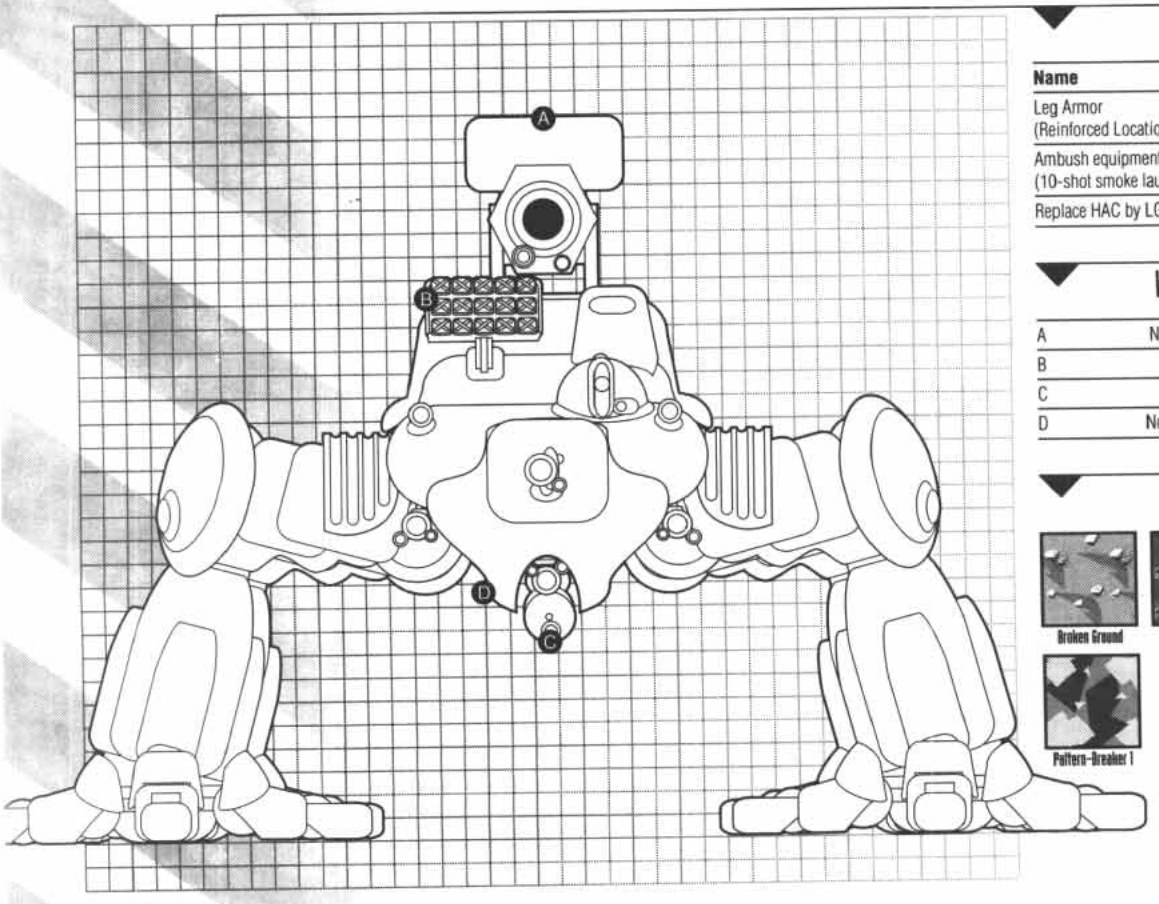
Name	Rating	Game Effect
Ammo/Fuel Containment System	-	Subtract 2 from "Ammo/Fuel" hit rolls
Automation	2	Act as two crewmen
Back-up Sensors	-	Absorbs first "Sensor" hit
Hostile Environment Protection	-	Desert
Improved Off-road Capacity	-	-1 MP cost per hex, min. cost 1
Improved Rear Defense	-	Rear defense penalties reduced by 1

Flaws

Name	Rating	Game Effect
Large Sensor Profile	2	Easier to detect
Sensor Dependent	-	Extremely small vision slits

Defects

Name	Rating	Game Effect
None	-	-



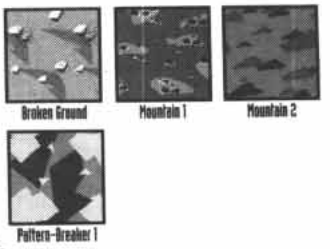
Optional Equipment

Name	Modified TV
Leg Armor (Reinforced Location Armor 1, Movement)	2324
Ambush equipment (10-shot smoke launchers, Camo Netting)	2353
Replace HAC by LGL (Front, 30 shots)	2238

Weapons Location Diagram

A	Northco WD 120 mm smoothbore gun
B	Northco WD 71 mm rocket launcher
C	Northco WD 40 mm GU-67 gatling
D	Northco WD 27 mm APGL (not visible)

Typical Camouflage



Bryce Hubbard (order #5318102)

4.18.1 WACS-03-ENG RECOVERY HAMMER

A cross between a *Thunderhammer* and an overgrown piece of construction machinery, the *Recovery Hammer* was born out of the economic depression following the end of the War of the Alliance. Norlight army units still stationed around the Badlands after the war, particularly in the Pacifica, Westridge and Serpentine mountain ranges, found themselves cut off from supplies and spare parts for weeks at a time while still fighting GREL stragglers and malcontents in the foothills. Cannibalizing recovered machinery became a must and many damaged military vehicles were retrofitted for the arduous task of locating and retrieving these isolated hulks. The off-road capabilities of the *Thunderhammer* chassis made it a favorite choice for technicians preparing new recovery vehicles to supplement the tracked *Baxters* already in the field. The supply and maintenance branches of the Northern Guard attempted to fill the need for recovery vehicles themselves, but the post-war economic situation and the huge number of troops still in the field made the delivery of standard vehicles difficult and their supply became extremely limited.

The high-command eventually issued a standard set of modification specifications for these impromptu vehicles, the largest of which was the *Recovery Hammer* (a.k.a. the "Claw Hammer"). Sporting a giant gripper-crane in place of its original artillery weapon, towing lugs, and a more conventional open-windowed cockpit, the *Recovery Hammer* rapidly became a familiar sight in many post-war Northern Guard border regiments, hauling damaged vehicles off the battlefield. The *Recovery Hammer* was developed for use in areas still under contention by GREL hold-outs or ambitious rovers and some weaponry was added to its standard features to deal with the scavengers who might claim fallen Northern materiel. Twin 30mm automatic cannons were installed in place of the old 40mm anti-armor gun for use against lightly or unarmored opponents. In the early days its service, the *Recovery Hammer* was even occasionally pressed into patrol duty when no other vehicles were available. Most *Recovery Hammers* still in service retain the cannons despite the fact that they are now rarely forced into anything resembling combat.

Vehicle Specifications

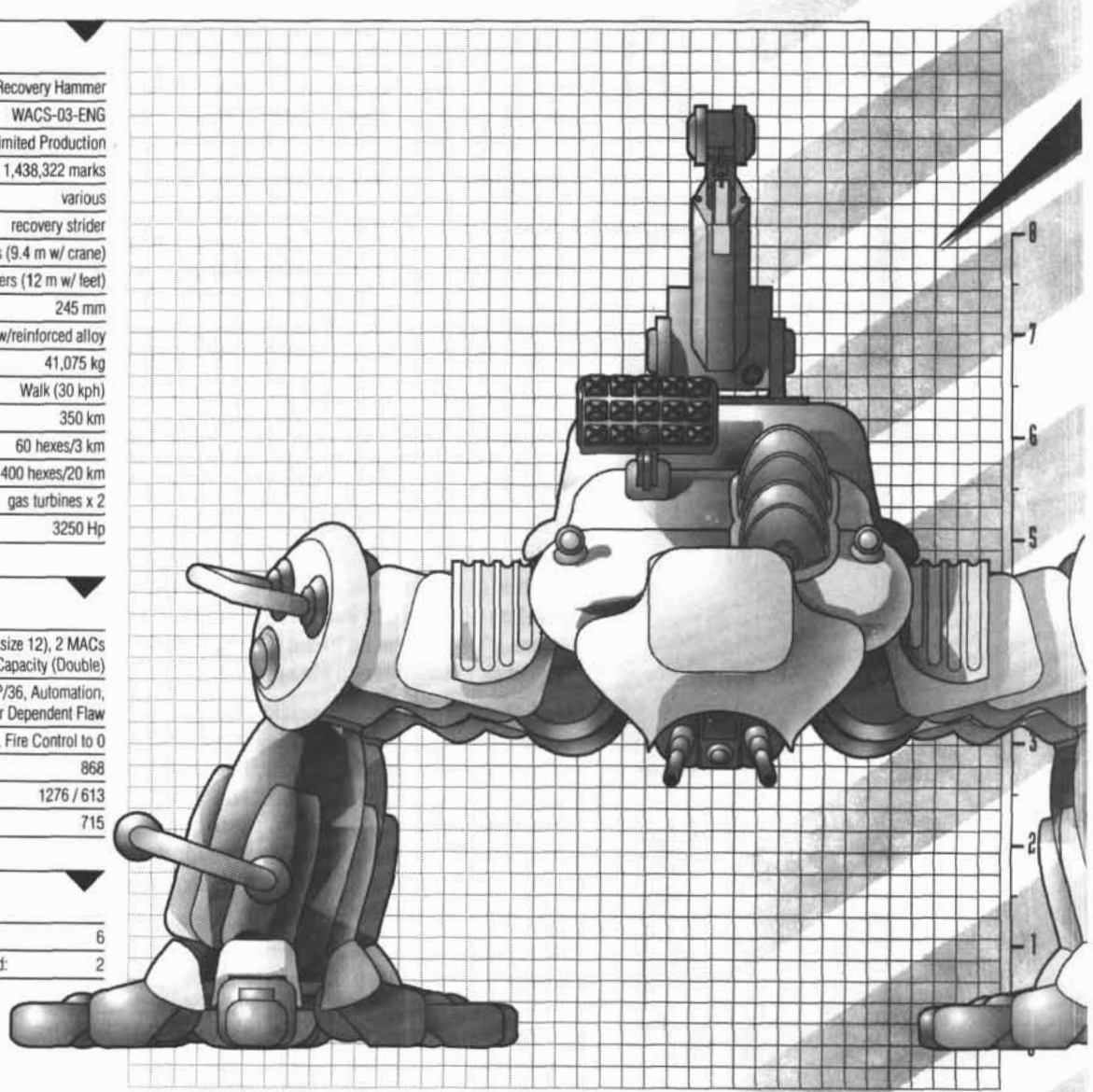
Code Name:	Recovery Hammer
Production Code:	WACS-03-ENG
Production Type:	Limited Production
Cost:	1,438,322 marks
Manufacturer:	various
Use:	recovery strider
Height:	6.8 meters (9.4 m w/ crane)
Width:	9.4 meters (12 m w/ feet)
Average Armor Thickness:	245 mm
Armor Material:	durasheet w/reinforced alloy
Standard Operational Weight:	41,075 kg
Primary Movement Mode:	Walk (30 kph)
Deployment Range:	350 km
Sensor Range:	60 hexes/3 km
Communication Range:	400 hexes/20 km
Powerplant:	gas turbines x 2
Horsepower:	3250 Hp

Modifications

Add:	Tool Arm (T, size 12), 2 MACs (F, 400 rounds each), High Towing Capacity (Double)
Remove:	All weapons except MRP/36, Automation, Backup Sensors, Sensor Dependent Flaw
Change:	Sensors to 0/3km, Fire Control to 0
Modified Threat Values:	868
Offensive / Defensive:	1276 / 613
Miscellaneous:	715

Vehicle Availability

Availability Threshold:	6
Maximum Number of Units in the Field:	2



Bryce Hubbard (order #5318102)

5 RESEARCH AND DEVELOPMENT MODELS

TEST DRIVE

Dunkan Polson slipped the safety harness latches into the catches on his chest and switched on his voice communications system. A mild burst of static coursed through the earphone before the channel cleared.

"Okay, I'm in." Polson pulled down the face-plate on his IHADS helmet, but kept it in simple HUD mode for the time being. Flicking a switch on the left joystick, he brought up the vehicle status screen, green and orange bars and numbers began to float before his eyes. "All systems are go."

"Looks good. We have green lights across the board. Switch to IHADS and lets get this show on the road."

"Roger." Polson flipped another switch and put his system in full virtual-reality mode. The claustrophobic interior of the *Cheetah Mk II*'s cockpit faded and Polson found himself looking out of the sensor eye of his new machine. With the switch of a button he gunned the V-engine, feeling its roar coming from behind the cockpit. His status readings came out clear and Dunkan switched to combat view, targeting cross-hairs and weapon status monitors popped up in front of him. "XL-1 ready to roll."

"Central ready. Bring her out for a spin, Senior Ranger."

Polson pushed the joystick forward and the *Cheetah* began to move smoothly. Polson usually piloted a *Strike Cheetah*, but this was his first time as a military test pilot. The Gear moved with a fluidity and responsiveness that surprised even him.

Rolling out on the SMS, Polson turned toward the obstacle course, the legs of the Gear automatically compensating for the short turn radius just as a speed skater would. The first part of the course was a simple slalom on a flat asphalt surface, and he gunned the prototype into the straight-away before the first "gate." The speed-ometer hit 85 kph when he entered the first turn. The whole chassis leaned into the turn, maintaining stability and reducing speed automatically, taking the next turn at roughly 55 kph. The SMS tires let out a mild squeal.

"Looking good XL-1. Any stability problem?"

"Nothing so far, central." Polson's voice was clipped as he concentrated on the task at hand. Moving the joysticks and pedals with precision — and allowing the NNet to make the proper adjustments — he brought the Gear out of the slalom with ease. The next set of obstacles loomed at the end of the asphalt testing grounds.

"Switching to primary movement system." Polson flipped a switch with his thumb and the *Cheetah* made a small leap as the toe tires retracted. The *Cheetah* was traveling at almost 95 kph when it began to run. The left leg hit the ground first and Polson winced when he heard the high-pitched whine of strained actuators and felt the shock travel through his spine.

Everything happened very quickly. At almost the same instant the system diagnostic screen overrode the tactical display to show a bank of red warnings flashing around a leg schematic. In Polson's ear, the technician at central was swearing profusely. He couldn't really pay too much attention, however, because the right leg hit the tarmac then and the *Cheetah* began to lurch and fall. Polson was vaguely aware that the lower left knee actuators were dead, that the knee remained bent when it tried to take another stride. Mostly he felt the terrible shock as five tons of Gear smashed into the tarmac and began to roll.

He worked the joysticks frantically to get the arms out to brace the torso, but the momentum was too great. With the roar of tearing metal one leg came off and part of the torso cracked. His right leg suddenly felt cold and he vaguely heard control in his headset before it went dead. He was saying something about calling emergency medical services to the field.

Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

5

5.1 THE FUTURE OF THE GEAR

Gear development has historically been intimately linked to warfare. The first *Hunter* was developed to ease the expansion of the United Mercantile Federation, both because the Federation wished to exercise power over its northern neighbors and because it foresaw conflict with the expanding Southern Republic and Mekong Dominion. The first burst of development occurred during the Merchant War between the UMF and the nascent Allied Southern Territories. Other leaps in Gear development occurred during major conflicts including the devastating St. Vincent's War, the Judas Syndrome and the War of the Alliance. The *Cheetah* and the *Jaguar*, the two most advanced Northern standard Gear models, were both developed as a result of the rise in North-South tensions that led to the Judas Syndrome. Many of their variants were created in the most desperate hours of the War of the Alliance.

With the return of polar tensions and many people on both sides speaking of renewed warfare, Northern Gear manufacturers have returned to the drawing board. New machines, new variants and new weapons systems are being drawn up and tested across the Arctic — not to mention the Antarctic and Badlands. Very few of these machines have been widely distributed, most remain simple problem-prone prototypes. As the call to war continues, however, Northern commanders expect field testing to begin and selected units to receive early production runs of many of these experimental machines.

Most Northern research is currently focused on improving the machines currently in the field. Instead of "reinventing the wheel," Northern military commanders have requested that contractors work with the resources already available by creating next-generation models of current machines. This strategy will permit the use of the same spare parts and limit the need for retraining technical personnel and pilots. All four of the standard Northern Gears (the *Cheetah*, *Grizzly*, *Hunter* and *Jaguar*) are being refurbished experimentally, although the *Jaguar* — a quite recent design — is being retooled for specific operational roles rather than technical enhancement. Some engineers and commanders, however, have argued that this "Mark II" philosophy is dangerous since it prevents totally new designs from appearing. The economic benefits of standardization tend to silence most of these critics.

Rajiv Padma

One of the top engineers at Shaian Mechanics, Rajiv Padma is currently in charge of the development of the *Cheetah* Mark II, successor to the immensely successful Mark I. Padma, however, is less than satisfied with his assignment. After two cycles of research and development, his team is still unable to markedly improve the *Cheetah* and its variants without causing massive system problems. Padma is well aware that the developers of the *Cheetah* already pushed the margins of safety on many materials to the limit: any increase in speed and maneuverability would cause stress fractures in the actuator system. The only way to improve the system, that he can see, is with new materials that have a greater strength to weight ratio. Unfortunately, these materials have not yet been developed. Padma's protests have fallen on deaf ears in Kenema. Shaian executives are convinced that they must continue to aggressively pursue the scout market if they are to go toe-to-toe with Northco. Padma has brought several metallurgists into his design team to try and develop the necessary materials (or get around the limitations of durasheet), but he holds little hope for success. This pessimism has displeased Shaian executives, who feel his attitude is damaging the morale of the design team and sabotaging its progress.

Padma had hoped to be involved in the development of the *Lion*, Shaian's heavy commando Gear project. The *Lion* is designed to capture the *Jaguar* and *Hunter* markets and is seen by most as the future of Shaian. If the *Lion* can achieve the success of the *Cheetah*, then the chief engineer of that project will receive a great deal of prestige and monetary rewards — Padma wants that prestige for himself. Instead, he is stuck in (as he sees it) a dead-end project where he can only fail. Padma's resentment has begun to reach dangerous levels, leading him to begin meeting covertly with "headhunters" from Keimuri Gear. Keimuri is offering him significant incentives to "cross-over" and refusing is becoming more and more difficult.

Roxanna Nikov

Born on 12 Winter TN 1899, Roxanna Nikov was raised by working-class parents in the industrial sector of Lyonnesse. Still a child at the time of the War of the Alliance, Roxanna nonetheless participated in the civilian brigades that helped organize the citizenry to work for the war effort. By the signing of the Treaty of Westphalia, Roxanna was eighteen and had already decided to become a Gear pilot. Two cycles later, she joined the United Mercantile Federation Army and began her training.

The UMFA's roguish style suited Roxanna to a "T," and she excelled during her training period despite a few heated rivalries with other students. Roxanna served four cycles in the UMFA as a combat pilot, but she found that the peaceful time of reconstruction after the War did not lend itself to the excitement she was looking for. In TN 1924, she requested a transfer to the UMFA test pilot program and received her papers the next season. Since then, she has become one of the most daring Gear jockeys in the UMF, piloting several of Northco's cutting-edge designs.

Roxanna is currently involved in the testing of the so-called *Hunter XMG*, a prototype designed to become the third generation *Hunter*. The *XMG* has been plagued with problems during testing, and Roxanna has twice been injured. The rush of danger is very seductive to her, however, and she has encouraged the Northco team to push the *XMG* even further. She has even suggested to project developer Dalia Floren that the *XMG* be entered in the TN 1934 Death Track 1000 in Innsbruck. Floren is very unsure about the prospect, fearing that the *XMG* will not be ready. The public relations department at Northco, however, loves the idea. Already they have begun to plan a promotional campaign in preparation for the event, much to Floren's dismay and Roxanna's delight. Floren has concluded that Roxanna must have a death-wish.

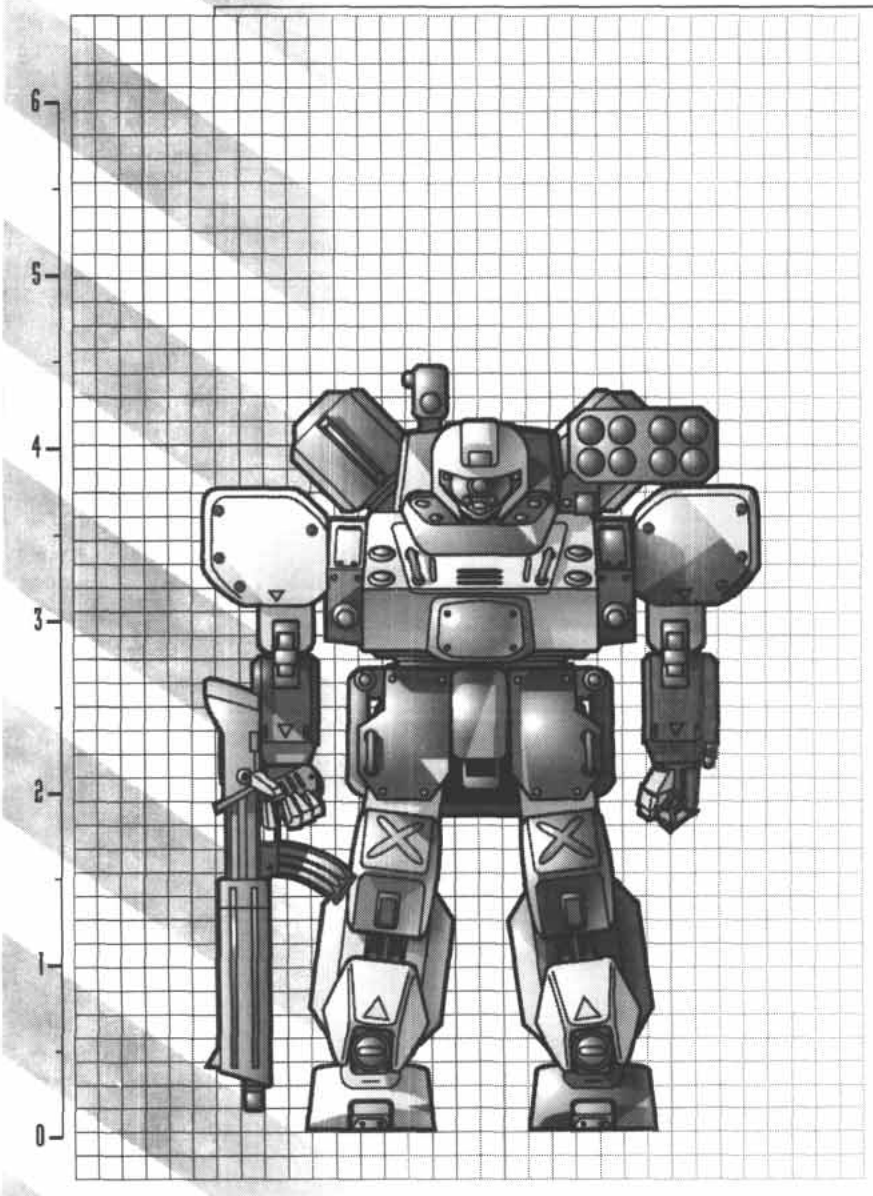
Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

5.2 S-C2001X CHEETAH MK2

To propose an improved version of the most popular scout vehicle in the North is a sure way to gain the full support of the military; to build it, however, is a much more difficult task. The top executives at Shaian Mechanics decided that only the original team could manage to top the first model and assigned Maud Gowyn and Jaymz Buhldane to the project. As the original designers, they have an intimate knowledge of the *Cheetah* and bring with them experience from its creation that can be used in the attempt to improve upon it. Unfortunately, while both engineers are extremely competent, it appears they are also hindered by the vision of the first *Cheetah*. Rather than redesigning some of the vital components of the *Cheetah*, they simply replaced them with new existing systems. The new sensor system — a WISE/04 Sentinel sensor boom — is both more reliable and easier to repair. The communication system went from a CHAT/8 to a BlueCom-driven transmission array, resulting in a broader frequency range with no increase in static. Some additional armor was slapped on, but resulted in a slower speed and a flaw in the structural integrity of the machine. Finally, the Cheetah Mk2's greatest improvement is a PDP4/11 semi-autonomous targeting system, allowing the pilot to track and fire upon enemies with great accuracy.

As a result of this rigid thinking, the *Cheetah* Mk2 shows no real inspiration. Its systems have been tweaked, and boosted, but no major conceptual improvements have been brought to the machine. This lack of originality, however, has not stopped the prototype from performing with all of the agility and speed that is to be expected from the *Cheetah* and then surpassing that. Shaian Mechanics, although satisfied with the results, has expressed some concerns that there were no innovations in the machine. Gowyn and Buhldane have answered that the budget restrictions made it difficult to spend any amount of time on research and development, and that it is both faster and more cost-effective to attach improved systems to the existing *Cheetah* frame. The resulting defects, however, may threaten the overall performance of the machine.



Vehicle Specifications

Code Name:	Cheetah Mk2
Production Code:	S-C2001X
Production Type:	Testbed Prototype
Cost:	163.000,000 marks
Manufacturer:	Shaian Mechanics
Use:	experimental scout Gear
Height:	4.1 meters
Width:	3.0 meters
Average Armor Thickness:	30 mm
Armor Material:	Durasheet w/composite
Standard Operational Weight:	5212 kg
Primary Movement Mode:	Walk (72 kph)
Secondary Movement Mode:	Ground (92 kph)
Deployment Range:	300 km
Sensor Range:	120 hexes/6 km
Communication Range:	600 hexes/30 km
Powerplant:	S-V880X+ V-Engine
Horsepower:	440 hp

Weapon Payload

Name	Ammunition Payload
Lt Autocannon	30 rounds
Lt Rocket Pack/24	24 rockets
Anti-Personnel Grenade Launcher	6 grenades
Hand Grenade	2 grenades
Heavy Hand Grenade	1 grenade
Spike Gun	3 charges
Vibroblade	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The new *Cheetah* Mk2 has been the delight of the design team. Making use of some of the most recent advances in Gear design and conceptual ideas that had to be discarded from the creation of the original for feasibility or affordability reasons — such as the sensor boom — the Mk2 is the pride and joy of Shaian Mechanics. The S-C2001X-Alpha prototype — the first one built — performed adequately, but turned out to be about 20 kph slower than expected due to the increased weight of the armor plating. The model was dismantled and rebuilt into a S-C2001X-Beta prototype nicknamed "Red" by the technicians. It was equipped with a customized version of the S-V880P (labeled S-V880X for the project) to increase the power output of the standard *Cheetah* V-engine. Its performance was substantially improved and while not as fast as the original *Cheetah*, the S-C2001X-Beta is much closer to the desired specifications. Northern Guard Ranger Roburt Kant, test pilot for the *Cat's Paws* regiment, has piloted the machine on repeated occasions and believes it lacks the finesse and maneuverability of the original *Cheetah* or the *Strike Cheetah*, but finds its increased accuracy and improved armor a definite advantage. While the machine has so far only been tested on the field against inert targets, Kant is confident that it will not disappoint against live ones.

A revised prototype of the S-C2001X-Beta is currently being built. Engineers expect that by using a 475 HP S-V900K engine instead of the S-V880X/V-engine combination, they will solve the speed problem. This solution, however, appears rather unpopular with the test pilots, who have often experienced unusual and perturbing vibrations with machines equipped with the S-V900K engine. Engineers are rather unconcerned with this, claiming that personal comfort is a rather small price to pay for increased performance. The designers also expect to increase the *Cheetah Mk2*'s capabilities by customizing the armor plates, something that many pilots find bothersome on the field when they need to scavenge spare parts for emergency repairs and jury rigs. Overall, however, the *Cheetah Mk2* stands to become the best thing since the original *Cheetah* and should be available early Summer TN 1934.

General Stats

Threat Value:	978
Offensive:	799
Defensive:	1014
Miscellaneous:	1121
Size:	6
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	6
Top Speed:	12
Secondary Movement Mode:	Ground
Combat Speed:	8
Top Speed:	15
Maneuver:	+2

Electronics

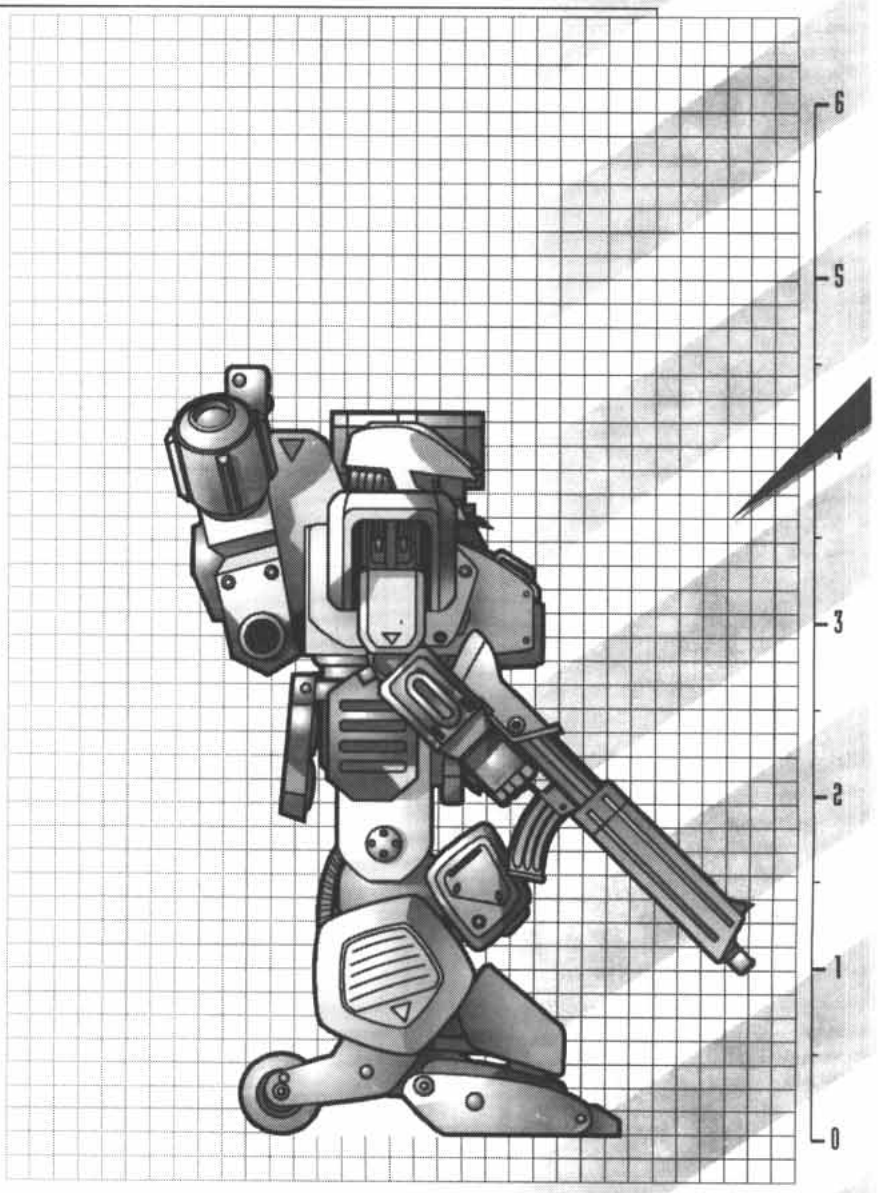
Sensors:	+2
Communications:	+1
Fire Control:	+1

Armor

Light Damage:	12
Heavy Damage:	24
Overkill:	36

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
Lt. Autocannon	LAC	Forward	1	30
Lt Rocket Pack/24	LRP/24	Fixed Forward	1	24
Anti-Personnel Grenade Launcher	APGL	Fixed Forward	1	6
Hand Grenade	HG	Forward	1	2
Heavy Hand Grenade	HHG	Forward	1	1
Spike Gun	SKG	Forward	1	3
Vibroknife	VB	Forward	1	-

Perks

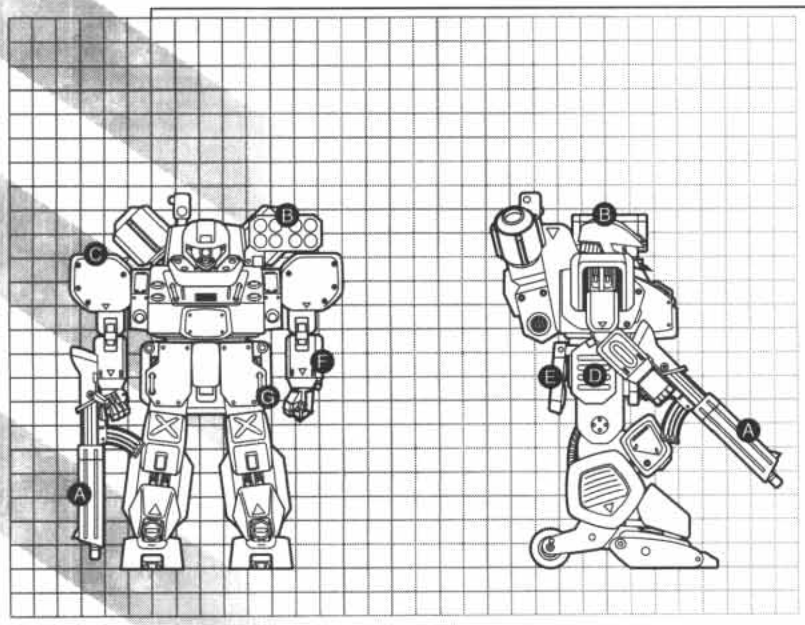
Name	Rating	Game Effect
Advanced Controls	-	Add 1 combat action
Airdroppable	-	Can be airdropped
Backup Sensors	-	Absorbs first "Sensor" hit
ECM	3	Offensive electronic warfare equipment
Hostile Environment Protection	-	Desert
Manipulator Arms x2	6	Can punch
Target Designator	2	Used to target Guided weapons
Tool Arm	1	Sensor boom

Flaws

Name	Rating	Game Effect
Annoyance	-	Full speed run is very bumpy
Difficult to Modify	-	-2 to repair and modify rolls
Exposed Auxiliary Systems	-	"Aux." hits are one stop worse

Defects

Name	Rating	Game Effect
Movement System	-	-10% speed (not factored in stats)
Structural Weakness	-	-1 Maneuver (not factored in stats)



Weapons Location Diagram

A	Lt Autocannon
B	Lt Rocket Pack/24
C	Anti-Personnel Grenade Launcher (not shown)
D	Hand Grenade
E	Heavy Hand Grenade (not shown)
F	Spike Gun (not shown)
G	Vibroblade (not shown)

Typical Camouflage

Bryce Hubbard (order #5318102)

5.2.1 S-C2001X-B CHEETAH MK2 PROTOTYPE

In parallel to the main design of the *Cheetah Mk2*, the design team has run thousands of simulations on computer systems and concluded that although the S-C2001X-Beta prototype might more easily meet the performance requirements set by the military for combat, there would still be a need for a nimble machine like the first *Cheetah* model. Computer analyses have indicated that the only cost-effective solution to the lack of maneuverability and speed defects of the design was to reduce the armor plating to its original level. The spike gun, while impressive in close combat, is not worth the extra modifications to the basic chassis and should be replaced by a chassis reinforcement such as the one on the *Cheetah Paratrooper*. The light rocket pod, considered awkward and ineffective on many Gear models, should be replaced by a medium pod of reduced size. Based on a similar design principle, the standard M222 autocannon with a more powerful MR25. The engineers and designers have also agreed to replace the standard prototype's heavy hand grenade by two more versatile panzerfausts. The last modification to the standard Mk2 is the replacement of the WISE/04 Sentinel sensor boom by the WISE/06 Ranger scanning system. While the system is slightly more expensive than that of the Mk1, it is still by far cheaper than the WISE/04 and is more easily compatible with the Tag-P1 target designator. The latter is a highly improved version of the Tag-M8 designator originally installed on the *Cheetah*. There are also several chips in the WISE/06 which are standard and easily found in repair kits.

The S-C2001X-B will not be built from scratch, but will be a carefully jury-rigged version of the S-C2001X-Beta already in existence. The S-V880X/V-engine combination will be replaced by the standard 425 HP S-V820S V-engine originally installed on the Mk1. Since the weight of the S-C2001X-B is very close to that of the old model, it is almost certain the speed will be almost identical. According to the schedule, tests should begin in five weeks from now and be performed by Dunkan Polson, the Duelist from the Northern Guard's 18th Gear regiment. Polson, long attached to Shaian, has agreed to become a high-profile test pilot as a favor.

Vehicle Specifications

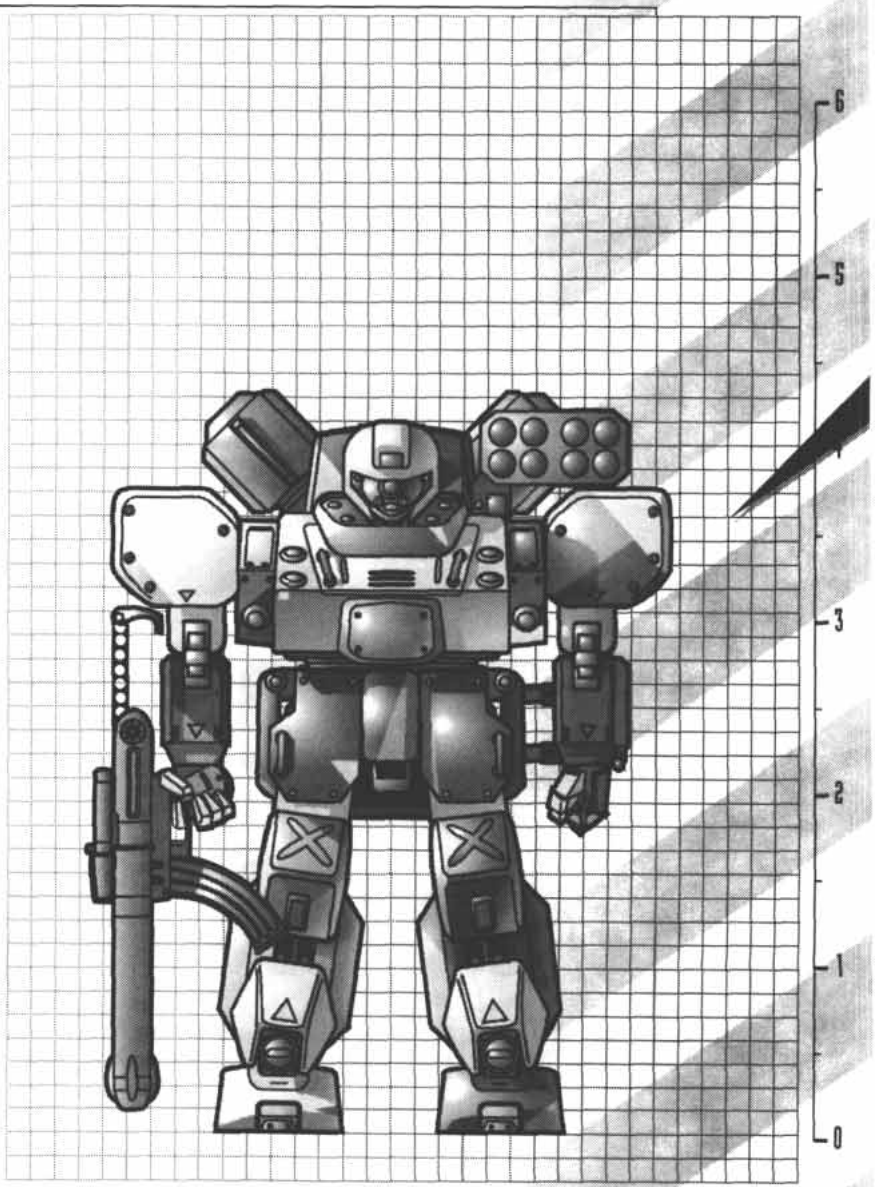
Code Name:	Cheetah Mk2 Prototype
Production Code:	S-C2001X-B
Production Type:	Testbed Prototype
Cost:	184,000,000 marks
Manufacturer:	Shaian Mechanics
Use:	experimental scout Gear
Height:	4.1 meters
Width:	3.0 meters
Average Armor Thickness:	30 mm
Armor Material:	Durasheet w/composite
Standard Operational Weight:	5212 kg
Primary Movement Mode:	Walk (72 kph)
Secondary Movement Mode:	Ground (92 kph)
Deployment Range:	300 km
Sensor Range:	120 hexes/6 km
Communication Range:	600 hexes/30 km
Powerplant:	S-V880X+ V-Engine
Horsepower:	440 hp

Modifications

Add:	MAC (F, 40 shots), 2 x MPZ, CR
Remove:	SKG, LAC, HHG, Tool Arm, Exposed Auxiliary Systems
Change:	downgrade Base Armor Rating to 11, increase Target Designator Rating to 3
Modified Threat Value:	1104
Offensive:	847
Defensive:	945
Miscellaneous:	1520

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



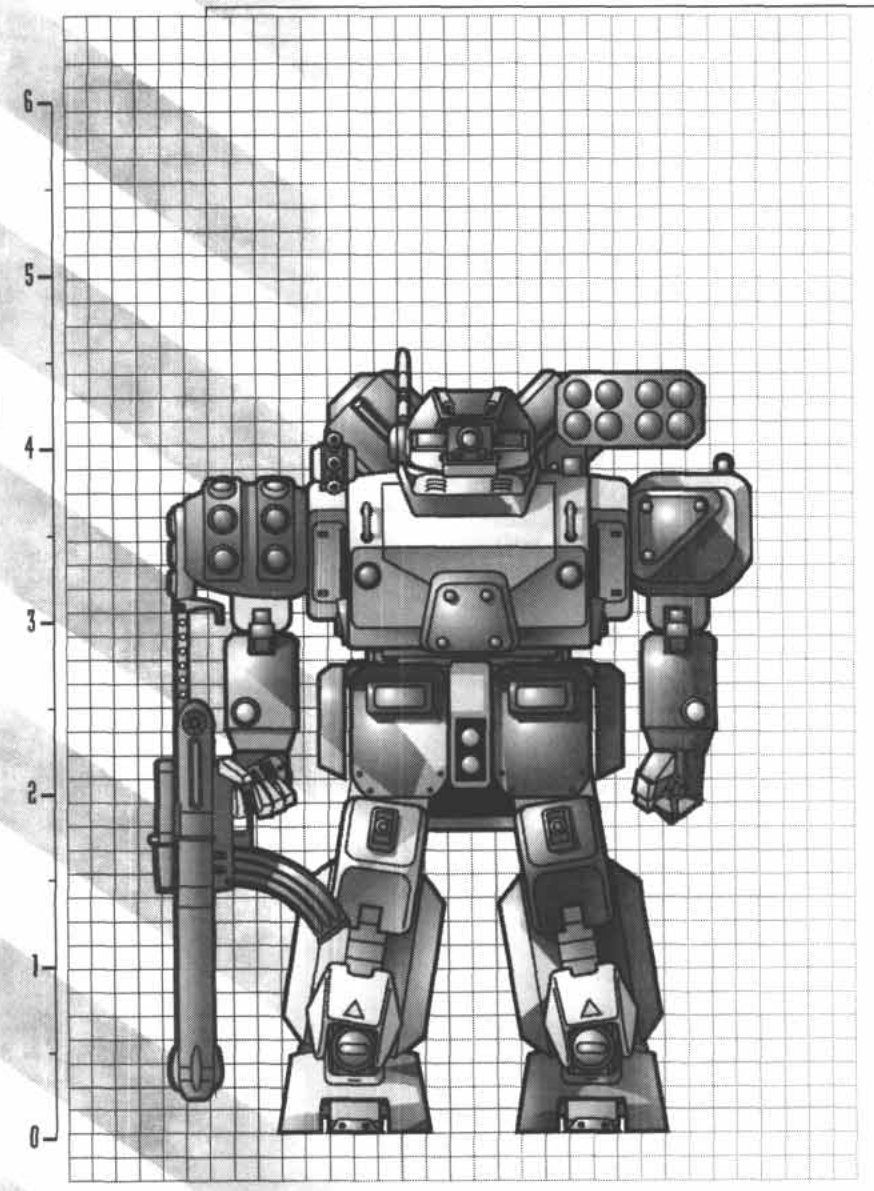
Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

5.3 N-103X HUNTER XMG

The *Hunter* has been a successful Gear since its inception, and success is a good place to start when building the future's most successful Gear. It is for this reason that the *Hunter XMG* has gone into development. It represents an upgrade able to take advantage of all of the improvements and new technology which have made their mark on various Gears since the first model. First among those technologies is the introduction of Duranium™, a lighter version of durasteel that was perfected mere weeks ago by Noveren Materials. With this new armor, the *XMG* can now sport thicker and more effective protection without compromising speed and performance. It effectively makes the *XMG* almost as resilient as the *Armored Hunter* without the dramatic decrease in maneuverability. The sensor suite from the *Bobcat* — Hyperion's modular Surveyor X — was also easily transferred to the *XMG*. The actuators were copied from the *Cheetah*'s because of their high quality and ease of repair. The communication array was pulled out and replaced with that of the more reliable *Headhunter*. Lastly, the R&D team tinkered with various replacements for the S-V950A V-engine, but without success. Because the *XMG* must be a simple and easy-to-repair machine, many of the more complex V-engines were rapidly put aside. In the end, it was a new version of the *Hunter Commando*'s S-V1000C — the S-V1000H — which best fit the new design.

Northco's specifications were very specific: the new *Hunter* had to be at least as reliable as the old model, had to be equipped with cheaper and more reliable armor, and had to feature high performance electronic systems. More importantly, the *XMG* had to be extremely standardized in order to retain its ease of repair and maintenance. The current models do not satisfy that requirement and the engineers are currently hard at work trying to meet it. The project, started in early TN 1932, is slightly behind schedule but Northco executives are pressuring the designers so that it will be finished by 1 Spring TN 1934. If all goes well and test results are positive, production of the *Hunter XMG* should start around mid-Summer TN 1934.



Vehicle Specifications

Code Name:	Hunter XMG
Production Code:	N-103X
Production Type:	Testbed Prototype
Cost:	143,807,693 marks
Manufacturer:	Northco
Use:	general purpose Gear
Height:	4.3 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	Duranium™
Standard Operational Weight:	7122 kg
Primary Movement Mode:	Walk (43 kph)
Secondary Movement Mode:	Ground (72 kph)
Deployment Range:	500 km
Sensor Range:	80 hexes/4 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1000H V-Engine
Horsepower:	535 hp

Weapon Payload

Name	Ammunition Payload
AR-25 Autocannon	30 rounds
RP-209 Rocket Pod	18 rockets
Mk III AP Launcher	6 grenades
Heavy Hand Grenade	4 grenades
Vibroblade	-

Bryce Hubbard (order #5318102)

• SERVICE RECORD

The first prototype, scratch-built by crack Northco technicians and engineers much earlier this cycle (23 Winter 1933, to be precise), was a Frankeinsteinian combination of a slightly improved *Hunter* chassis with components scavenged from *Bobcats*, *Cheetahs*, *Hunter Commandos* and *Headhunters*. After two weeks of testing and an extensive feasibility study, it was determined that although the first model — named "Frankeinstein" by its designers — was severely defective, the *XMG* was a viable project. Work began in earnest. The first prototype was dismantled and recycled. The second model built, nicknamed "Bowser II" in honor of the oldest *Hunter* in existence, was much closer to the "SuperHunter" concept envisioned by Northco's executives. Demonstrations were then held for top military brass to convince them to sponsor further development on the project. The CNCS was enthusiastic and granted 50,000,000 marks for further development of the *XMG*. Duelist Danghen Jarak was assigned to the test the prototype, but soon disappeared with the machine and escaped to the Badlands. Sadly, this delayed the project by nearly a season. A third prototype is now undergoing intensive testing.

Despite the delays and numerous technical problems, the *Hunter XMG* has so far been a success, and only a few kinks remain to be resolved. The external structure of the Gear is slightly unstable. This would normally not be a cause for concern, but the use of the ram plate generates vibrations within the frame that occasionally cause several plates to actually fall off, much to the embarassment of the R&D team. The heavier actuators and more powerful motors have also caused some overheating, although technicians believe this may be a very minor problem. Lastly, the Gear has a tendency to get bogged down in rough terrain. While most of these problems can be solved, there is some concern that the approaching deadline for the *XMG* project may force the engineers to make uncomfortable compromises. Northco executives and their potential clients are concerned by the added difficulty of streamlining the various parts of the model and making them easy to replace or repair. If that requirement is not met, the entire project could end up having been a waste of time and resources.

General Stats

Threat Value:	863
Offensive:	1614
Defensive:	497
Miscellaneous:	477
Size:	6
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	4
Top Speed:	7
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	12
Maneuver:	+1

Electronics

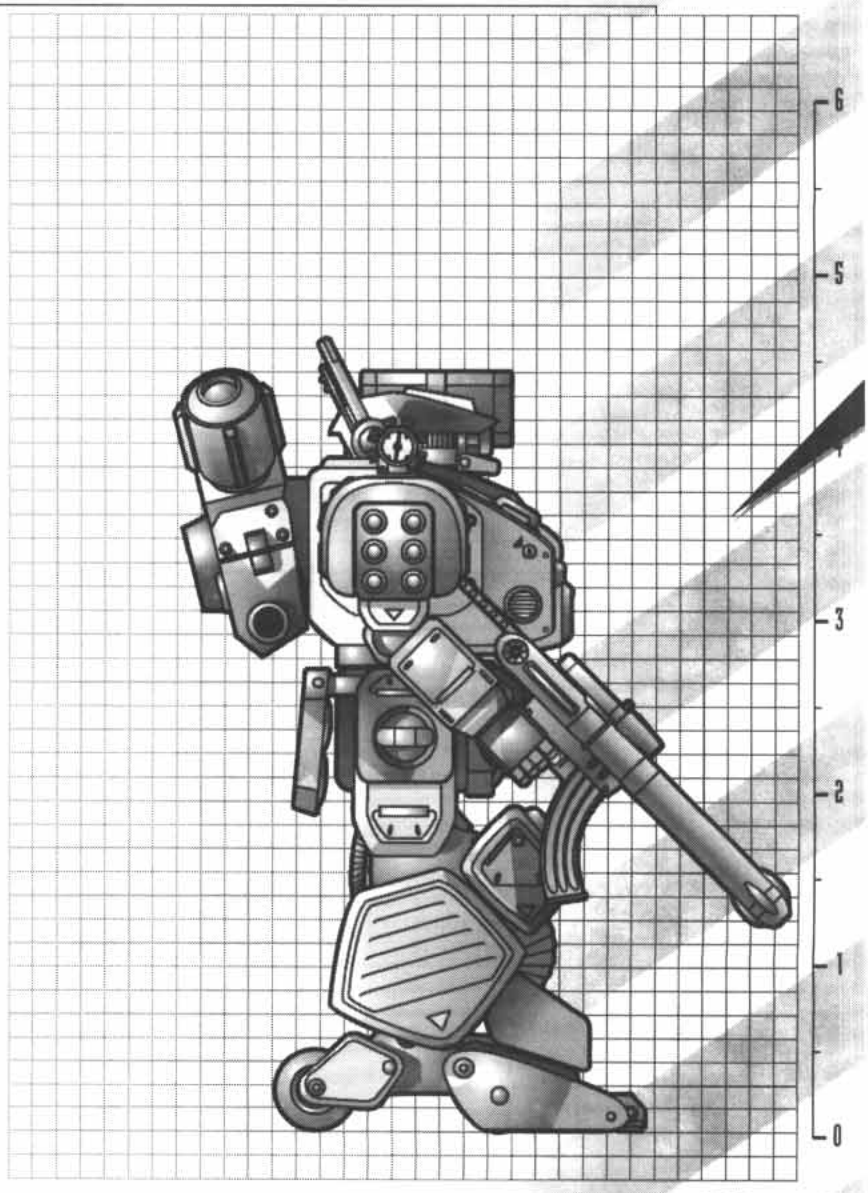
Sensors:	+1
Communications:	+1
Fire Control:	+1

Armor

Light Damage:	16
Heavy Damage:	32
Overkill:	48

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
AR-25 Autocannon	MAC	Forward	1	30
RP-209 Rocket Pod	MRP/18	Forward	1	18
Mk III AP Launcher	APGL	Fixed Forward	1	6
Heavy Hand Grenade	HHG	Forward	1	4
Vibroblade	VB	Forward	1	-

Perks

Name	Rating	Game Effect
Airdroppable	-	Can be airdropped
Backup Sensors	-	Absorbs first "Sensors" hit
Emergency Medical System	-	Absorbs one "Crew stunned" result
Hostile Environment Protection	-	Desert
Manipulator Arms x2	6	Can punch
Ram Plate	-	Front arc ram damage halved
Reinforced Location Armor	2	Structure

Flaws

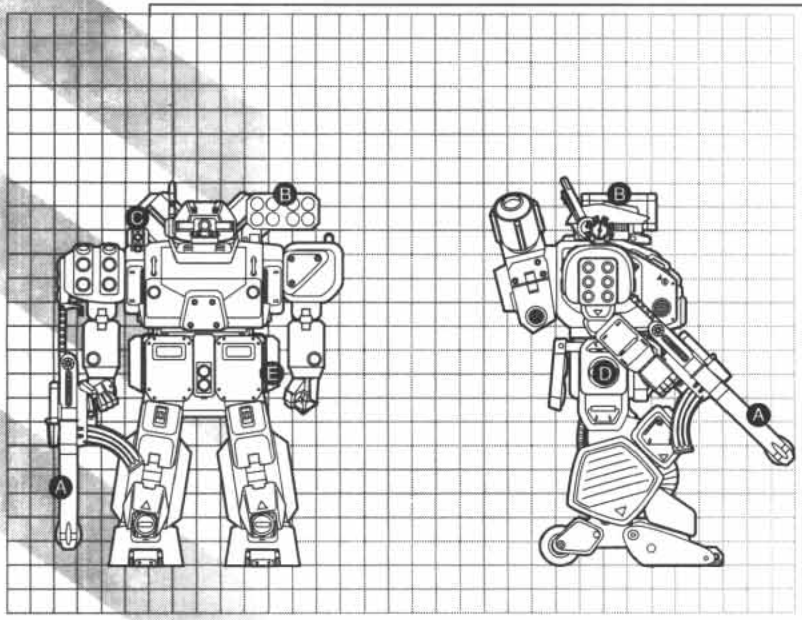
Name	Rating	Game Effect
Poor Off-road Ability	-	Terrain of 2 MP cost or higher increased by 1

Defects

Name	Rating	Game Effect
Fragile Chassis	-	Add 1 to Structural Damage rolls
Overheating	1	Suffers Light damage if too active

Optional Equipment

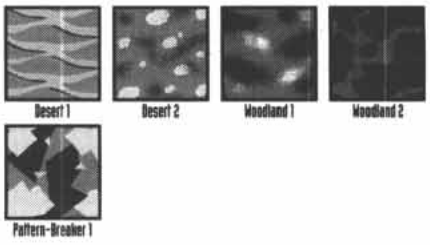
Name	Modified TV
Assault (+2 armor, -1 Ground speed)	894
Forward Observer (Add Target Designator 2)	968
Add Deployable Pack Gun (30 shots)	905



Weapons Location Diagram

A	AR-25 Autocannon
B	RP-209 Rocket Pod
C	Mk III AP Launcher
D	Heavy Hand Grenade
E	Vibroblade

Typical Camouflage



Bryce Hubbard (order #5318102)

5.3.1 N-103X-2 HUNTER XMG PROTOTYPE

The engineers just recently discovered that the torsional stress resulting from the distribution of armor and weaponry had an adverse effect on certain parts of the chassis. In some cases, the lower body tortion bearing was slightly bent backwards, resulting in a reduction in the rotational capacity of the torso. To prevent this, technicians proposed a slight reduction in the armor and a few changes in the internal connections to the chassis. Engineers have also introduced a few adjustments in the engine torque. This should result in reduced stress on the chassis and improve the *Hunter XMG*'s overall speed. On Day 197 of the project, someone suggested to remove the ram plate. It was quietly taken up and, on Day 198, the plate was nowhere to be seen. No one looked very hard for it. To further protect the chassis, a replacement for the medium rocket pack was brought forth. The *XMG* was equipped with a smaller medium rocket pack with nine rockets and two light panzerfausts. Pilots who made this last suggestion felt this would compensate for the reduced punch of the MRP/9. Unfortunately, the poor off-road capabilities of the N-103X-2 prototype have been swept under the rug, and it appears that because of the strict deadlines, this defect may remain on the machine. A team of technicians is also working around the clock to figure out the source of an irritating whine which, some say, might be the result of an unbalanced engine.

The existing N-103X-2 prototype has just come off the testbed and is being field tested. While results have not yet been conclusive, it is suspected that this may very well become the standard model once all the kinks have been worked out. Pilot reports are very encouraging and the preliminary performance statistics seem to corroborate the test pilots' impressions. The increase in speed, which was the very reason for trying to build this prototype, seems to be worth the loss of armor and the reduction in weaponry. Northco believes that the *Hunter XMG* second prototype could almost be used "as is" and meet the specifications imposed by the Northern Guard. Demonstrations are scheduled in a few weeks, and corporate executives are confident that the Guard will be more than satisfied They suspect that an initial order for five hundred *XMG*s might reward their efforts.

Vehicle Specifications

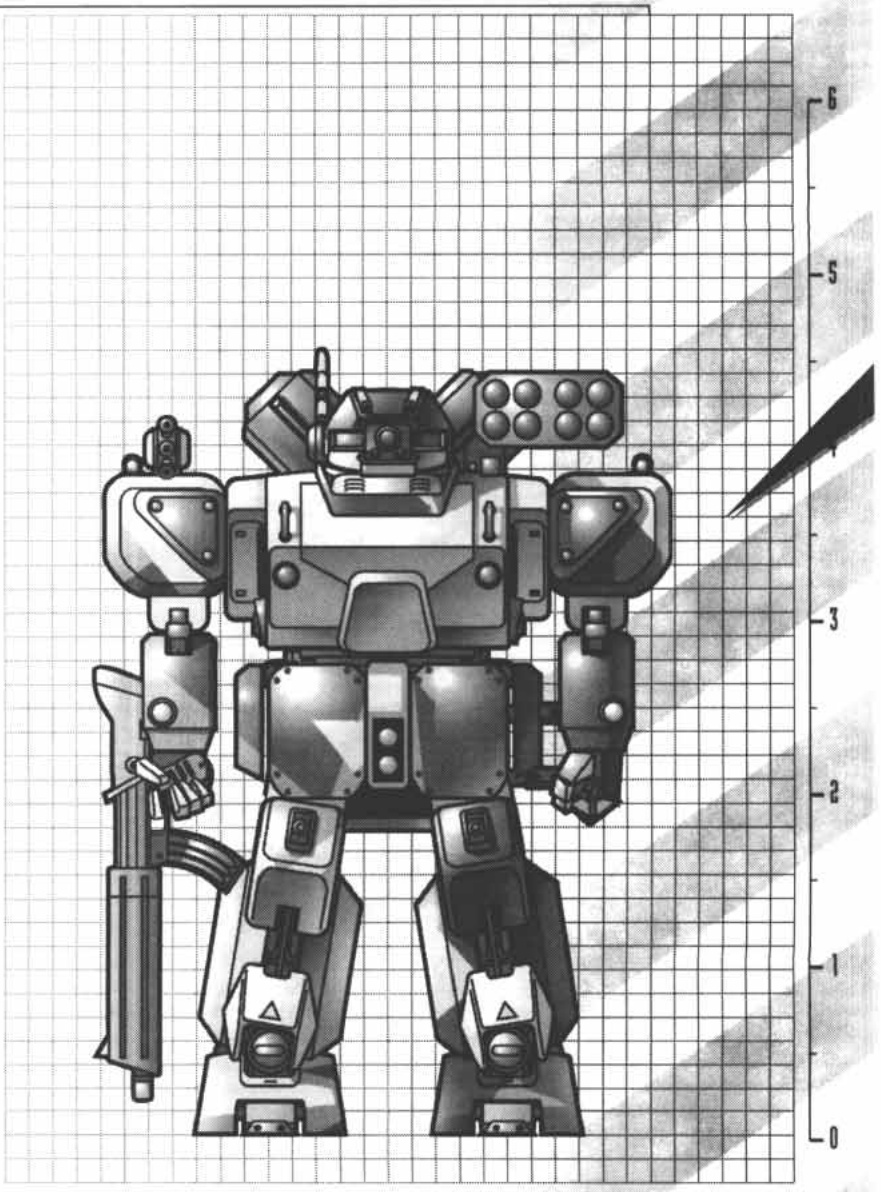
Code Name:	Hunter XMG Prototype
Production Code:	N-103X-2
Production Type:	Testbed Prototype
Cost:	122,100,000 marks
Manufacturer:	Northco
Use:	general purpose Gear
Height:	4.3 meters
Width:	3.4 meters
Average Armor Thickness:	51 mm
Armor Material:	Duranium™
Standard Operational Weight:	7122 kg
Primary Movement Mode:	Walk (43 kph)
Secondary Movement Mode:	Ground (76 kph)
Deployment Range:	500 km
Sensor Range:	80 hexes/4 km
Communication Range:	300 hexes/15 km
Powerplant:	S-V1000H V-Engine
Horsepower:	535 Hp

Modifications

Add:	MRP/9 (F, 9 rockets), two LPZ
Remove:	MRP/18, one HHG, Ram Plate
Change:	increase Walker Top Speed to 7 (43 kph), increase Ground Top Speed to 13 (76 kph), reduce Base Armor to 15
Modified Threat Value:	814
Offensive:	1517
Defensive:	457
Miscellaneous:	470

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



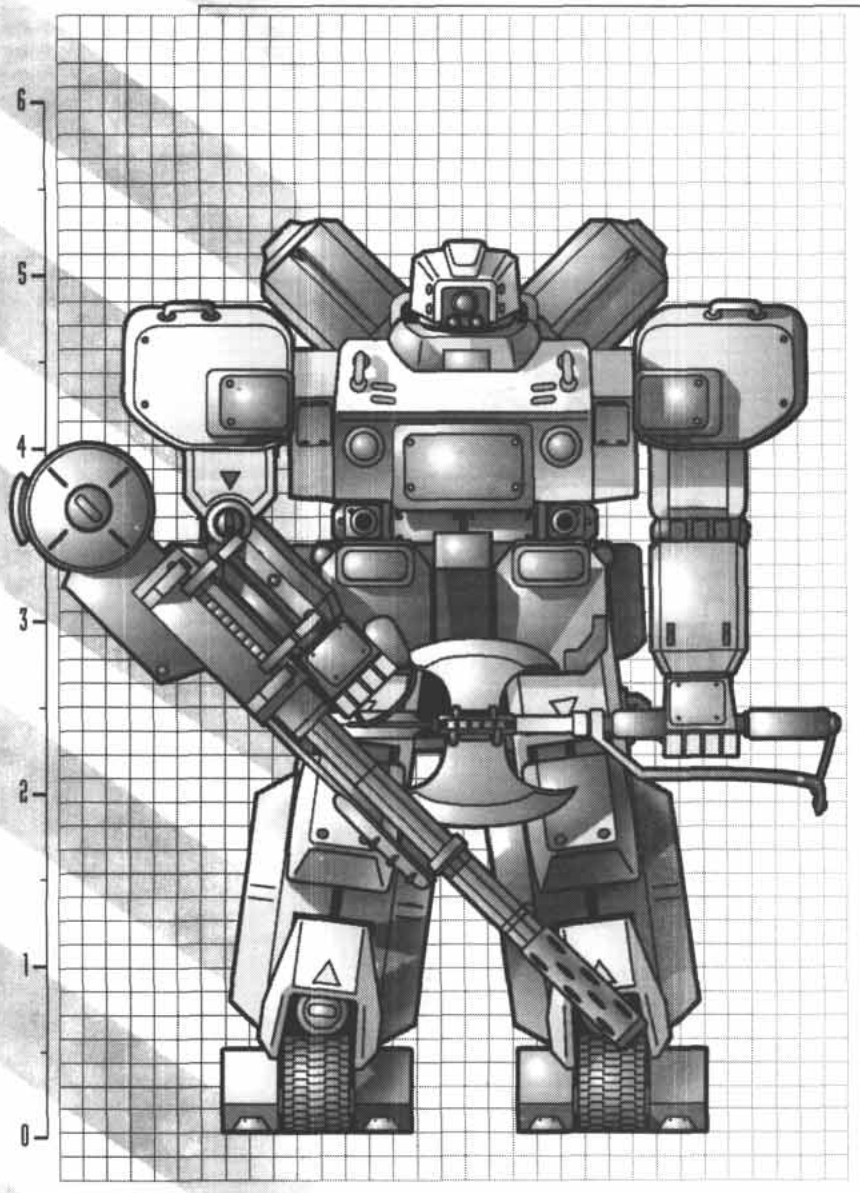
Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

5.4 NG-1549X PANDA

No one in the Northern Guard believes that the collective sigh of relief following the War of the Alliance will continue. In the meantime, however, the military intends to take advantage of the calm before the storm Performance analyses of the War of the Alliance have led military minds to consider new views on modern warfare. Rather than favoring all-purpose Gears, they have expressed a distinct interest for more specialized models. In keeping with this preference, the Northern Guard High Command has commissioned Northco and Shaian Mechanics to produce jointly the next generation of specialized assault Gears based on the *Grizzly*. Much to the designers dismay, they simply asked for a machine that would be "faster, stronger and better." During its development, the Research and Development teams have displayed the symptoms of their hard efforts: pale from too little sun and eyes black from lack of sleep, the design team has nicknamed the project "*Panda*," a name that has stuck, even if the connotations seem harmless compared to the actual result.

The creation of the next generation assault Gears meant a complete rethinking of the now-aging *Grizzly*. The prototype's engine has been replaced twice. It was decided that the higher torque on the original was unnecessary on a dedicated assault Gear. The old S-V2200Z V-engine has been replaced by the more efficient S-V2220B. It has effectively improved the *Panda*'s deployment range, giving it greater operational flexibility and battlefield endurance. The wizards at Shaian Mechanics have provided the *Panda* with new actuators based on their work on the *Cheetah*, resulting in impressive maneuverability for a Gear of the *Panda*'s size. One of the most visually impressive modifications is undoubtedly the change from a vibroknife to the massive vibroax, giving the new Gear a particularly lethal aura. The addition of advanced controls and an emergency medical system that keeps the pilot conscious in case of damage have turned the *Panda* into an extremely deadly Gear. Tests have barely begun, but the first prototype is already meeting the technical requirements. Most engineers find it risky to design a machine as specialized as the *Panda*, but none of them can deny its effectiveness.



Vehicle Specifications

Code Name:	Panda
Production Code:	NG-1549X
Production Type:	Testbed Prototype
Cost:	137,142,857 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	prototype assault
Height:	5.1 meters
Width:	3.9 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/allow and ceramic
Standard Operational Weight:	9215 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	450 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2220B V-engine
Horsepower:	1130 hp

Weapon Payload

Name	Ammunition Payload
Banshee-X Very Heavy Autocannon	80 rounds
HRP/24	24 rockets
2 Frag Cannons	20 shells ea.
Heavy Guided Mortar	8 shells
AP Grenade Launcher	6 grenades
Heavy Hand Grenade	6 grenades
Vibroax	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

The sole prototype has successfully demonstrated its deadliness both against inert targets and in actual simulated live confrontations. The reinforced chassis ensures increased survivability and makes sure the Gear can return in one piece after a confrontation. Due to the Gear's improved controls, the pilots can launch more attacks with greater accuracy. In particular, the combination of the Banshee-X autocannon and the twin fragmentation cannons demonstrates the close-range deadliness of the design. Pilots, however, have indicated a marked preference for the vibroax, a weapon whose mere appearance acts as a deterrent against smaller opponents. Unfortunately, despite Northco and Shaian Mechanics' best efforts, not everything has been successful or without a cost. Several overhauls have been necessary to eliminate some rather crippling defects. The existing prototype is undergoing its seventh revision, and it is expected that the electronic glitch that prevents the weapon systems from peforming at full efficiency will be solved. Before the third overhaul, it was discovered that if the system went haywire, it would give the pilot severe electrical burns. The machine was then equipped with a temporary emergency medical system that would prevent the pilot from passing out after traumatic injuries. It remains to be determined whether engineers will choose to leave this system in the final version, but most pilots keep their fingers crossed. Aside from this, all other setbacks were less dramatic, and the *Panda* has been performing admirably under the controlled conditions of the test range.

The pilots who have tried the *Panda* so far have very few negative comments about the machine. Its tendency to overheat and its vulnerability to haywire attacks are somewhat bothersome, but they seldom impair the machine's overall capabilities. Some have complained about a lack of accuracy and a disappointing speed, but all have agreed that this was a much improved version of the *Grizzly* and deserved praise. Since Northco and Shaian Mechanics are very much ahead of schedule, they are planning on further testing the model and introducing some additional improvements if they can fit them within the assigned price range of the machine. After all, both companies have established their reputations on the quality of their products.

General Stats

Threat Value:	960
Offensive:	2271
Defensive:	380
Miscellaneous:	230
Size:	7
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	1

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	Ground
Combat Speed:	6
Top Speed:	11
Maneuver:	0

Electronics

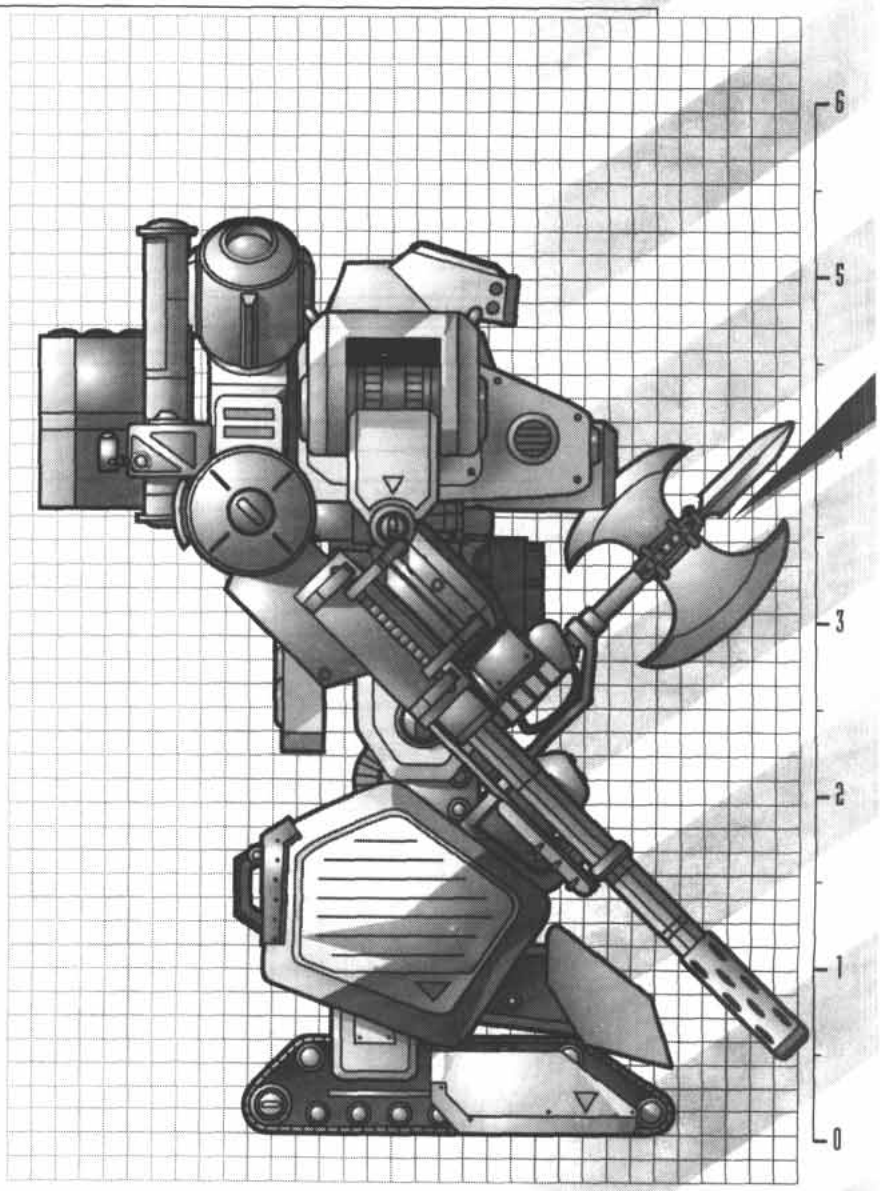
Sensors:	+1
Communications:	+1
Fire Control:	0

Armor

Light Damage:	18
Heavy Damage:	36
Overkill:	54

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
Banshee-X V. Hvy Autocannon	VHAC	Forward	1	40
Heavy Rocket Pod/24	HRP/24	Forward	1	24
Fragmentation Cannon	FGC	Fixed Forward	2	20/20
Heavy Guided Mortar	HGM	Forward	1	8
AP Grenade Launcher	APGL	Rear	1	6
Heavy Hand Grenade	HHG	Forward	1	6
Vibroax	VA	Forward	1	-

Perks

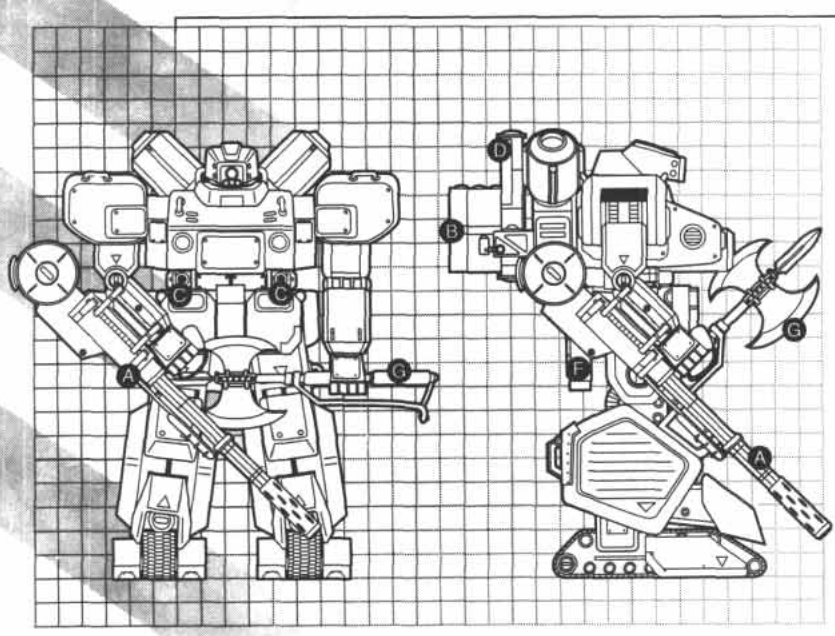
Name	Rating	Game Effect
Advanced Controls	-	extra action each combat round
Emergency Medical	-	absorbs one "Crew stunned" result
HEAT-resistant Armor	2	Add to Armor vs HEAT weapons
Hostile Environment Protection	-	Desert
Improved Rear Defense	-	Reduce penalty for back defense
Manipulator Arm x2	7	Can punch
Reinforced Chassis	-	Absorbs first "Structure" hit

Flaws

Name	Rating	Game Effect
Difficult to Modify	-	-2 to repair and modify rolls
Hazardous Ammo/Fuel Storage	-	+2 to ammo/fuel hit rolls
Large Sensor Profile	1	Easy to detect
Overheating	-	Suffers light damage if too active
Vulnerable to Haywire	-	Haywire causes three damage rolls

Defects

Name	Rating	Game Effect
Electronics Glitch	-	Subtract 1 from FC (not figured in stats)
Movement System Defect	-	Subtract 10% from speed (not figured in stats)
Traceable Emissions	1	Bonus to spot, automatic lock



Weapons Location Diagram

A	Very Heavy Autocannon
B	HRP/24
C	Frag Cannons
D	Heavy Guided Mortar
E	AP Grenade Launcher
F	Heavy Hand Grenade
G	Vibroax

Typical Camouflage

Bryce Hubbard (order #5318102)

5.4.1 NG-1549X-3 SAVAGE PANDA

The *Panda*'s cooling system is inadequate for the task and is the direct cause of the machine's overheating problems. Technicians have come up with a patch that can solve this problem, but this requires additional internal space right behind the pilot's seat. Unfortunately, the additional weight jeopardizes the integrity of the tortion bearing and the designers have considered trading off the improved rear defensive system to solve the problem. Additional armor can be added to compensate for the subsequent weakening of the Gear's rear arc, which is expected to simultaneously correct the weight imbalance due to the HEAT-resistant armor, and optimize the movement systems. The FIRE-333 fire control system has also demonstrated a difficulty in handling the weapon load of the *Panda*, and rather than changing the system, engineers have modified the payload instead. The Banshee-X autocannon has been removed and replaced by a standard heavy bazooka. Additionally, the heavy mortar was replaced by a light model that has been proven to be very reliable with the FIRE-333 system. Some further testing has been done regarding the electrical surge that injured a test pilot during the third version of the *Panda*, a problem that had caused considerable worry among the R&D crew. It was speculated that similar discharges from other electrical systems would occur under combat conditions due to a fundamental flaw in the Gear's insulation. As a solution, the engineers have suggested the implementation of special grounding. Three pilots have already tested the machines and report few bugs except the electrical problems.

All in all, the prototype that is being built with these modifications in mind shows much promise. It should be near completion by the end of this Season and represents the best chance of a solution to all the somewhat minor problems that still plague the *Panda*. The crews have given it the temporary label *Savage Panda*, although the final name of the machine will simply be the *Panda*. It should take no more than a week or two of testing before the executives move the project to the early production stage. Pilots and engineers look forward to the Gear's official release.

Vehicle Specifications

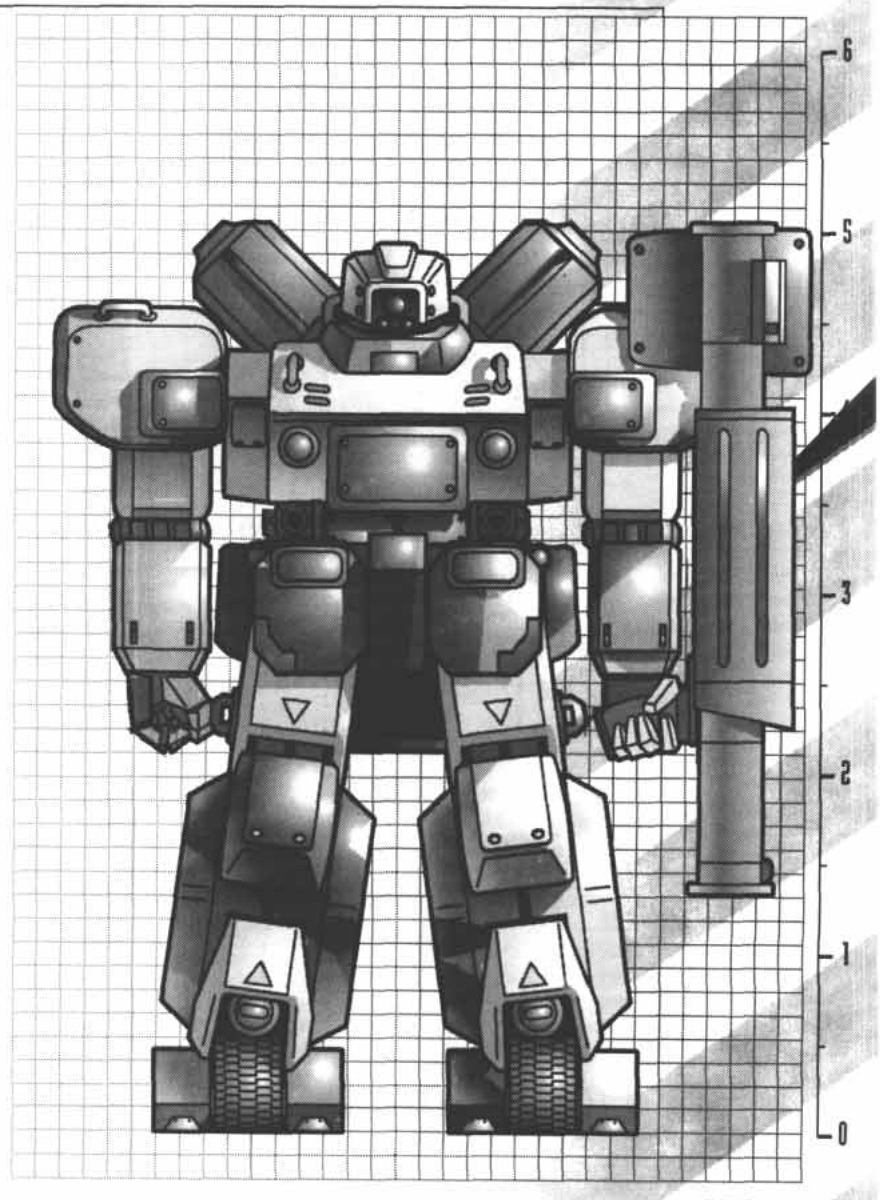
Code Name:	Savage Panda
Production Code:	NG-1549X
Production Type:	Testbed Prototype
Cost:	159,000,000 marks
Manufacturer:	Northco/Shaian Mechanics
Use:	prototype assault
Height:	5.1 meters
Width:	3.9 meters
Average Armor Thickness:	70 mm
Armor Material:	durasheet w/allow and ceramic
Standard Operational Weight:	9215 kg
Primary Movement Mode:	Walk (37 kph)
Secondary Movement Mode:	Ground (65 kph)
Deployment Range:	450 km
Sensor Range:	40 hexes/2 km
Communication Range:	200 hexes/10 km
Powerplant:	S-V2220B V-engine
Horsepower:	1130 hp

Modifications

Add:	HBZK (F, 20 ammo), LGM (F, 12 ammo), Reinforced Armor (2, Rear), Haywire Resistant
Remove:	VHAC, HGM, Overheating, Improved Rear Defense, Vulnerable to Haywire
Change:	n/a
Modified Threat Value:	1113
Offensive:	2194
Defensive:	380
Miscellaneous:	765

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



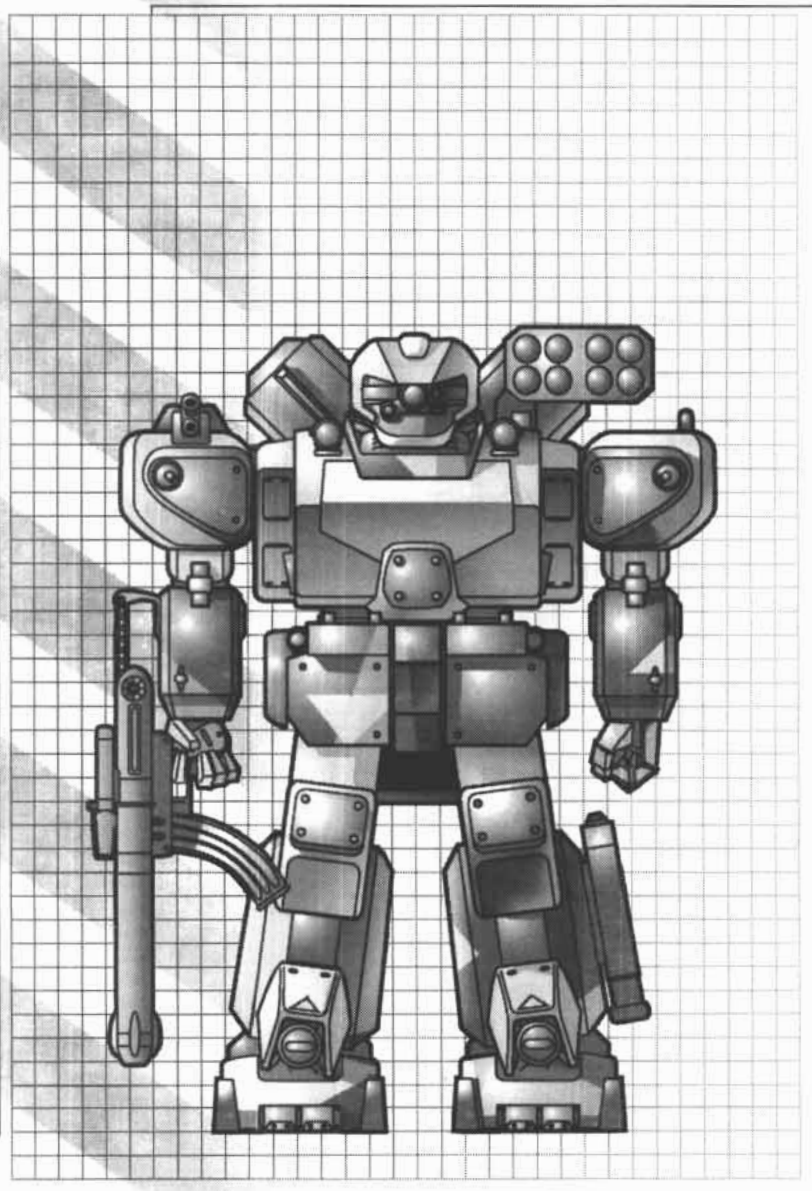
Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

5.5 N-1521XSAP SAND CAT

The northern military in general — and, more specifically, the Northern Guard — has always had great trouble with operations in white sand, which tends to eat up Gears in a rather short time. The destructive nature of this type of terrain has motivated the CNCS armed forces to invest in new technology that would allow armored vehicles (particularly Heavy Gears) to sustain no damage in the white sands. Should they find some form of protective counter-measure, the Northern Guard would have a decisive advantage over the Southern MILICIA during potential conflicts. Since no one would expect a contingent of Gears to show up from a flanking white desert, the strategic advantages are obvious. To that effect, Northco Research & Development has perfected a special product simply called "SAP," a synthetic version of the kraan sap used by the Ratir Koreshi of the White Desert. Scientists claim that SAP is far from perfect for the job, but the military has insisted that some new Gear incorporate it in its design so that testing can commence as soon as possible. Northco has selected a *Jaguar* for the task and has dubbed the project *Sand Cat*. Engineers introduced SAP into the actuator lubricants, oil systems and fuel mix, and applied it as a lacquer on the exterior surfaces of the Gear. Unfortunately, SAP is both sticky and highly flammable, causing joints to occasionally jam and increasing the chancews of a major fire on the Gear. Furthermore, it leaves traceable emissions, making the *Sand Cat* a much better target for incoming attacks.

The *Sand Cat*'s entire electronic system has been overhauled in an attempt to increase overall performance and to compete favorably with the *Cheetah*. Other than that, the *Sand Cat* has been kept as simple as possible. Sensor and communication systems have been streamlined based on what was learned from previous designs. The weapon load was limited to "tried and true" models, and SAP was applied wherever possible. Because it is very difficult for a pilot to exit his vehicle while in the White Desert, engineers decided to agree to pilot requests and include a limited life support system. Ongoing tests are secretly being conducted in the White Desert under heavy escort.



Vehicle Specifications

Code Name:	Sand Cat
Production Code:	N-1521XSAP
Production Type:	Testbed Prototype
Cost:	117,000,000 marks
Manufacturer:	Northco
Use:	Experimental strike Gear
Height:	4.6 m
Width:	3.4 m
Average Armor Thickness:	45 mm
Armor Material:	Durasheet w/alloy and ceramic
Standard Operational Weight:	7385 kg
Primary Movement Mode:	Walk (58 kph)
Secondary Movement Mode:	Ground (85 kph)
Deployment Range:	450 km
Sensor Range:	60 hexes/3 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V1110K V-Engine
Horsepower:	630 hp

Weapon Payload

Name	Ammunition Payload
MR-25 Autocannon	40 rounds
RP-209 Rocket Pod	18 rockets
Mk IV AP Launcher	6 grenades
M25 Pack Gun	30 rounds
M-2A Grenades	3 grenades
HW-VB1 Vibroknife	-

Bryce Hubbard (order #5318102)

SERVICE RECORD

Even before the *Sand Cat* was tested in environment rooms simulating White Desert conditions, several SAP-related problems were identified. The SAP/fuel mix results in abnormal waste emissions, which in turn provide IR-seeking ammunition with a clearl target. Meanwhile, the lacquer has proven to be highly flammable. In one instance, this led to a regrettable incident. A technician who was smoking during his break inadvertently threw his cigarette against the *Sand Cat* on an area that was abnormally thick with SAP, starting a fire that torched the Gear. It took two weeks to clean the wreck and refit it. SAP also has one major flaw that pilots find distasteful: it smells horrible. Furthermore, it has a tendency to cling to any clothing or body hair and is extremely hard to remove. Some witty technicians have commented to pilots that this particularly noticeable "musk" should definitely improve the otherwise unremarkable love life. In return, pilots have nicknamed the *Sand Cat* the "Skunk" as a tribute to the legendary foul-smelling Earth mammal. As a sign of protest, some test pilots have begun wearing gas masks when piloting the *Sand Cat*.

Despite all their complaints about the vehicle's smell, however, pilots find the *Sand Cat* a reliable machine and one that would indeed prove useful in the white sands. The second prototype has just rolled off the design hangar and the few test runs have shown a disappointing lack of improvements over the first. There is still a fire hazard, although it requires more than a cigarette to trigger. Flamethrowers, however, are more than enough to destroy the machine. The *Sand Cat* also has somewhat stiff joints. Scientists are still hard at work trying to perfect a SAP that will not jam in the actuators, but many suspect it is a losing battle. Most pilots have expressed a concern that the entire project might not be worth the time and resources invested in it. After all, despite the fact that a few machines might slip in unnoticed behind enemy lines, it is doubtful that the *Sand Cat* will ever be mass produced because of its price. As a result, there would never be enough machines available to represent a real threat to the enemy. Nonetheless, the brass want their White Desert Gear, and they will get it. At the very least, Northco will have developed the SAP, an interesting by-product which could interest white sand prospectors.

General Stats

Threat Value:	780
Offensive:	1648
Defensive:	537
Miscellaneous:	154
Size:	6
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	1
Bonus Actions:	0

Movement

Primary Movment Mode:	Walk
Combat Speed:	5
Top Speed:	10
Secondary Movement Mode:	Ground
Combat Speed:	7
Top Speed:	14
Maneuver:	+1

Electronics

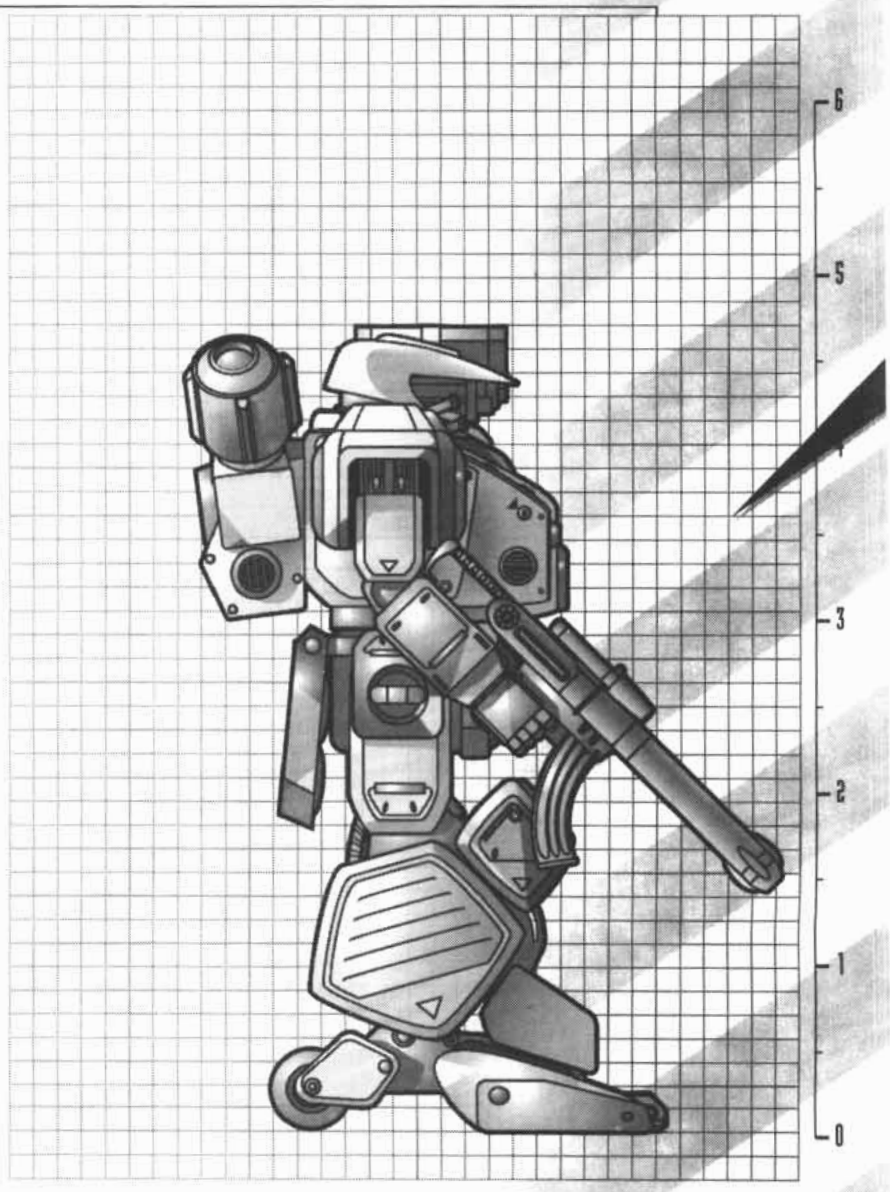
Sensors:	+1
Communications:	+1
Fire Control:	+1

Armor

Light Damage:	15
Heavy Damage:	30
Overkill:	45

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

Weapons Summary

Name	Code	Fire Arc	Qty	Ammo
MR-25 Autocannon	MAC	Forward	1	40
RP-209 Rocket Pod	MRP/18	Forward	1	18
Mk IV AP Launcher	APGL	Fixed Forward	1	6
M25 Pack Gun	DPG	Forward	1	30
M-2A Grenades	HG	Forward	1	3
HW-VB1 Vibroknife	VB	Forward	1	-

Perks

Name	Rating	Game Effect
Airdroppable	-	Can be airdropped
Hostile Environment Protection	-	Desert
Limited Life-Support	-	Provide support for up to a week
Manipulator Arms x2	6	Can punch
Rugged Movement System	-	Absorbs first "Movement" hit

Flaws

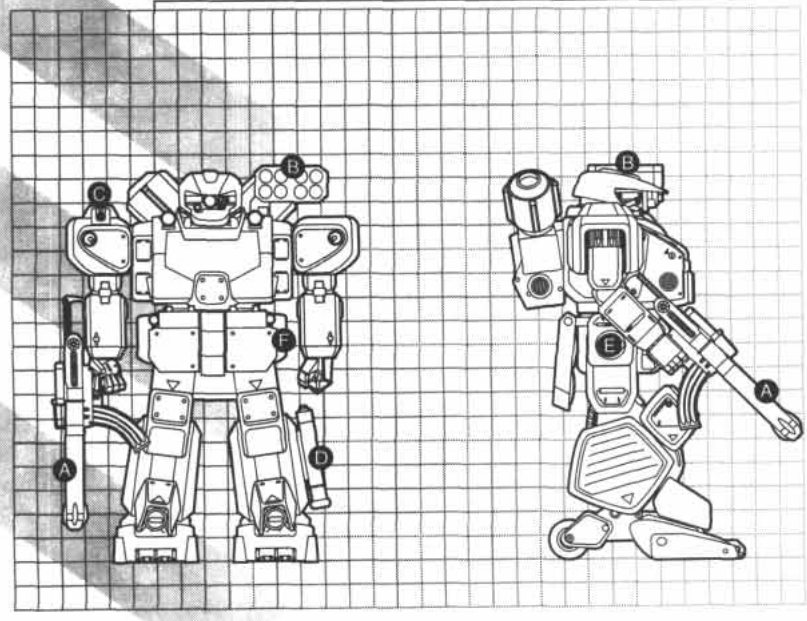
Name	Rating	Game Effect
Annoyance	-	SAP smells bad!
Difficult to Modify	-	-2 to repair and modify rolls
Highly Flammable	-	Incendiary effects doubled

Defects

Name	Rating	Game Effect
Structural Weakness	-	-10% to armor
Traceable Emissions	1	Bonus to spot, automatic guided lock

Optional Equipment

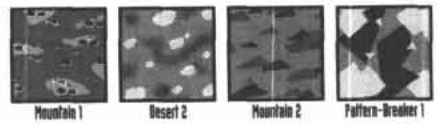
Name	Modified TV
Big Cat (+2 armor, -1 Ground speed)	739
Sand Scout (Add Target Designator 2)	832



Weapons Location Diagram

A	MR-25 Autocannon
B	RP-209 Rocket Pod
C	Mk IV AP Launcher
D	M25 Pack Gun
E	M-2A Grenades
F	HW-VB1 Vibroknife

Typical Camouflage



Bryce Hubbard (order #5318102)

5.5.1 N-1523XSAP STICKY CAT

There have been tests on one of the prototypes to use a magnetic field to repel dust. This suggestion, provided by the team working on the *Lightning Cat* Project (another unfinished variant of the *Sand Cat*), may present some advantages and might even provide a temporary solution, but the designers who have been assigned to the *Sticky Cat* would much prefer to stick to SAP and are hard at work trying to find a new version of SAP that would have all the advantages of the basic SAP with none or few of the drawbacks. After all, even a strong magnetic field will not prevent white sand from getting into the system and causing much internal damage. Once inside, the lacquer would provide superior protection compared to magnetics because it would also protect the armor and the chassis. The latest scientific research has provided an adequate SAP (temporarily named SAP2) for armor covering, but it is less than satisfactory when used in the fuel mix. The newer synthetic compound is also not quite as noxious as the first, but is certainly not odorless and is still far from pleasant. Using SAP2 would allow engineers to keep the *Sand Cat* armor up to standard *Jaguar* levels and would avoid the structural problems noticed in the *Lightning Cat*. Some reduction in performance is expected, but this seems to be by far the best of all possible solutions.

The current *Sticky Cat* prototype (thus named because of the stickiness of the SAP that constantly jams the Gear's actuators) has been tested a few times against non-mobile targets, and has a tendency to overheat. This is a frequent problem among new designs and one which the engineers are confident they will solve in subsequent versions. Some technicians have stated that since SAP2 appears to no longer be flammable, the *Sticky Cat* sould now be only hot, not burning. While many make a joke of it, the fact is that it is indeed a slight improvement over the initial concept. Unfortunately, speed is slightly reduced and the fuel efficiency is below the expected standards. There are still doubts as to the effective deployment range of the *Sticky Cat*, but it looks as if the machine might have some use in the future. Pilots who have tried it have given it a thumbs up despite all its flaws. After all it is a *Jaguar*-related Gear.

Vehicle Specifications

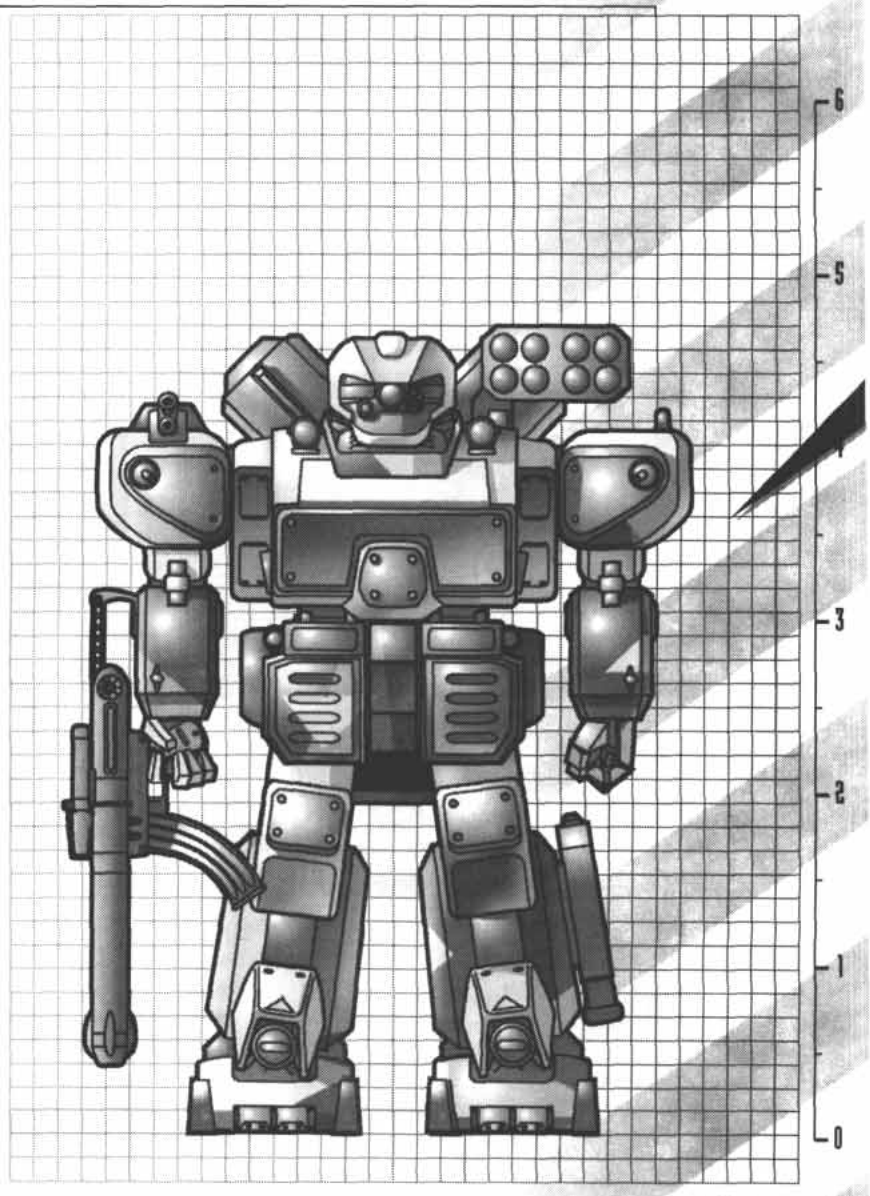
Code Name:	Sticky Cat
Production Code:	N-1523XSAP
Production Type:	Testbed Prototype
Cost:	117,900,000 marks
Manufacturer:	Northco
Use:	Experimental strike Gear
Height:	4.6 m
Width:	3.4 m
Average Armor Thickness:	45 mm
Armor Material:	Durasheet w/alloy and ceramic
Standard Operational Weight:	7385 kg
Primary Movement Mode:	Walk (58 kph)
Secondary Movement Mode:	Ground (85 kph)
Deployment Range:	450 km
Sensor Range:	60 hexes/3 km
Communication Range:	400 hexes/20 km
Powerplant:	S-V1110K V-Engine
Horsepower:	630 hp

Modifications

Add:	Overheating
Remove:	Annoyance and Highly Flammable
Change:	reduce Fuel Efficeiency to 1.5x, reduce Base Armor Rating to 16, reduce Walker Top Speed to 9 (55 kph), reduce Ground Top Speed to 14 (83 kph)
Modified Threat Value	786
Offensive	1648
Defensive	518
Miscellaneous	193

Vehicle Availability

Availability Threshold:	12
Maximum Number of Units in the Field:	1



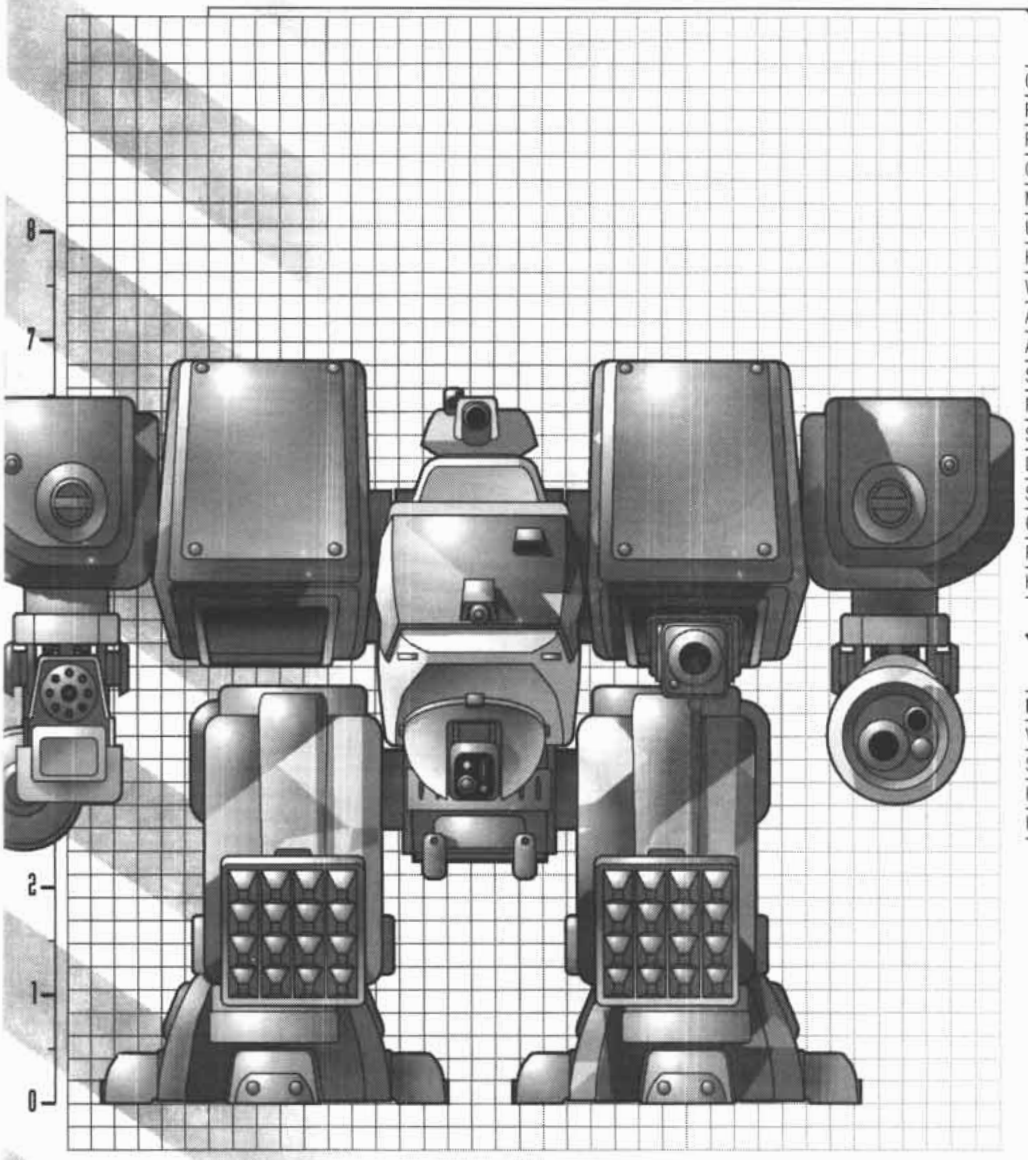
Bryce Hubbard (order #5318102)

RESEARCH AND DEVELOPMENT MODELS

2.6 N-MA4203X MASTODON

The *Mammoth* strider is a staple of the Northern Guard. It is the most common strider found in the Northern forces because of its firepower, relative maneuverability and affordability. It presents an attractive package. When top Northern Guard brass asked Hartmore Motor Company in TN 1931 to improve on the basic chassis and to make it "king of the field" in less than two cycles, Hartmore engineers threw up their arms in despair. Designing, producing and perfecting the original WACS-01FS-AST *Mammoth* had taken four cycles, and a legion of engineers and technicians. Now a full two cycles after accepting the challenge, Hartmore is on the verge of starting early production on the *Mastodon*, the *Mammoth*'s successor. The improvements, while not particularly original, are still impressive considering the tight deadline. Taking the basic shell of the *Mammoth*, the R&D team slightly improved the armor without losing any maneuverability and somehow managed to increase both speed and range. When asked how they did it, the reply consisted of shrugs and a chorus of "I don't know." Most of those who have worked on the project prefer not to talk about it.

In order to increase the *Mastodon*'s battlefield endurance and keep the costs down, the Fireball II anti-tank missile launcher was removed from the battle arm and replaced with the massive Vulcan-20 autocannon. The limited range of the SB-90 assault gun in the other arm prevents smaller vehicles such as Gears from coming in too close. Engineers opted to remove the GU-20 turret mounted autocannon and a KR-88 fragmentation cannon in its place to effectively decimate close range targets. Lastly, the twin torso-mounted KJ-16 miniguns have been eliminated to make room for a single heavy grenade launcher for additional close range area support. Because of the weight increase, the engineers have had to reinforce the strider's upper structure and to strengthen the legs' hydraulic mechanisms. The only existing prototype is simply labelled "M1" and is heavily guarded by a contingent of Northern Guard soldiers. The entire project is funded by the army and they impose the strictest security measures to ensure that the prototype is not stolen. Tests have been going on for eight weeks and engineers are about to start work on the second prototype.



Vehicle Specifications

Code Name:	Mastodon
Production Code:	N-Ma4203X
Production Type:	Testbed Prototype
Cost:	100,222,222 marks
Manufacturer:	Hartmore Motor Company
Use:	heavy assault vehicle
Height:	6.8 meters
Width:	9.5 meters
Average Armor Thickness:	145 mm
Armor Material:	Durasheet w/ceramic
Standard Operational Weight:	22,400 kg
Primary Movement Mode:	Walk (35 kph)
Secondary Movement Mode:	none
Deployment Range:	420 km
Sensor Range:	80 hexes/4 km
Communication Range:	300 hexes/15 km
Powerplant:	V-Engine (x2), ceramic IC
Horsepower:	1200 Hp x 2, 200 Hp x 1

Weapon Payload

Name	Ammunition Payload
Vulcan-20 Autocannon	400 rounds
SB-90 Assault Gun	20 shells
KR-88 Fragmention Cannons (x2)	40 shells (each)
Hvy Grenade Launcher	40 grenades

Bryce Hubbard (order #5318102)

SERVICE RECORD

The prototype *Mastodon* gives every impression of being a fearsome opponent. Those who have seen it on the firing range methodically turning every conceivable mock-up into a splintered wreck can testify to its deadliness. The strider's new weaponry has indeed devastating power, but, sadly, the whole truth is somewhat less impressive. The new sensor array, which has been upgraded from a NSA-1V to a XNSA-8, has encountered compatibility problems with the prototype's veteran neural net. Both pilots and technicians suspect that the old NNet might just be stubborn and should be wiped out, but engineers maintain that it is perfectly acceptable as it is and much prefer it to a new and inexperienced NNet. Installing a new system would only lead to further (and unacceptable) delays. Test pilots have also reported unusual jerking motions and communication problems not present in the standard *Mammoth*, resulting in pilot headaches and nausea. Testing ground maneuvers, crew say, resemble more a drunken dance than actual combat maneuvering. Crew comments and reports have included such words as "stupid," "awkward," "clumsy" and some less than polite comments about the design team's genealogy. There have also been numerous complaints concerning the removal of the target designator and dedicated guided weaponry, which ensured that the strider could place lethal shots at very close range.

Hartmore technicians and engineers are working day and night to modify and test the *Mastodon* with a frenzy that attests to their anxiety. The deadline is fast-approaching and an actual mock combat has been scheduled in a few weeks against a standard *Mammoth*. Pressure from the military is increasing and should the new machine fail, the Northern Guard might cancel the project. In order to present the military with viable options should the standard *Mastodon* fail to impress, Hartmore has begun building two new prototypes. Fearing that this project might jeopardize their reputation in the industry, top company executives are pulling out all the stops to have something worthwhile to show the military. Most insiders believe that this project is doomed to fail and that it would have been better to decline the challenge in the first place. Predictions are already being made that the machine that made Hartmore Motors is going to be the same one that takes it down.

General Stats

Threat Value:	902
Offensive:	1717
Defensive:	488
Miscellaneous:	500
Size:	9
Original Default Size:	10
Indv. Lemon Dice:	2
Crew:	2
Bonus Actions:	1

Movement

Primary Movment Mode:	Walk
Combat Speed:	3
Top Speed:	6
Secondary Movement Mode:	n/a
Combat Speed:	-
Top Speed:	-
Maneuver:	-1

Electronics

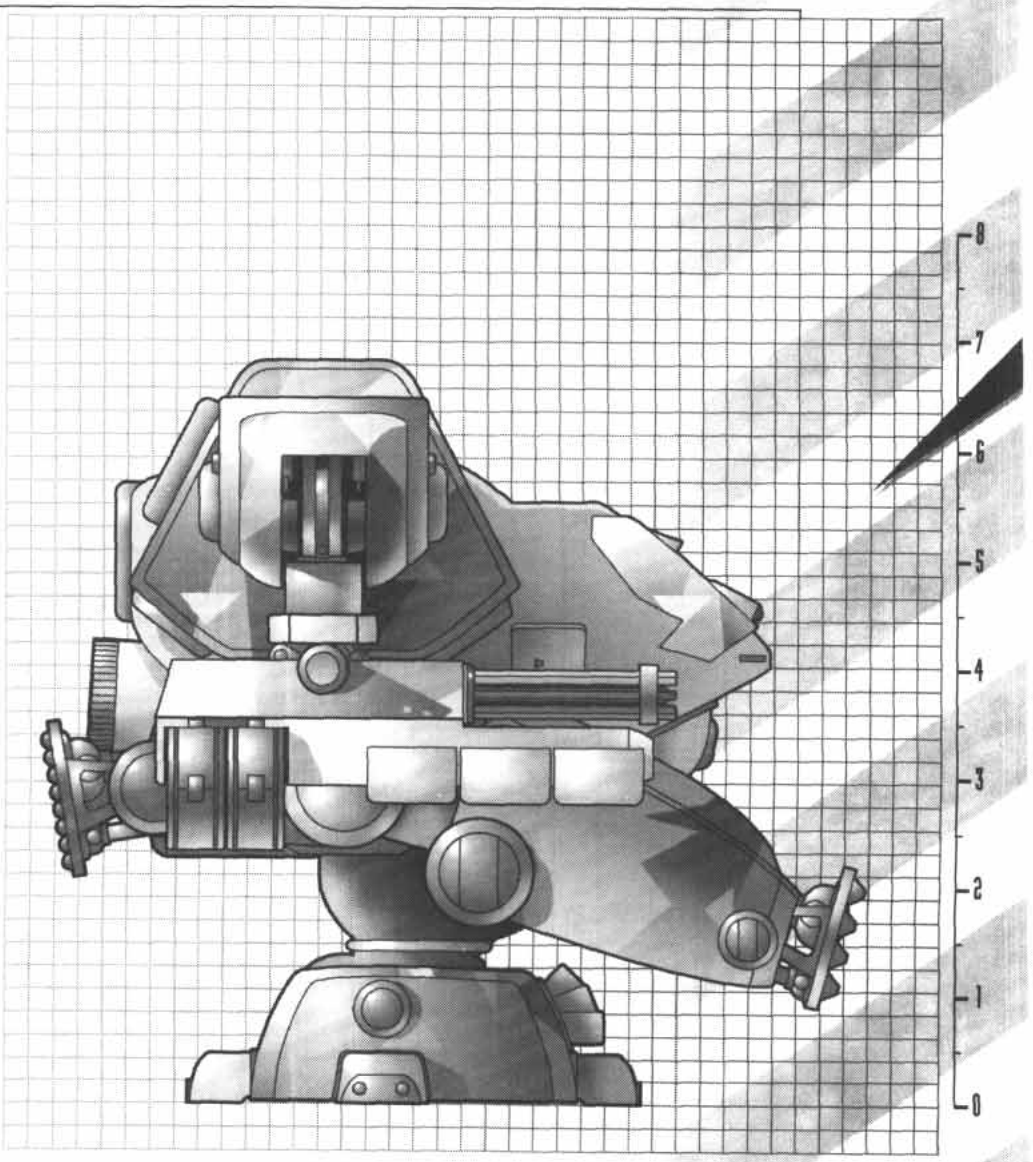
Sensors:	+1
Communications:	0
Fire Control:	0

Armor

Light Damage:	27
Heavy Damage:	54
Overkill:	81

Vehicle Availability

Availability Threshold:	10
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

5 RESEARCH AND DEVELOPMENT MODELS

Weapons Summary

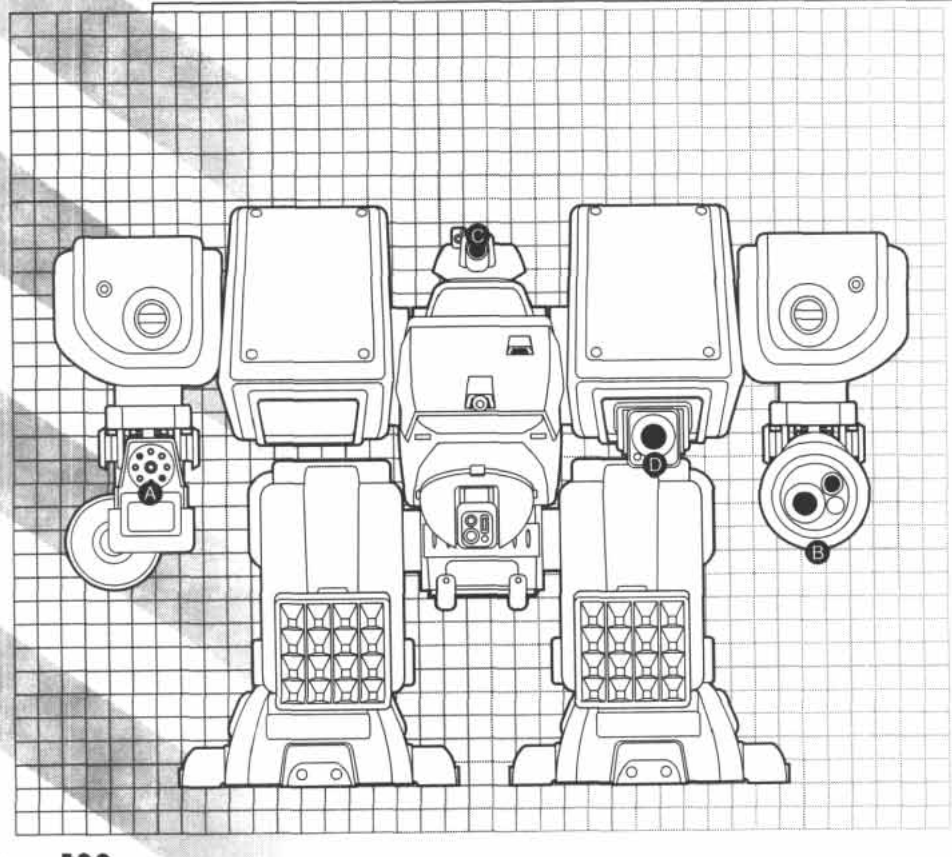
Name	Code	Fire Arc	QTY	Ammo
Vulcan-20 Autocannon	VHAC	Forward	1	400
SB-90 Assault Gun	SC	Forward	1	20
KR-88 Fragmentation Cannon	FGC	Turreted	1	40
Heavy Grenade Launcher	HGL	Fixed Forward	1	40

Perks

Name	Rating	Game Effect
Ammo/Fuel Containment System	-	Subtract 2 from "Ammo/Fuel" hit rolls
Backup Sensors	-	Absorbs first "Sensor" hit
Battle Arm x2	9	Can punch
Emergency Medical	2	Absorbs one "crew stunned" result
HEAT-Resistant Armor	4	Added protection versus HEAT
Hostile Environment Protection	-	Desert
Improved Off-Road Ability	-	-1 MP per hex; min. cost is 1
Limited Life Support	-	-
Reinforced Armor	4	Front
Shielded Weapons	-	Absorbs first "Weapon" hit

Flaws

Name	Rating	Game Effect
Annoyance	-	Continual lurching movement
Annoyance	-	Poor sound insulation
Difficult to Modify	-	-2 to repair and modify rolls
Large Sensor Profile	2	Easier to detect
Sensor Dependent	-	Extremely small vision slits



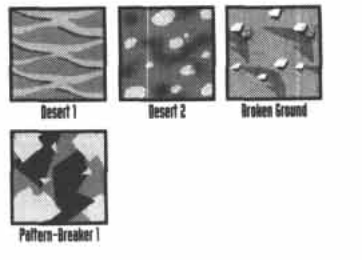
Defects

Name	Rating	Game Effect
Annoyance	-	Vision slits cause migraines
Electronic Glitch	-	-1 Communication
Electronic Glitch	-	-1 Sensors
Inefficient Controls	-	-1 Crew Actions
Structural Defect	-	-10% Armor

Weapons Location Diagram

A	Very Heavy Autocannon
B	Snub Cannon
C	Fragmention Cannon
D	Hvy Grenade Launcher

Typical Camouflage



Bryce Hubbard (order #5318102)

2.6.1 N-MA4204 MASTODON II

In order to discover what is wrong with the basic *Mastodon*, Hartmore engineers have stripped an old *Mammoth* and have slowly begun converting it into a *Mastodon*, piece by piece, starting with the systems that work fine on the first prototype. The only such systems are the weapon systems, and those have been reproduced "as is" on the *Mastodon II*. To avoid repeating the electronic glitches that have plagued the prototype, the original systems have been kept on the *II*. The design crew hopes that the military will be so happy and impressed by the *Mastodon II*'s big guns and heavier armor that they will overlook the old and somewhat obsolete NSA-1V sensor array, and the slightly inefficient communication system. They have also invested a bit of time in cosmetics and have redesigned the control and readouts to match newer ergonomic standards. Desperate designers hope that it will give the appearance of a reworked, more efficient design. Technicians are considering an "old but good" approach in case all else fails. Most of the work on this prototype — the "M2" — is centered around patchwork and touch-ups that will hide the obvious problems with the "M1." The vision slits are being upgraded to a forward arc of heavily reinforced plastic to increase the crew's visual field. The upgrade of the whole cockpit area will allow the technical crew to improve the sound insulation.

Much to Team M1's distress, it appears that Team M2 might actually have the best chance for success. They have so far only tested their design with an old NNet and the NSA-1V sensor array, but are also training a second NNet with an XNSA-8 system around the clock through a computer simulation. The attempt is supervised by Gear trainer Katryne Sanz, reputed to be one of the best NNet trainers in the North. It is hoped that the NNet was indeed the cause of the glitches on the "M1." If such were the case, "M2" might actually be the model that will be pitted against the *Mammoth*. Sanz has reported good progress with the new NNet system and is optimistic about the chances that the "M2" will be sucessful. Hartmore executives have promised her a very substantial bonus based on the performance of the "M2," but have also made clear that she will take the fall should it fail.

Vehicle Specifications

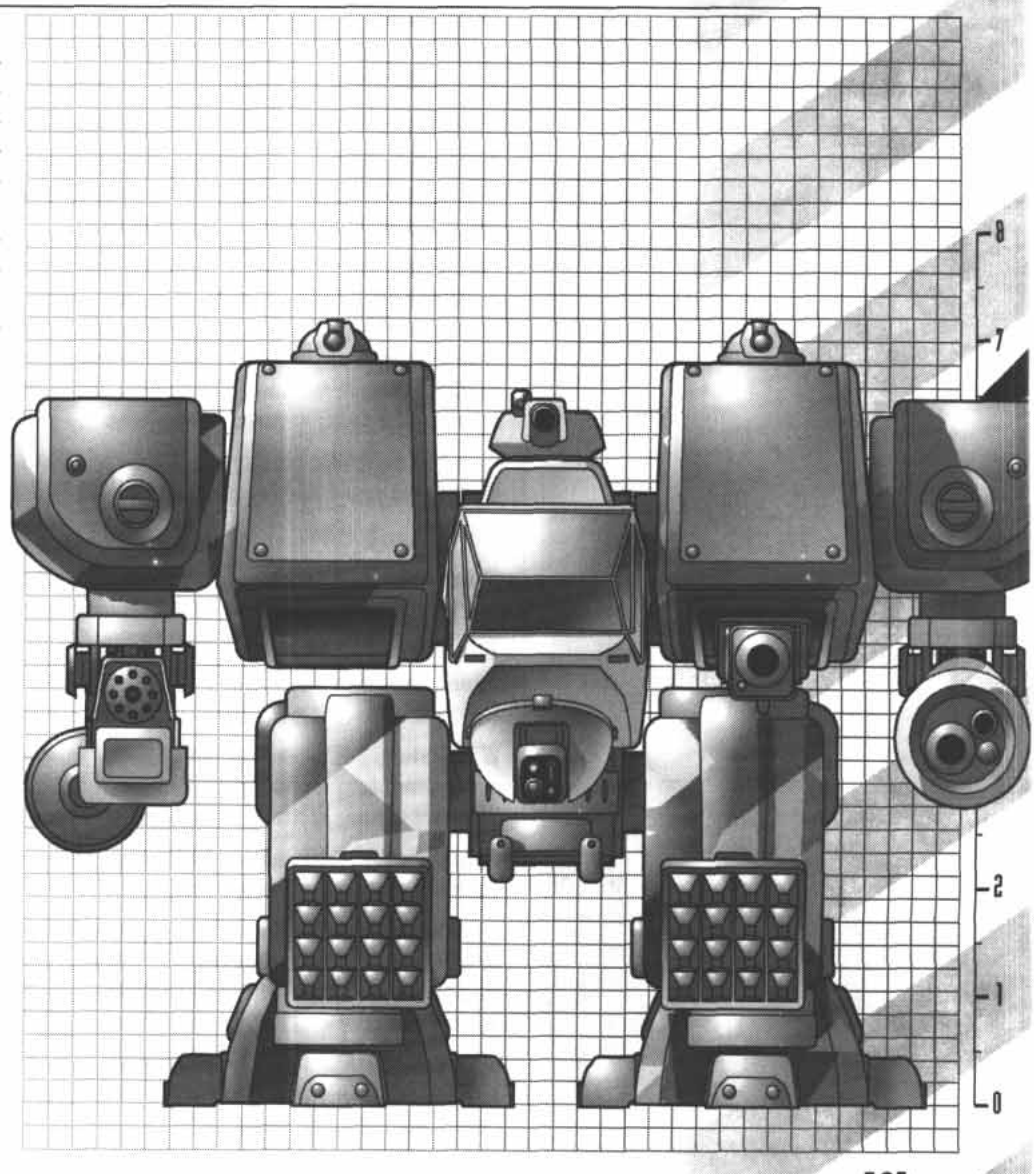
Code Name:	Mastodon II
Production Code:	N-Ma4204X
Production Type:	Testbed Prototype
Cost:	110,333,333 marks
Manufacturer:	Hartmore Motor Company
Use:	heavy assault strider
Height:	6.8 meters (7.1 m w/ sensor pods)
Width:	9.5 meters
Average Armor Thickness:	145 mm
Armor Material:	Durasheet w/ceramic
Standard Operational Weight:	22,100 kg
Primary Movement Mode:	Walk (35 kph)
Secondary Movement Mode:	none
Deployment Range:	420 km
Sensor Range:	60 hexes/3 km
Communication Range:	240 hexes/12 km
Powerplant:	V-Engine (x2), ceramic IC
Horsepower:	1200 Hp x 2, 200 Hp x 1

Modifications

Add:	n/a
Remove:	Sensor Dependent
Change:	Downgrade Sensors to +1/3 km; Communication to 0/12 km
Modified Threat Value:	993
Offensive:	1717
Defensive:	488
Miscellaneous:	775

Vehicle Availability

Availability Threshold:	10
Maximum Number of Units in the Field:	1



Bryce Hubbard (order #5318102)

UNDER THE TABLE

Helios set on the horizon with an ochre color that was unique to the area around Red Sands. Crimson silicate dust hung suspended in the air and lent a red tinge to the evening light. Ivanna didn't really care that much. Nightfall meant nothing to her except that her contact was late.

A low rumble was the first indication that Ivanna's wait would not be in vain. The headlights of a *Longrunner* transport truck swung around the disused storehouse she was standing near. A smaller jeep followed behind, then passed the huge truck to turn onto the dusty patch of ground where Ivanna's *Elan* was parked. A cloaked man hopped out of the vehicle and strode towards her. A significantly larger man — clearly armed with a Riley 9 mm MG — got out as well, but hung back.

"You Breza?" No polite introductions, no smile. He was here for business.

"That's me. You're Merik I take it?" Ivanna kept her voice even, with just the right touch of nervousness appropriate for this exchange.

"Let's see the cash." He never answered her question.

"Right here." Ivanna pulled the tarp off the *Elan*, revealing three dull-gray, armored cases. Her eyes rapidly scanned the man. The SMG was cocked and, she thought, the safety was off. "I'd like to see what I'm buying, Merik."

"All I see is cases, chickie." Merik flashed a cocky smile.

"And all I see is a skag-head with a truck." Ivanna knew she was being tested. Merik would eat her alive if he thought he could walk all over her. She didn't flinch when the bodyguard took a step forward.

"It's okay, Brok." Merik waved the human mountain back. "We'll show the lady what she wants to see. Jym, bring me a case." A third man, thin and graceful this time, came from behind the wheel with a large black case. The inside was filled with "smart foam" designed to keep the contents secure. This particular case was holding a single gray and black cube, which Merik picked up thanks to a retractable handle. The Abaline Research logo on the cube glinted in the headlights.

"Hard to beat this quality, chickie. Top of the line N720 ONNet, already fitted with Gear basic programming and data buses." He was grinning like a longfang now.

"Serial numbers?"

"That's the beauty. They don't exist. This whole series was wiped from the records and just vanished like dust." He carefully put the ONNet back in the case. "So chickie, we got a deal?" He walked over to the *Elan* without waiting for an answer.

"Deal," she said while Merik slipped out a pack of Peace River thousand-dollar bills from the nearest case. "Four million for all twelve."

With a sharp whine, a *Dragonfly* hopper popped from behind one of the low buildings in the area, bright spotlights illuminating the transaction and loudspeaker booming. "You are all under arrest! Drop your weapons and lay down on the ground!"

Merik's smirk vanished and he turned toward Ivanna, who had pulled a Confederate Police badge and a 9 mm pistol.

"You're busted skag-head." Ivanna loved to see the shock on his face and the fear in his eyes, and she almost missed Brok. The bodyguard had sidestepped and was raising his weapon. Without hesitation, she fired three tightly-grouped shots. Two missed, but the last entered his throat. A pink mist sprayed across the jeep.

Ivanna became aware of a whimpering sound. Merik was flat on the ground, crying like a baby. Despite having just killed a man, she couldn't hold back a comment: "don't wet yourself, chickie."

Bryce Hubbard (order #5318102)

6.1 NEW WEAPON SYSTEMS

The weapon systems introduced in the **Heavy Gear** rulebook and elsewhere represent only a sample of the variety of armaments available. Many more types exist to fill out a variety of operational and tactical needs. The following pages detail 21 weapon systems that also see common use on Terra Nova for Gears, vehicles and gun emplacements. These weapons are available to all armed forces, almost without restrictions. They cover a range of operational roles, from specialized functions such as anti-aircraft duty to general ground warfare patrol.

The weapons are divided into rough classes based on their operations rather than their battlefield function. Cannons include weapons that use a chemical explosion to propel a single or multiple shells or slugs. Close combat weapons are used at short range and are commonly used only by Gears, who engage in hand-to-hand combat. Field Mortars are simpler versions of the guided mortars introduced in the **Heavy Gear Rulebook**. Not using guided munitions, these weapons accelerate projectiles on a parabolic course. Laser weaponry uses beams of coherent energy to cause damage with astonishing accuracy. Rockets and missiles carry a warhead in a flying delivery system, either guided (missiles) or not (rockets). A final sections of additional weapons brings together weapon systems from other products used in a new configuration in this **Compendium**.

6.1.1 CANNONS

Cannons include any weapon that can accelerate one or more projectiles using a chemical explosion. Various types of cannons are the basic weapon type used by armored vehicles on Terra Nova. The high caliber fully automatic autocannon class of weapons is featured on almost every military Gear on the planet, while single-shot rifles and anti-infantry machineguns are mainstays of tanks and striders. Regardless of their application, they are all rugged, adaptable and effective, which is why they are very popular. They are also easy to maintain and the ammunition can be readily manufactured with minimal facilities, unlike complex guided missiles or capacitor banks. Cannons can take a variety of forms, from single barrelled guns to rotating multi-barrelled "gatling"-type weapons. Most modern cannons include an autoloader and/or a belt-feeder mechanism, or are clip-fed for easy reloading. Advanced heat-resistant alloys make them less dependent on cooling systems than was previously the case, permitting greater rates of fire. The Riley M222 autocannon is undoubtedly the most popular cannon in the North.

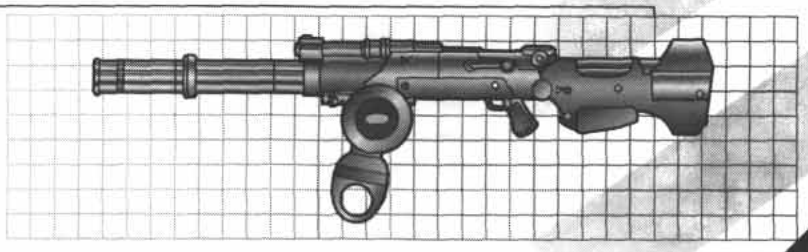
• VERY LIGHT MACHINEGUN

The Very Light Machinegun is a standard infantry support weapon that has been adapted for vehicular use. It is usually attached to a motorized pintle mount to avoid exposing the gunner. While the machinegun is useful against unprotected infantrymen, it is nearly worthless against vehicles, even unarmored ones.

The Brucker M769 is a functional and rugged machinegun capable of firing belt-fed, standard 7 mm cased ammunition. It is often pintle-mounted on jeeps, trucks and other support vehicles.

Very Light Machinegun Profile

Purpose:	Anti-Infantry
Effective Range:	400 m
Penetration:	5 mm
Accuracy:	average
Mode of Fire:	burst
Usual Ammo Load:	1000-5000 bullets



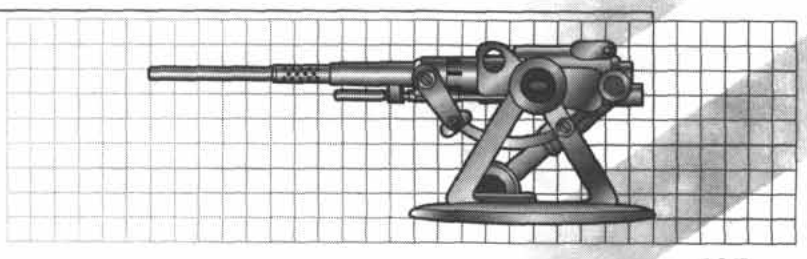
• VERY LIGHT AUTOCANNON

The Very Light Autocannon lies somewhere between a heavy infantry machinegun and a vehicle-mounted autocannon. Although its armor-piercing shells are not very useful against infantry, the VLAC is a perfect back-up, anti-armor weapon for light vehicles. Many scout cars carry one such cannon on a rear weapon mount.

The Riley M202 is a well-known example of the Very Light Autocannon. The single barrelled, air-cooled weapon fires non-standard 15 mm shells, but will accept similar rifle ammunition of the same caliber.

Very Light Autocannon Profile

Purpose:	Anti-Gear/Anti-Infantry
Effective Range:	800 m
Penetration:	38 mm
Accuracy:	average
Mode of Fire:	burst
Usual Ammo Load:	60 shells

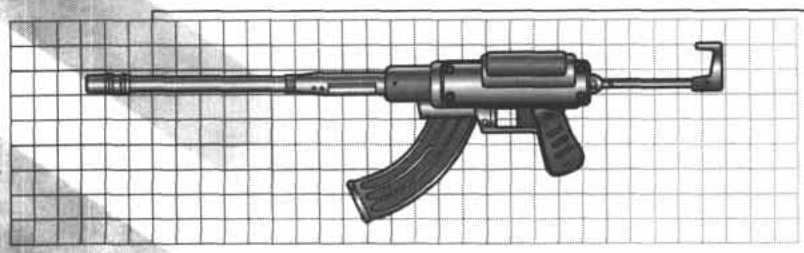


Bryce Hubbard (order #5318102)

• VERY LIGHT RIFLE

The Very Light Rifle is a very small vehicle gun designed as a backup weapon for light scouting vehicles. Its 20 mm shell can pierce the skin of most light vehicles, but not much else. It is popular with rovers because its simplicity makes it easy to maintain in the field.

The "R"-series includes single shot weapons ranging from light guns to field artillery. The R127 VLRF is a single shot cannon that has been likened to an enlarged infantry gun. Its battlefield usefulness is limited except when delivering custom ordinance such as smoke or marker shells.



Very Light Rifle Profile

Purpose:	Anti-Vehicle
Effective Range:	800 m
Penetration:	38 mm
Accuracy:	average
Mode of Fire:	burst
Usual Ammo Load:	60 shells

6.1.2 CLOSE COMBAT WEAPONS

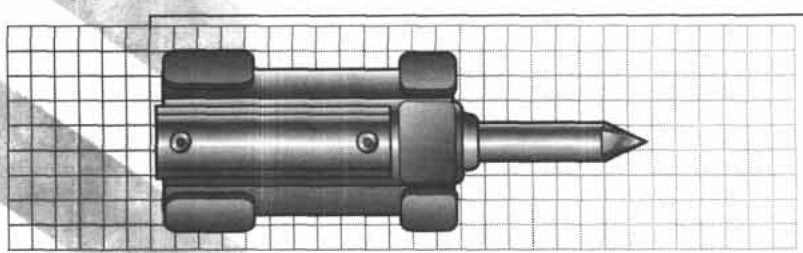
This category includes weapons that are only effective at a short distance (10-20 meters or less). Because their humanoid form gives them more flexibility than most vehicles, Heavy Gears are the machines that use melee weapons the most.

Hand grenades are obvious weapons for Heavy Gears and are available in a variety of sizes and payloads. Grenades are one of the earliest Gear weapons, dating back to the collapse of the Concordat. A rare weapon has been included in this list: the spike gun. It is worth mentioning because of its unusual nature. It is an armor-piercing ram that is applied to the armored skin of an enemy vehicle.

• SPIKE GUN

The Spike Gun is an unusual weapon/tool that is sometimes carried by vehicles, but is usually used by humanoid walkers such as Heavy Gears. The Spike Gun is a chemically powered, armor-piercing ram that is mounted on an arm. A tiny explosion propels a hardened alloy spear forward with enough force to punch through armor with no sound other than the dull thunk of ruptured armor plating (the detonation itself is muffled by a complex system of baffles). The spear can be replaced with a chisel-like device for engineering work.

The Spike Gun shown above is a typical example of this type of weapon. The explosive charges are located in a box-shaped clip placed on the side.

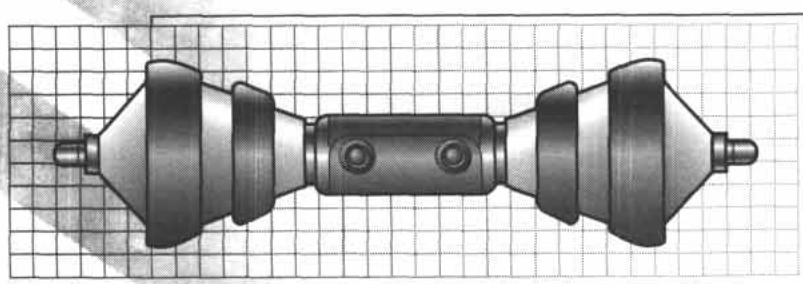


Spike Gun Profile

Purpose:	Hand-to-Hand Anti-Armor/Tool
Effective Range:	1 m
Penetration:	144 mm
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Magazine:	5 charges

• SELF-DESTRUCT GRENADE

The Self-Destruct Grenade is so named because of its extremely powerful warhead and large area effect. It was originally developed as an engineering demolition charge for Badlands prospecting and mining operations, but was quickly turned into a weapon by settlers desperate to defend their homes against the Earth Forces. During the war, many fanatical Gear pilots carried these into combat in the hope of bringing some of their foes down with them as their own Gears were destroyed. All Self-Destruct Grenades are equipped with a timer allowing them to be activated and then left behind. The timer, once set, fuses in place and cannot be deactivated.



Self-Destruct Grenade Profile

Purpose:	Last-Ditch Weapon/Demolition
Effective Range:	20 to 50 m
Penetration:	900 mm
Area Effect:	50 m
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Magazine:	1 grenade

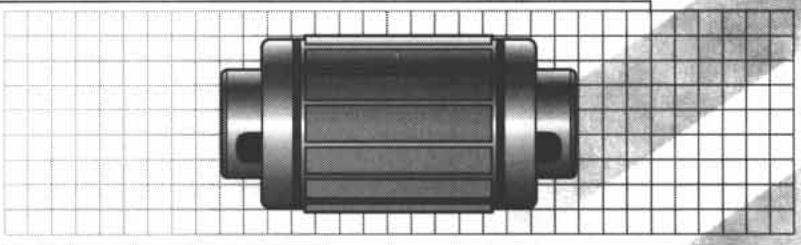
Bryce Hubbard (order #5318102)

• HAYWIRE GRENADE

The Haywire grenade is a rather specialized weapon designed to disable enemy units rather than destroy them. The core of the grenade is a fast-discharge energy capacitor. When activated, the grenade emits a high-voltage burst to cause cascading electrical failure in its target, hopefully taking it out by destroying critical circuitry or electrocuting crewmembers. Because the capacitor fractures and melts when activated, haywire grenades may only be used once and are not rechargeable.

Haywire Grenade Profile

Purpose:	Anti-Vehicle
Effective Range:	20 to 50 m
Penetration:	100 mm + electrical damage
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Magazine:	1 grenade (often carried in 3- or 6-packs)



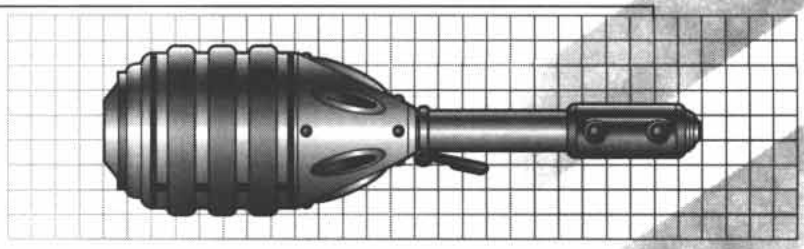
• HEAVY GRENADE

This is a heavier version of the standard Gear-sized Hand Grenade. The explosive charge is made more powerful at the expense of the pre-fragmented ceramic shrapnel load that made the smaller grenade such a deadly anti-infantry weapon. Nonetheless, the Heavy Grenade is still a very versatile tool, usable not only in battle, but also for engineering and demolition tasks (Heavy Grenades generally have a simple timer or fuse of some sort). Some rare Heavy Grenade designs are fin-stabilized for additional throwing accuracy.

The H-6 Heavy Grenade features an unorthodox design with an elliptical warhead and a throwing handle. Like other Heavy Grenade designs, a simple fuse allows the grenade to be used as a demolition charge.

Heavy Grenade Profile

Purpose:	Anti-Vehicle
Effective Range:	20 to 50 m
Penetration:	625 mm
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Magazine:	1 grenade (often carried in 3- or 6-packs)



6.1.3 FIELD MORTARS

Mortars are weapons that accelerate one or more projectiles using a chemical explosion. Because of their configuration, they lob the shell along a very high trajectory. This makes mortars unsuitable for close fighting, but allows indirect firing. Because they are more powerful and less accurate than mortars firing guided ammunition, field mortars are usually reserved for general area bombardment.

Terranovan mortar designs take a variety of forms. In the case of Heavy Gears, mortars are often mounted on the backpack, firing over the head of the machine. In some designs, stabilizer struts extend from the mortar assembly to transfer the gun's high recoil directly to the ground, greatly reducing the stress on the Gear's legs.

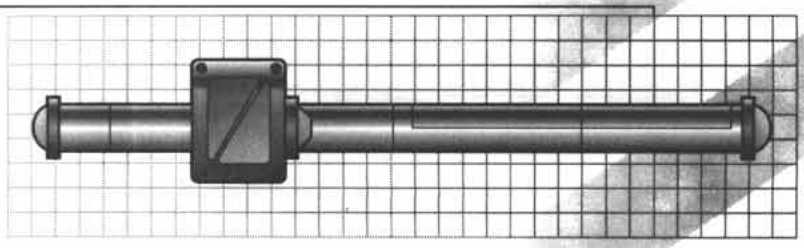
• LIGHT FIELD MORTAR

The Light Field Mortar is a low-velocity howitzer that lobs large warheads in an arcing overhead trajectory. Although very similar in operation to the Guided Mortar, the Field Mortar trades its more sophisticated cousin's accuracy for increased range and punch. This is accomplished by replacing the shell's guidance system with a larger warhead. The very nature of the weapon prevents its use at close range.

The 90 mm UBM-22 is an inexpensive mortar unit that was specifically designed for area bombardment. It fires a high explosive shell similar in destructive power to a Gear's hand grenade, but can also fire other types of ammunition such as smoke rounds.

Light Field Mortar Profile

Purpose:	Bombardment
Effective Range:	1600 m
Penetration:	225 mm
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Load:	20 shells

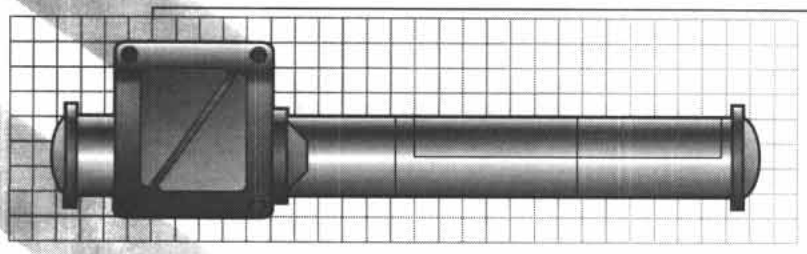


Bryce Hubbard (order #5318102)

• MEDIUM FIELD MORTAR

The Medium Field Mortar is a slightly larger version of the Light Field Mortar. It fires a bigger shell and has a longer barrel to boost the projectile further. Superficially, the MFM is very similar to the more sophisticated Heavy Guided Mortar, and the two are sometimes confused. Performance-wise, the Guided Mortar is more accurate, but the Field Mortar has a larger area effect.

The UBM-100 Mortar Unit is a typical Medium Field Mortar carried by the Rabid Grizzly Heavy Gear. Since it uses the same mounting brackets as the Northco FSGM Heavy Guided Mortar, the UBM-100 is sometimes used on other Grizzlies when guided ammunition is in short supply.



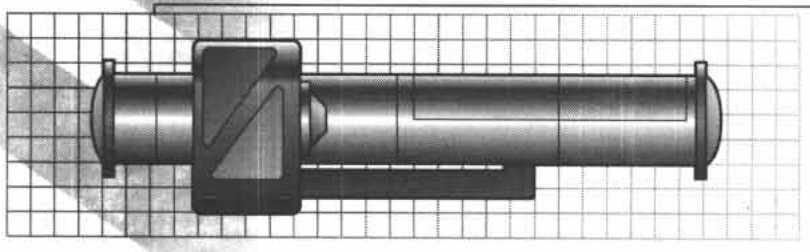
Medium Field Mortar Profile

Purpose:	Bombardment
Effective Range:	2000 m
Penetration:	400 mm
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Load:	12 shells

• HEAVY FIELD MORTAR

A large bombardment weapon, the Heavy Field Mortar is sometimes classed in military registers as an artillery piece. It can hit a mobile target over 2.5 kilometers away. The shell used is composed of several sub-warheads for greater area coverage: even if the shot misses, the target could still be hit by a fragment. Heavy Field Mortars are usually mounted on tracked vehicles since they are very heavy and have a high recoil.

The SDpzk-16, also affectionately known as the "Stormhammer," is a typical Heavy Field Mortar. The rugged 160 mm weapon has an air-cooled armored jacket for extended firing and general protection. The "Stormhammer" is most often found mounted on the back decks of modified Klemm *light tank chassis.*



Heavy Field Mortar Profile

Purpose:	Bombardment
Effective Range:	2400 m
Penetration:	625 mm
Accuracy:	poor
Mode of Fire:	single
Usual Ammo Load:	5 shells

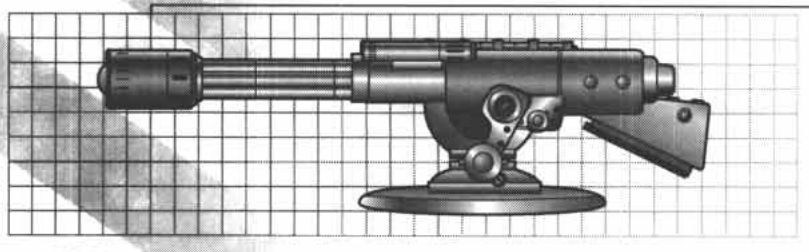
6.1.4 LASER WEAPONRY

Laser is an acronym for Light Amplification by the Stimulated Emission of Radiation. This type of weapon fires a beam of coherent energy, generally light in the near-visible frequency range, using the millenia-old High Energy Laser (HEL) techniques. Accuracy is very high, though always limited by the fire control computer.

• GATLING LASER CANNON

The Gatling Laser is a specialized, rapid-firing energy beam weapon that uses multiple lasing chambers to recharge its capacitors faster and to better dissipate the heat of continuous fire. The resulting "machinegun effect" can be used to attack multiple targets. Although the increased energy pumped into each shot dissipates quickly in atmosphere, the Gatling Laser can spread its fire over a larger area than other continuous-firing lasers.

FyStar Weapon Works recently introduced its brand new Helios-series high-power laser. Although it is low-powered for a battlefield weapon, the Helios uses three 10 MW lasing chambers located around a central core, activated by an electric motor on a separate circuit.



Gatling Laser Cannon Profile

Purpose:	Anti-Vehicle
Effective Range:	800 m
Penetration:	260 mm (up to 100 m range)
Accuracy:	good
Mode of Fire:	burst
Usual Energy Charge:	40 shots

Bryce Hubbard (order #5318102)

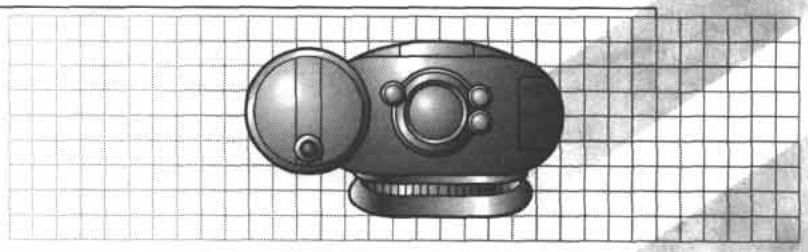
• LIGHT PULSE LASER CANNON

A weapon similar to the Light Laser Cannon, the Light Pulse Laser concentrates all its power in a single, highly concentrated pulse of energy. Although this reduces the range because of increased beam attenuation, it also causes a lot more damage to the target. Light Pulse Laser Cannons have an output of around 15 to 20 mW, depending on lasing efficiency.

The Sergon Optics A-20 Lightbearer is a 17.5 MW free-electron pulse laser mounted in the upper turret of the Aller Main Battle Tank. *Sergon Optics is a division of Hyperion Works and is well known for its quality lasers.*

Light Pulse Laser Cannon Profile

Purpose:	Anti-Vehicle
Effective Range:	1200 m
Penetration:	400 mm (up to 150 m range)
Accuracy:	average
Mode of Fire:	single
Usual Energy Charge:	15 shots



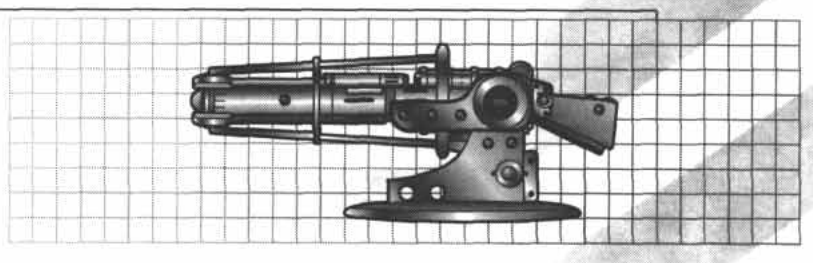
• HEAVY PULSE LASER CANNON

Like the lighter PLC, the Heavy Pulse Laser concentrates all its power in a single, highly concentrated pulse of energy. Although the beam rapidly loses coherence and power, the weapon is still very accurate for its large size and packs quite a punch. Heavy Pulse Laser Cannons have an output of around 25 to 35 mW and require large capacitor banks that take a long time to recharge.

The 35 MW HA Armorwerks PLC-35 is, without a doubt, the largest vehicular laser system currently in use. Pieced together from the remnants of crashed Earth ships' weapon arrays, the PLC-35 is a powerful battlefield laser capable of outperforming most projectile weapons at close range. Unfortunately, interaction with airborne particles greatly reduces its penetration depth over a longer range.

Heavy Pulse Laser Cannon Profile

Purpose:	Anti-Armor
Effective Range:	1200 m
Penetration:	575 mm (up to 150 m range)
Accuracy:	average
Mode of Fire:	single
Usual Energy Charge:	10 shots



6.1.5 ROCKETS AND MISSILES

This type of weapon consists of a high-explosive, shaped charge warhead propelled by a rocket motor. Guided rockets are referred to as "missiles." They are expensive but are generally quite accurate. They also have the advantage of being able to follow the spot made by a laser beam pointed at the target by a friendly, making extremely accurate indirect fire possible. The simpler rockets are even more popular because they give effective firepower to light vehicles unable to handle the recoil of the large battlefield guns. Rockets are often little more than a rocket motor mated to a warhead with a dumb microchip allowing it to home in on the general area where the target is believed to be. Rockets are relatively cheap and thus fairly popular in small communities with limited resources.

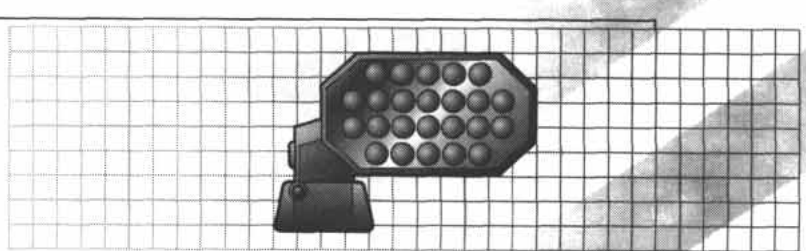
• HEAVY INCENDIARY ROCKET PACKS/24

Heavy Incendiary Rockets are similar to Heavy Rockets, but carry an incendiary warhead (usually a white phosphorous/napalm-type chemical gel). The warheads spread a viscous burning liquid that keeps affecting the target for some time after the hit. HIRs are used mostly for mass destruction.

Northco does not produce many rocket launchers (or weapon systems for that matter), but their 24-rocket HI-8 pack is well known for its brutal efficiency and smooth operation.

HIRP/24 Profile

Purpose:	Anti-Vehicle/Scorched Earth
Effective Range:	1200 m
Penetration:	260 mm
Accuracy:	poor
Mode of Fire:	single or ripple
Usual Ammo Magazine:	24 rockets

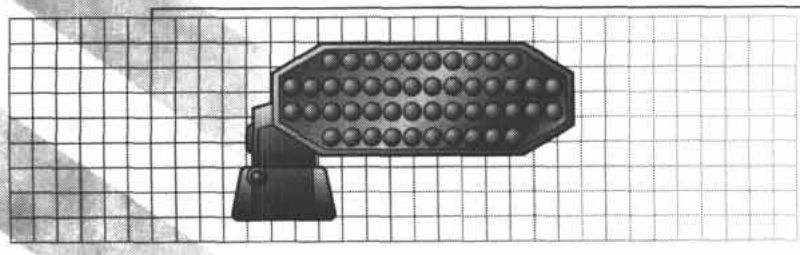


Bryce Hubbard (order #5318102)

• HEAVY INCENDIARY ROCKET PACKS/48

The 48-rocket HIRP is one of the most devastating battlefield weapons used by land vehicles on Terra Nova. Not only are the incendiary warheads very powerful, they can be ripple-fired to cover a very large area. This is intended to catch several targets at once and deny the area to the enemy since the burning zone will be impassable for several minutes while the chemicals consume themselves.

The weapon shown above is the Territorial Arms 82 mm HIRP, a standard SCRP rocket pod refitted to launch incendiary rockets. Although the warhead is less potent on impact, having been replaced by a smaller one to make room for the incendiary fuel tanks, the rocket motor and guidance system were left as is, giving the HIRP about the same performance profile as a regular heavy rocket launcher.



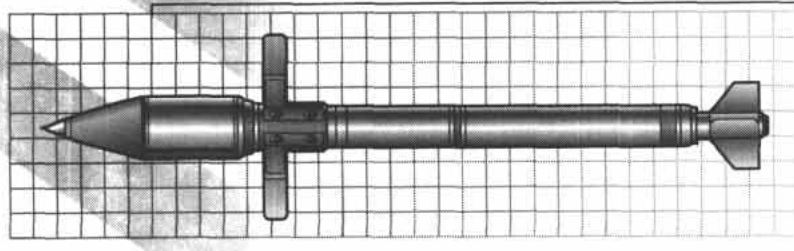
HIRP/48 Profile

Purpose:	Anti-Vehicle/Scorched Earth
Effective Range:	1200 m
Penetration:	260 mm
Accuracy:	poor
Mode of Fire:	single or ripple
Usual Ammo Magazine:	48 rockets

• ANTI-GEAR MISSILE

The Anti-Gear Missile is a smaller, lighter version of the standard anti-tank missile. The warhead is useless against the heavy armor of the larger tanks, but can handle just about any other armored vehicle. The majority of AGM designs are wire guided using a very thin optic fiber, but a few models are laser or radio guided. Because of their reduced size, multiple AGMs can be carried within a single launcher.

The Hammerstrike-II missile can be fired from a ground launcher or, with the aid of an additional solid fuel booster, from an aircraft or other vehicle. The small projectile lacks the punch of a standard anti-tank missile, but is powerful enough to dispose of most light armored vehicles and, of course, Gears.



Anti-Gear Missile Profile

Purpose:	Anti-Gear
Effective Range (air):	6000 m
Penetration:	225 mm
Accuracy:	good
Mode of Fire:	single
Usual Ammo Magazine:	2 to 4 missiles

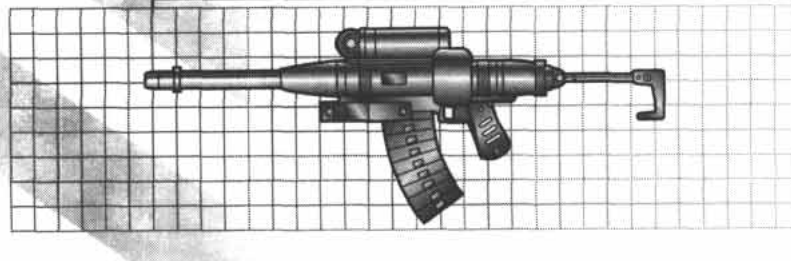
6.1.6 ADDITIONAL WEAPONS

The following weapons have been previously published in other Heavy Gear sourcebooks, but are used in the Compendium in slightly different configurations. There game stats remain unmodified, however, and a complete list of stats for all weapons used in the Compendium can be found at the end of this chapter.

• LIGHT ANTI-AIRCRAFT CANNON

The Light Anti-aircraft Cannon is a high velocity, small-caliber weapon with an extremely high rate of fire, allowing it to fill a large area with deadly projectiles. An electric auto-loader brings fresh ammunition rounds, often caseless, from a magazine. It is usually linked to an air defense sensor system to increase its accuracy.

The LAAC-76 20 mm cannon mounted on Norlight attack planes is representative of this class of weaponry. The cannon is placed in an external pod underneath the fuselage, while its ammunition is carried in a helicoïdal magazine in the pod's rear section.



Light Anti-Aircraft Cannon Profile

Purpose:	Anti-Aircraft
Effective Range (air):	4000 m
Penetration:	65 mm
Accuracy:	average
Mode of Fire:	burst
Usual Ammo Load:	200-1000 shells

Bryce Hubbard (order #5318102)

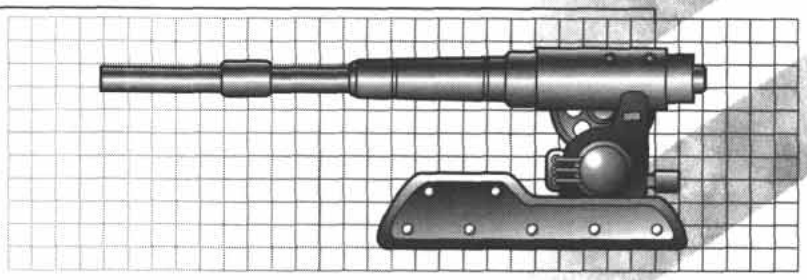
• LIGHT ARTILLERY GUN

The Light Artillery Gun is a large cannon or howitzer. The usual caliber is around 100 mm, though some units use a smaller caliber and advanced binary propellants or electrothermal technology to achieve a similar performance. A few rare designs have been based on massdriver technology, but their power requirement and technological complexity have made them unpopular with the artillery units they have been assigned to. Its main function is to accurately propel a shell over very long distances. Often, artillery guns are designed to put a salvo of five or six shells in the air before reloading or cooling off.

The AMD-7 is a Southern massdriver artillery gun. Its drive coils can accelerate packets of kinetic penetration ordinance for normal fire or can load special ammunition canisters for special effects such as smoke. Its high maintenance requirement has prevented its wide distribution to front line units, however.

Light Artillery Gun Profile

Purpose:	Artillery/Fire Support
Effective Range:	10 km
Average Penetration:	145 mm
Area Effect:	15 m radius
Accuracy:	average
Mode of Fire:	single
Usual Ammo Magazine:	40 salvos



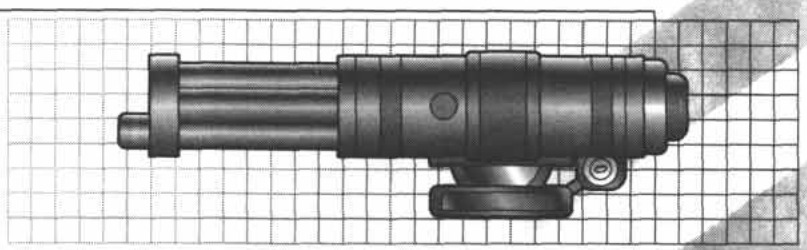
• MEDIUM ANTI-AIRCRAFT CANNON

The Medium Anti-Aircraft Cannon is a close cousin of the Medium Autocannon. It has a slightly higher rate of fire and uses explosive shells, usually of 40 mm caliber. It can also use shells that are equipped with a collapsed alloy penetrator for increased damage. Often, a mix of the two is loaded in the MAAC's ammunition magazine for optimum effect against a variety of targets, both on the ground and in the sky. Most MAACs have several barrels to allow them time to cool off between shots.

The Western Armory MC-105 gatling cannon is a rugged single-barrel gun which is liquid cooled and automatically belt-fed for a cylindrical ammunition drum located on the Gear's back armor skirt. Originally used on anti-vehicle helicopters, it has been converted as a Gear-carried, anti-aircraft weapon. The MC-105 is located in a rotating, over-the-shoulder mount on the Flak Jaguar. *Because of its high price, few militaries find it worth their while.*

Medium Anti-Aircraft Cannon Profile

Purpose:	Anti-Aircraft
Effective Range (air):	6000 m
Penetration:	100 mm
Accuracy:	average
Mode of Fire:	burst
Usual Ammo Load:	200-1000 shells



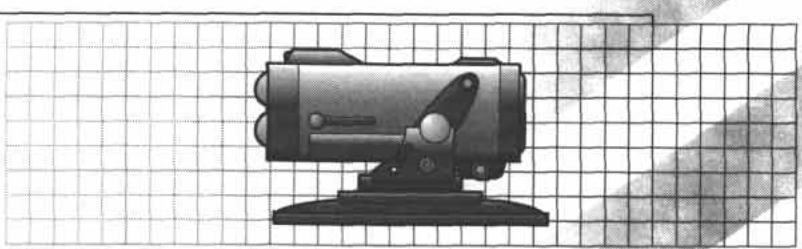
• VERY LIGHT ROCKET PACK/128

The Very Light Rocket is little more than a metallic cylinder, barely longer than a beer can, which is filled with propellant powder at one end and a warhead at the other. The largest Very Light Rocket Pack, the VLRP/128 is equipped with a rugged targeting computer that can control the launch of 64 individual rockets at once and direct them to cover a destruction zone of up to 250 square meters. With additional help from the main fire-control computer and a minimal cooling delay, the launcher can virtually erupt with projectiles to attack multiple targets in a very large zone.

The Territorial Arms Redjacket-C is a standard VLRP/128 multi-rocket launcher. The Redjacket-C is generally housed within a rectangular box that contains the necessary vents and cooling equipment for extended firing. The Redjacket-C is used in fortifications, landships and field artillery mounts.

• Very Light Rocket Pack/128 Profile

Purpose:	Mass Bombardment
Effective Range:	400 m
Penetration:	65 mm
Accuracy:	poor
Mode of Fire:	burst
Usual Ammo Magazine:	128 rockets



Bryce Hubbard (order #5318102)

6.2 PERKS

Many vehicles have special features that are not covered by the vehicle's simple tactical and strategic statistics, which reflect only armor, weaponry, movement and basic electronics. These features are quantified with a system of Perks and Flaws.

Perks represent additions or special useful features found on a vehicle. These may completely separate sub-systems such as a next-generation on-board neural net (the Advanced NNet Perk) or may reflect a special feature of systems already covered by the basic statistics, such as advanced armor systems (the Ablative Armor or Reactive Armor Perks). Perks follow the sample principles of simplicity as the Silhouette system as a whole, and the same Perk can represent several "real world" features (which result in the same tactical effect).

Perks which feature the "AUX" logo are considered auxiliary systems for damage purposes. These Perks are almost always semi-independent sub-systems that can be damaged or destroyed separately from the rest of the machine. They often cover sophisticated electronic sub-systems. Perks which feature the "R" logo have a rating. These Perks can be purchased at a variety of levels of effectiveness and that level is factored into their cost. The rating of the Perk is always listed after the name of the Perk.

The following are official additions to the Perks listings in the **Heavy Gear Rulebook** (p. 144) and other **Vehicle Compendiums**. Some of these Perks have been listed in previous supplements; they are included here so that readers need not search through dozens of books to find the stats of a vehicle they see here. The **Heavy Gear Rulebook** and this **Compendium** are all that is necessary to understand virtually all the stats in this book.

One of the listed Perks is a revision of the old Vehicle Bay Perk (page 149 of the rulebook). The Vehicle Bay Perk is now cheaper and better explained than before. Note that the vehicles found in the **Compendium** series use the new cost and function of the Vehicle Bay Perk. Everything else in this book follows the standard rules from the rulebook.

• ABLATIVE ARMOR

R

One or more facings of the vehicle are covered with a special, very advanced armor plating that shatters away under impact stress or vaporizes when hit by a HEAT-effect weapon (whether a shaped-charge warhead or a laser beam). This action absorbs much of the incoming energy (and thus the damage), but the Ablative Armor must invariably be replaced after each battle.

The maximum amount of Ablative Armor that may be carried is equal to half the Base Armor rating of the vehicle (rounded down). When the vehicle is hit, add the current rating of this perk to the Armor rating of the vehicle. Each defensive arc (Front, Rear Sides and Rear) must be protected separately. Ablative Armor is not compatible with Reactive Armor.

Ablative Armor automatically loses 1 point from its rating per ten points (or part thereof) of damage every time it is hit, in addition to the normal Armor reduction (if applicable). The Ablative Armor loses points every time the vehicle is hit, whether the attack damages the vehicle or not.

• COST (PER DEFENSE ARC) = RATING/2 •

• ACROBATIC HANDLING

AUX R

The maneuvering systems of battlefield Gears are designed with overall motion in mind. War machines must be able to move quickly and efficiently over varying terrain, but elaborate jumps are well beyond the needs of the military. All these factors are important in duels as well, but there is an added need for close-combat maneuverability. Being able to jump and flip the Gear through tight obstacle courses and to avoid multiple tackling opponents is not only useful, but extremely crowd pleasing.

The rating of Acrobatic Handling is added to the Gear's maneuverability score for close combat attacks and defenses, and when defending against point-blank attacks. The Perk gives no advantage for any attack made from short range or further. Acrobatic Handling also modifies any rolls made to make jumps, flips or kicks.

No Gear may take a rating in Acrobatic Handling higher than one above their Maneuver rating. Gears with negative modifier ratings and vehicles without the Walker movement type may not take Acrobatic Handling.

• COST = RATING X 6 •

• ADVANCED NEURAL NET

Advanced Neural nets are the "smart" computers that form the core of the newest generation of Terranovan military vehicles. They were developed in part with technology recovered from destroyed or abandoned Earth vehicles and spaceships. Advanced neural nets are harder to manufacture and more expensive than regular NNets, but they vastly improve the response time of all of the vehicle's on-board electronic systems.

Advanced neural nets are highly responsive, adding a +1 modifier to the vehicle's maneuverability score. This bonus is added after calculating the vehicle's Threat Value. Advanced neural nets also automatically get the learning ability (see the **Heavy Gear Technical Manual** for more detail).

• COST = 10 •

Bryce Hubbard (order #5318102)

• ANTI-MISSILE SYSTEM

AUX A

Anti-missile systems (AMS) are designed to detect and destroy missiles before impact. Usually, they take the form of rapid-fire, small-caliber machineguns, though small counter-missiles or shotgun-like devices are also used. All these missiles are mounted in small independent turrets to ensure both a rapid response time and complete coverage of the surrounding area. Anti-missile systems are most often used on slow and ponderous vehicles such as heavy tanks and landships, because their weight and clumsiness prevents them from effectively dodging shots aimed at them.

In game terms, each functional anti-missile system grants the vehicle an additional special defense roll versus missiles and rockets. Anti-missile systems can be activated or deactivated at the cost of one action (it is assumed they are "on" at the start of the battle). Active anti-missile systems do not use up actions and roll versus every incoming missile or missile cluster (burst attacks). They can also be fired as normal weapons (x1 Damage, ROF 3 with a Base Range of 1) at the cost of one action.

The anti-missile system has a skill level of two, plus its rating. It can attack any type of mortar shell, rocket or missile, but not bazooka projectiles. If the result of the anti-missile system is greater than the attacker's roll, the anti-missile system shoots down the missile. The AMS completely destroys the missile when successfully used versus a single shot attack. When used to defend versus a missile cluster (ROF attack), each point of the MoS reduces the incoming cluster's ROF bonus by one. If the ROF bonus drops below zero, all of the incoming missiles have been effectively destroyed.

The amount of shots spent each time the system is fired is equal to five minus the MoS, with a minimum cost of 1. The maximum number of units of ammo that can be carried is equal to ten times the vehicle's Size. There is no limit on the number of AMS carried per vehicle, but no AMS may have a rating higher than 3.

Example: Heavy Gear Alpha fires an anti-tank missile at Tank Beta. Heavy Gear Alpha's attack roll is 5. Tank Beta's defense roll is a 2. Fortunately, Tank Beta has two rating 2 anti-missile systems. The two systems roll 2 and 4, modified to 4 and 6 by the rating. Since the second system's roll is better than Alpha's attack roll, the second anti-missile system shoots down the missile. The systems spend five and four units of ammunition, respectively.

Seeing this, Gear Alpha's teammate, Heavy Gear Gamma, launches a ROF 3 rocket salvo toward the tank. Its attack roll is 5. Tank Beta rolls another 2 for defense, so the anti-missile system activates again. It rolls a 6, modified by 2, for a total of 8. The MoS is equal to 3, so the ROF bonus of the attack drops to zero. Of the salvo, only one rocket will strike the tank.

• COST = (RATING X 5) + (0.1 X UNITS OF AMMO) •

• ANTI-PERSONNEL CHARGES

AUX A

Anti-Personnel (AP) charges are directional fragmentation mines mounted on the hull of a vehicle as a deterrent to close assault by infantry units. When an infanty squad closes to within 25 meters of the vehicle, a small proximity sensor detonates one or more charges in the direction of the unit, slicing through their ranks and showering them with deadly shrapnel. Fortunately for infantrymen, the system is not fool-proof and sometimes either fails to function or does so too late, allowing the attackers to get behind cover before the blast hits.

AP charges can be turned on or off at the cost of one action. They are either all on or all off — it is assumed they are "on" at the start of a battle. They have a Damage Multiplier of 3 and roll two dice for their attack roll, adding their rating to the dice roll. No AP system may have a rating lower than one (1) or higher than three (3).

Each firing of the system consumes one die's worth of charges. The range of the AP charges is 0 (Point Blank only — the infantry must be in the same hex as the vehicle) and they have a "T" firing arc. Firing AP charges does not use up actions — the system automatically attacks all infantry units (friend or foe) in the hex once per turn until the infantry unit is destroyed, leaves the hex, the system runs out of charge, or it is turned off.

The hull-mounted position of the charges makes them very vulnerable to enemy fire. Anti-personnel charges count as auxiliary systems, but damage is applied differently for them. On a Light damage result, two dice's worth of charges are destroyed. On a Heavy damage result, all charges are detonated and lost. It is not possible to armor or otherwise protect the AP charges, as this would reduce their performance below an acceptable level.

• COST = (3 X RATING) + (0.02 X NUMBER OF CHARGES CARRIED) •

• AMMO STORAGE

The vehicle is equipped to store some or all of its spare ammunition clips in an armored compartment to protect them against damage. Walkers must often use this Perk, but other vehicles can use it too. Clips stored in such a way can only be accessed by the outside of the vehicle. If there is no Manipulator Arm or ammo-reloading Tool Arm mounted on the vehicle, the crew must exit and manually reload the weapon (i.e., transfer the clip by hand). At the designer's discretion, the Manipulator Arm can be considered not precise enough for reloading, forcing the use of the dismounted crew option.

Stored clips are not counted as an AUX system anymore. They can only be detonated by an Ammo Explosion result on the damage table, which destroys the vehicle anyway. The Perk's cost is one point per ten points worth of shots of ammunition stored, regardless of how they are divided into clips.

• PERK COST: 1 PER 10 POINTS OF SHOTS STORED (ROUNDED UP) •

Bryce Hubbard (order #5318102)

• CAMO NETTING

AUX

The vehicle is covered with a heat-absorbent tarp which has a net attached to it. Leaves and other camouflage material can be attached to the net, while heat is absorbed by the tarp. This gives a +1 to concealment when in vegetal cover (Woodland or Jungle hexes). The camouflage tarp is custom designed for each vehicle type, ensuring that it covers most of the hull and blurs the overall silhouette. Most tarps are made to be easily stored and installed when a vehicle changes terrain types while on operations.

• COST = 1 •

• CHAFF/FLARE DISPENSER

AUX A

Chaff and Flare dispensers are used to confuse and defeat the radar and infrared guidance systems of incoming missiles. In game terms, each use of a Chaff/Flare Dispenser grants the vehicle a defense bonus versus rockets, missiles and guided weapons. The dispenser's rating is added to the driver's defense roll. If the result of the vehicle's modified defense roll is equal to or greater than the attacker's roll, the countermeasures have successfully misled the missile(s).

Example: Infantryman Alpha launches a guided missile at tank Beta. Alpha's attack roll is a 6. Beta's defense roll is a 4. Fortunately, tank Beta has a Chaff/Flare Dispenser (rating 2). The rating is added to the defense roll, giving a final result of 6. Since the modified defense roll is equal to Alpha's attack roll, the chaffs and flares have misguided the missile.

Use of a Chaff/Flare Dispenser does not cost an action. There is no limit, other than the dispenser's ammo load, to the number of chaffs or flares that can be used in one round, but only one shot is expended per defense roll.

• COST = (RATING X 5) +(AMMO/20) •

• CLIMBING APPARATUS

The Climbing Apparatus is a set of special footplate spikes, ropes and claws used by humanoid vehicles for climbing. Since the claws can hold the unit securely against the cliff face, weapon fire during climbing is now possible, albeit at a -2 penalty. The Climbing Apparatus also reduces the climbing Piloting test's threshold by one. The climbing equipment cannot be used as a weapon.

Climbing Apparatus also includes a set of crashbars designed to protect the vehicle from the damage that would result from scaling a sharp incline. Gears equipped with Climbing Apparatus often — but not always — have only a Walk movement mode.

A vehicle must have both the Walker movement mode and at least two Manipulator Arms capable of lifting it to make use of this Perk.

• COST = 2 •

• FUEL EFFICIENT

The engine of the vehicle is extremely efficient thus a greater deployment range is possible. As long as the vehicle remains at Combat Speed, each kilometer of Deployment Range counts as two (or more) kilometers of distance. One and a half, twice and three times the range are possible multipliers (the cost is 2, 4, or 8, respectively).

• COST = 2, 4, OR 8 •

• HIGH CAPACITY COMPUTER

The High Capacity Computer Perk indicates a vehicle with an advanced and powerful data-processing system. While most 62nd century vehicles are computer equipped, this one's computer has additional processing power which is not hindered by normal operations. In the tactical game, this has no noticeable effect, which explains its low point cost.

In the roleplaying game, the computer can be used to run various programs that are unrelated to the vehicle's normal function. For instance, a high capacity computer might keep a series of code-breaking programs, a record of units deployed in the field and their current status, or maybe the financial records of a company.

• COST = 0.5 •

• LOW PROFILE

The vehicle has a low profile that makes it easier to hide and conceal. Vehicles with this Perk tend to have low and compact hulls and can easily hide behind low walls or hills. Walker vehicles can benefit from this Perk, but not Heavy Gears, as their humanoid structure does not really fit the concept of a low profile.

Vehicles with this Perk add +1 to Concealment while in cover. Cover is defined in the tactical game as any Woodland, Jungle, Swamp or Urban hex.

• COST = 2 •

Bryce Hubbard (order #5318102)

• MINELAYING EQUIPMENT

The Minelaying Equipment Perk is a set of special machinery designed to dig a small trench or a series of holes along the path of the vehicle. The machinery then plants one or more land mines and buries them. The system can also "spray" the smaller anti-personnel mines behind the path of the vehicle for fast deployment. This Perk is not explain within these pages. Its function and advantages are outlined in great detail on p. 28-33 of the **Tactical Field Support** rules supplement. The latter provides various mine types for use with this Perk.

The whole system is very efficient and can lay up to five points worth of mines every two minutes (four tactical rounds or twenty Skirmish rounds). The minefield becomes active one minute after the minelaying vehicle has left the hex, though this delay can be increased if desired. Minelaying Equipment may not be used to place Jumping Mines. The mines are not included in the Perk cost and must be bought separately.

• COST = 3 + 1 PER TEN TV POINTS OF MINES (ROUNDED UP) •

• PINTLE MOUNT

AUX

It is possible to install an infantry weapon just outside one of the hatches of a vehicle on a simple swivel mount. Such a weapon is said to be pintle mounted and must be operated by one of the vehicle's crewmen. That crewman can do nothing else except fire that gun and is exposed to enemy fire (count as Exposed Crew Compartment for the gunner only, if the vehicle is not already open-topped). Pintle mounts have a 180° arc of fire (chosen at the time of design), but can be swung around in the opposite direction at the cost of one action.

Pintle Mounts are commonly found on wheeled or tracked vehicles which may wish to add light anti-infantry weaponry to their arsenal. Rovers often convert civilian jeeps and utility trucks into light combat vehicles with the simple addition of a pintle-mounted weapon.

The weapon is not protected by the vehicle's armor and counts as an Auxiliary system. Fire Control hits neither affect pintle mounted weapons nor does the Fire Control bonus of the vehicle apply to them (they are not controlled through the computer). Firing penalties are equal to -1 for more than half and up to Combat speed, and -2 for Top Speed, in addition to any other modifiers.

Pintle mounts are quite simple to build and add practically nothing to the cost of the vehicle. The weapon itself is a standard infantry weapon (see list on page 100 of the rulebook). The cost of the weapon is equal to its Damage Multiplier and is added to the vehicle's Offensive Score.

• COST = FREE (COST OF WEAPON IS ADDED TO OS) •

• RAM PLATE

Part of the chassis of the vehicle has been specially reinforced to withstand high speed impacts. For most vehicles, this take the form of a large welded plate; for Gears, reinforced shoulders are used. This reinforced section allows the vehicle to survive collisions that would normally incapacitate it. Ram Plates are commonly found on police and military vehicles designed to break though barriers and road-blocks, or on close-combat Gears.

Choose an arc for each ram plate present. The vehicle takes only half the normal damage in a collision, provided the impact is in the same arc as the Ram Plate (obviously).

• COST = 1 •

• REACTIVE ARMOR AUX R

Reactive Armor is an advanced development of a millennia-old concept. It is not composed of the usual armor plates, but rather is a set of small directional fragmentation mines mounted on the hull of a vehicle. A series of small sensors detonates one or more charges in the direction of an incoming attack, hopefully reducing its efficiency. The explosion counteracts HEAT-effect charges and sprays anti-laser aerosol to diffuse and refract laser beams. Reactive Armor is always active, no matter what. Because of balance problems, vehicles using the Walker movement system cannot have Reactive Armor at a Rating higher than 1. Additionally, each defense arc must be protected separately.

Reactive Armor reduces the Margin of Success of a HEAT attack by an amount equal to its rating. If the Margin of Success of the attack drops below 1, no damage is done. Because the actual number of charges used to repel each assault is highly variable, Reactive Armor does not use ammunition, but does roll against an Ammo Threshold, which starts at 0. Every time the system is used, roll two dice: if the total is lower than the Ammo Threshold, the system has run out of charges. If the roll is equal or lower, the system works — lower the MoS and increase the Ammo Threshold by one. Fumbles are disregarded and count as a roll of one. There is enough ammunition for at least two interceptions. Firing Reactive Armor charges does **not** use up actions and works until the system runs out of charges (the roll is below the threshold) or is destroyed.

Reactive Armor is an AUX system — and so can be damaged by an auxiliary systems result on the Systems Damage Table — but damage is applied somewhat differently. On a Light Damage to auxiliary systems, add one to the Ammo Threshold of the Reactive Armor. One a Heavy Damage result, all charges on the facing hit are detonated and lost. All charges must be replaced after the battle.

• COST = (HALF THE SIZE OF THE VEHICLE X RATING) •

Bryce Hubbard (order #5318102)

• SHIELD

R

Some vehicles, usually those with manipulator arms such as Gears, can carry a large piece of reinforced armor plating and use it as a shield. Some non-humanoid vehicles (usually used in demolitions or bomb-disposal) also carry Shields, which serve as mobile armor plates designed to protect exposed systems or crew. This shield can be moved in front (F defense arc) or to one side (L or Rt defense arc, chosen at the moment of design) of the vehicle to stop incoming attacks. A vehicle with a shield may expend one action to block an attack; the vehicle's pilot can then reroll his defense roll. If this second roll is successful, the vehicle is still hit, but the shield adds its rating to the vehicle's base armor for damage purposes.

Vehicles may not carry shields whose rating is greater than their base armor rating or their size, whichever is smaller. The vehicle requires an arm (Manipulator, Tool or Battle Arm) whose rating is equal or higher than the shield's. When not actively blocking, the shield adds half its rating (rounded down) to the vehicle's base Armor, either to the front or side defense arcs (pilot's choice).

If a vehicle suffers Light Damage after having successfully blocked using its shield, the shield's rating is automatically halved (rounded down). If a vehicle suffers Heavy Damage after having successfully blocked using its shield, the shield is automatically destroyed. In both cases, no further damage is applied to the vehicle.

• COST = SHIELD RATING X 3 •

• STABILIZER MOUNT

Stabilizer Mounts are special systems designed to handle the recoil generated by a large weapon, allowing even a light vehicle to use one. Stabilizer weapon mounts can take on a variety of forms, from giant rifle bipods (for Heavy Gears, obviously) to recoil compensators and hydraulic blades, but they almost always anchor the vehicle to the ground in some way.

The Stabilizer Mount Perk allows the vehicle to add 2 to its Size for weapon and ammunition purposes. Therefore, a Size 6 vehicle equipped with this system may carry weapons and ammunition as a Size 8 vehicle. Larger vehicles such as striders must often get into a "firing position" to use heavy weapons and this is also represented by the Stabilizer Mount Perk.

The Perk must be bought for each and every oversized weapon carried by the vehicle. Before firing that particular weapon, the vehicle must spend one action preparing its position (dropping down to the ground, activing the hydraulic jacks, etc.). When preparing the firing position or using the weapon, the vehicle cannot move. As soon as it moves, the vehicle is not able to fire its oversized weapon(s) anymore and must spend another action regaining its firing posture.

• COST = 2 PER OVERSIZED WEAPON •

• SMOKE LAUNCHERS

AUX

Smoke Launchers are small tubes fixed to the hull of the vehicle. Each tube contains a small smoke grenade that is launched using compressed gas to a position within 20 to 75 meters of the vehicle. The shell contains a volatile gas mixture that vaporizes into thick smoke of whatever color was chosen (usually black or grey, though practically any color can be ordered). Smoke Launcher charges are too slow and don't burn hot enough to be used as an offensive weapon. They never cause damage.

Smoke Launchers have a maximum range of one hex and can be fired at any time during the vehicle's Movement Phase at no action cost. The smoke covers the whole hex where the grenade lands. The dense smoke cloud has an Obscurement of 2 and will last until the end of the turn. Firing multiple charges in one hex will not add more Obscurement, nor will it increase the duration of the cloud cover.

The hull-mounted position of the smoke launchers makes them very vulnerable to damage. The launchers count as auxiliary systems, but damage is applied differently. On a Light damage result, two die's worth of charges are destroyed. On a Heavy damage result, all charges are detonated and lost. It is not possible to armor or otherwise protect the launchers.

• COST = 0.1 PER SHOT •

• VEHICLE BAY

(Note: this perk replaces the original Vehicle Bay perk found in the rulebook, page 149).

The vehicle has a vehicle bay for storing another, smaller vehicle. There are also facilities to maintain and refuel such vehicles (the main difference between a cargo bay and a vehicle bay). Vehicles with vehicle bays are usually called carriers. Vehicle bays need not be for very large vehicles, as even Gears can transport small drones. Vehicle bays on a carrier may be purchased separately to reflect multiple storage areas. Carried vehicles spend one entire round disembarking from the carrier, during which time they may fire but not move.

Vehicle bays are rated in terms of the type of vehicle carried and the maximum weight they can hold. Each vehicle is considered as massing the maximum weight of its Size category. For example, a Size 10 bay holds up to 30 tons of vehicles: that can be 375 Size 1 vehicles, three Size 7 vehicles or one Size 9 and one Size 6 vehicles, and so on. The type of vehicle must be specified during construction, i.e. a bay designed to house assault boats cannot house tanks or jet fighters. Vehicle bays, however, can usually house different models of the same type (within size constraints).

• COST = (MAXIMUM CARRIED WEIGHT IN SIZE POINTS) •

Bryce Hubbard (order #5318102)

6.3 FLAWS

Flaws are the opposite of Perks and represent defects in the vehicle. Sometimes these defects are planned into the vehicle as a cost-cutting measure. At other times, the Flaws are the result of design or production errors. They are not to be confused with Defects and Lemon Rolls, which occur *after* the model has been designed and produced.

Flaws, just like Perks, are rated by a "cost." Note that all Flaws have a negative cost — they reduce the total Perk/Flaw cost of the vehicle. Flaws with the designation "R" have a rating that is always listed after the name of the Flaw on the data sheet.

The followings are official additions to the Flaws listing from the Heavy Gear Rulebook.

• BRITTLE ARMOR

The vehicle's armor and superstructure are either of poor quality of just badly attached/fitted. Any battle damage will loosen up, shake off, or destroy multiple armor panels, perhaps even damaging the structure itself. The vehicle loses twice the usual Armor points from damage (e.g., two points from Light Damage and four from Heavy Damage). Brittle Armor does not affect the starting Armor Ratings of the vehicle, however, and only comes into effect once initial damage is taken.

• COST = -5 •

• DECREASED MANEUVERABILITY (R)

When using one type of movement, the vehicle loses some of its natural agility. The Flaw often reflects not a design problem in the individual vehicle, but radically different performance profiles of different movement systems. This flaw only applies to vehicles with two or more Movement Modes and must be linked to one Movement Mode in particular. When the affected Movement Mode is used, subtract the rating of this flaw from the vehicle's Maneuver value.

• COST = -RATING X 2 •

• DIFFICULT TO MODIFY

The vehicle's innards are a nightmare of intertwined machinery and cables. The guys who designed it must have really hated technicians and repair crew! Pieces must be specially machined for the engine, bolts, nuts and other fasteners are not made to any standard size, the color coding is non-standard, the maintenance manual does not have an index (or worse, it is incorrect), etc. Apply a -2 modifier to all repairs and modification attempts. Vehicles with the Difficult To Modify Flaw do not have their overall performance reduced by their complexity, however, and the Flaw rarely comes into play in a simple tactical game.

• COST = -5 •

• FUEL INEFFICIENT (R)

The vehicle gulps down massive amounts of fuel, reducing its effective range. This inefficiency only comes into play at high speeds, when the engine is wotking at full capacity and consumming large amounts of fuel. When a Fuel Inefficinet vehicle used Top Speed of any Movement Mode, each kilometer adds the rating of this flaw (times two for Top Speed, as usual) for Deployment Range purposes. For example, a vehicle suffering from the Fuel Inefficient flaw at a rating of 2 would count every kilometer traveled through at Top Speed as six kilometers in terms of Deployment Range.

• COST = -RATING •

• ONE WAY COMMUNICATION

The vehicle's communication system can either receive or emit, but not both. Simple emitters can be used to represent emergency beacons, while receivers can represent amateur frequency scanners. Few military vehicles are equipped with such a simple communications system because it limits their use on the battlefiled. Choose whether the communication system is an emitter or a receiver.

• COST = -2 •

• UNSTABLE

The vehicle is hard to control at high speed or on difficult terrain such as rough ground or urban areas. This can be traced to a bad design or just a top heavy vehicle, but the end result is the same. Apply a -1 modifier to all Piloting rolls at Top Speed and/or in terrain with a MP cost greater than one (1). The Unstable Flaw is often found on vehicles which started as (or remain) makeshift modifications. Gears, with their high center of gravity, are particularly vulnerable to instability.

• COST = -1 •

Bryce Hubbard (order #5318102)

6.4 WEAPON CHARACTERISTICS

Just like vehicles, weapons and ammunition can have special characteristics that alter the way they function in battle. The Heavy Gear Rulebook introduced several of the most important characteristics necessary for standard battlefield weapons (see *7.4.1 Weapon Terms*, p. 132-133 of the Rulebook). Certain specialized weapons, however, require additional characteristics (Armor-Crushing, Armor Piercing, Entangle) not included in the basic rules. These apply almost exclusively to close-combat weapons. These characteristics are provided in the interests of completeness, because they are part of the stats of weapons used by some of the vehicles in the Compendium. The stats for these weapons can be found at the end of this chapter in the Vehicle Weapons List. These characteristics were first discussed in the **Duelist's Handbook**.

Like Perks and Flaws, weapon characteristics conform to the Silhouette system's effect-based philosophy. Consequently, these characteristics (as well as those in the Rulebook or elsewhere) do not represent a precise real-world weapon design, but a specialized effect that can be achieved in many ways. While armor-piercing bullets in the real world mean a very specific type of ammunition, for example, weapons with the Armor-Piercing characteristic can achieve that concentrated penetrating power through a variety of methods. The following descriptions provide full descriptions of the game implications of each new characteristic, but also give some indication of the types of weapons, ammunition or attack configurations that could achieve that game effect. Unless otherwise noted the benefits and drawbacks of each characteristic of a weapon are cumulative and automatic.

• ARMOR-CRUSHING

Typical Use: "hammerhead" missiles, acid sprayers, rotating saws

Weapons with the Armor-Crushing characteristic are designed to destroy the armor plates of targeted vehicles. The weapon disperses a large amount of firepower over a wide impact area, ripping apart the armor plates it encounters. This characteristic also represents large bladed weapons such as vibroaxes that tend to sheer off whole sections of a target vehicle's armored casing. Armor-Crushing weapons, by their very nature, are inaccurate. They have a low accuracy and tend to leave huge scars on machines they strike. While they tend to make short work of the outer casing of an enemy vehicle, they are no more effective at damaging internal systems than normal weapons. Much of the effect of an Armor-Crushing attack is expended on the surface, used to destroy the overall structure.

If an Armor-Crushing attack is successful, the target looses twice the usual Armor points (2 for Light damage and 4 for Heavy damage) in addition to any normal system damage.

• ARMOR-PIERCING

Typical Use: vibroblade, kinetic projectiles

Armor-Piercing weapons are designed to cut through armor to reach the vulnerable systems and crew on the inside. Armor-Piercing weapons are solid kinetic projectiles or bladed weapons that feature a very sharp penetrating tip. This tip concentrates the force of impact onto a small surface. Armor piercing weapons or rounds are also very solid and tend not to shatter or flatten with impact, rather pushing armor plates aside. Unlike HEAT or explosive weapons, armor piercing weapons do little structural damage and rely on their ability to hit vulnerable systems to incapacitate a vehicle. Armor-Piercing tends to be associated with elegant and precise weapons.

Armor-Piercing weapons halve the defending vehicle's Armor rating to determine damage. If the attack is successful, the target does not loose any Armor points (the entry hole is too small to affect the Armor rating), but takes damage as usual. This means that Armor-Piercing weapons cannot incapacitate a vehicle through simple structural damage, but can cause serious problems for heavily armored vehicles that would normally be nearly invulnerable to attacks from weapons of equal Damage Multiplier.

• ENTANGLE

Typical Use: whips, nets, grapple launchers

Weapons with the Entangle characteristic — usually whips, nets or cables of some sort — can be used to immobilize an opponent. A vehicle hit by an entangling weapon either receives damage from it or is ensnared, unable to move or fight (attacker's choice). To escape an entangling attack, a Piloting skill roll must be made versus the Margin of Success of the attack. This is modified by the difference between the Damage Multiplier of the weapon and the Size of the trapped vehicle. If the vehicle has arms — be they Manipulator, Battle or Tool Arms — a bonus equal to half the rating of the largest arm is applied to the Piloting roll to represent the added ability to handle (even imprecisely) the entangling weapon in order to free the vehicle.

In addition to the above rules, ranged entangling weapons are considered to be attached to an high-strength cable, which is itself attached to a powerful winch. The winch can be used to drag the vehicle forward or, if the target is lighter than the vehicle, drag it toward the winch. The maximum weight that can be handled by the cable is equal to the Damage Multiplier expressed in Size capacity. For example, a x3 winch could drag a weight equivalent to Size 3, or 1.1 tons. Several cables can be used together to pull more weight. Thus, two x3 cables could drag up to 2.2 tons together.

If the Margin of Success of the ranged entangling attack is equal to or higher than 3, the entangling weapon is now attached to the target. It can be detached and reeled in at any time at the cost of one action. It is possible for a target to be both attached to the weapon and ensnared at the same time. The cable itself can take up to its rating in damage points before being severed. Ranged attacks, however, have a -3 penalty to hit because the cable is so small. Point-blank attacks on the cable have no such penalty.

Bryce Hubbard (order #5318102)

6.5 AMMO TYPES

The usual warheads and shells used by the vehicles described in **Heavy Gear** are standard high explosive or armor-piercing rounds. However, many weapons can fire special ammunition types that are not in standard use. The list below describes four ammunition types used by vehicles in this compendium and their game effects. Note that the following weapons cannot use these new ammunition types: lasers, railguns and particle cannons.

• FIRE-FIGHTING FOAM

The shells/warheads are filled with a stable polymer compound that expands into a fire-fighting foam once exposed to the atmosphere. The foam cancels one die worth's of Fire Intensity points per ten points (or part thereof) of "damage." Fire-fighting ammunition can be designed for flamers, field guns, mortars, grenade launchers, bazookas, medium and heavy rocket packs and hand grenades.

Foam shells have no penetration power and thus no effect against armor. The foam is non-toxic, harmless to people and property, and dissolves in water.

• COST MULTIPLIER: 1 •

• HAYWIRE

The haywire warhead is a strange weapon designed to immobilize enemy vehicles without destroying them. Upon impact, a large rapid-discharge capacitor releases all its stored energy in one intense burst that fries circuitry, damages sensitive systems and shocks crewmembers into unconsciousness or death.

The weapon's Damage Multiplier is halved, but it gets two rolls on the Systems Damage Table when it scores Light or Heavy Damage on an opponent. In roleplaying terms (for example, if "Crew" is hit), treat the weapon's damage results as an electrical attack with an intensity equal to its Damage Multiplier plus its margin of success.

Haywire ammunition can be designed for field guns, mortars, grenade launchers, bazookas, chassis reinforcements, melee weapons, torpedoes and bombs.

• COST MULTIPLIER: 15 •

• NON-LETHAL

Non-lethal ammo means either rubber bullets or low-velocity plastic shells that deploy "arms" to distribute the impact across a larger surface. Non-lethal ammo has no penetration power and thus no effect against armor of any kind. Only machineguns, light rifles, very light and light autocannons can fire non-lethal ammo. Pack guns can also be manufactured with non-lethal ammunition, but they cannot fire anything else.

Rockets, grenades and missiles can also be non-lethal, carrying a payload of choke or irritant gas. Halve the weapon's Damage Multiplier, rounded down. The gas cloud's radius is assumed to cover only the target hex, unless the weapon or ammunition also has an Area Effect (in that case, add one to the AE).

If non-lethal ammo is used in a roleplaying context, use the weapon's Damage Multiplier (vehicle scale) plus the MoS of the attack as a Threshold for a Health roll against unconsciousness. If it fails, the target is automatically unconscious for a number of rounds equal to the MoF of the Health test. In addition, if the roll fails by between 4 and 6, the subject gains a flesh wound; if by between 7 and 9, a deep wound. If the Build roll is failed by 10 or more, the target is dead. Once this period has passed, another Health test must be made every turn to regain consciousness. The threshold is the same as before, but goes down by one after each failure to regain consciousness.

In the tactical game, non-lethal weapons have no penetration power and no effect of any kind against armored units. Only infantry squads (no matter the type of armor) and vehicles with the "Exposed Crew Compartment" flaw are affected by this type of ammunition. The weapon's basic Damage Multiplier is halved, but the damage is otherwise applied as normal. Vehicles with exposed crew are only affected on "Crew" hits and disregard any other damage result (non-lethal gas attacks affect them automatically, however). After the battle, casualties are dead on a roll of 6 instead of 4-6. On a roll of 1 or 2, the casualties are not harmed and are available for the next battle.

• COST MULTIPLIER: 1 •

• SENSOR-HOMING

The warhead uses the target's own sensor emissions to home in and destroy it. If the target made an Active Sensor roll in the combat round prior to the radar-homing weapon attack, the shell gains a +2 to hit.

Sensor-homing ammunition can be designed for heavy and very heavy field guns, mortars, all missiles (except rockets), torpedoes and all artillery weapons.

• COST MULTIPLIER: 30 •

Bryce Hubbard (order #5318102)

6.6 WEAPONS TABLE

Cannons

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
VLMG	Very Light Machinegun	25	1/2/4/8	x2	0	+3	0.02	2	Anti-Inf.
LMG	Light Machine Gun	52	1/2/4/8	x3	0	+4	0.05	3	Anti-Inf.
HMG	Heavy Machine Gun	59	1/2/4/8	x4	0	+3	0.09	3	Anti-Inf.
FGC	Frag. Cannon	195	1/2/4/8	x7	+1	0	0.75	5	Anti-Inf., Frag Ammo
VLRF	Very Light Rifle	44	2/4/8/16	x6	0	0	0.18	3	-
LRF	Light Rifle	92	3/6/12/24	x8	0	0	0.36	4	-
MRF	Medium Rifle	165	4/8/16/32	x10	0	0	0.66	4	-
HRF	Heavy Rifle	209	4/8/16/32	x12	0	0	0.85	5	-
DPG	Deployable Pack Gun	58	2/4/8/16	x8	-1	+2	0.15	3	Disposable
LAAC	Light Anti-Air. Cannon	121	2/4/8/16	x8	0	+6	0.28	4	-
MAAC	Medium Anti-Air. Cannon	176	3/6/12/24	x10	0	+4	0.51	4	-
HAAC	Heavy Anti-Air. Cannon	230	3/6/12/24	x12	0	+3	0.68	5	-
VLAC	Very Light Autocannon	69	2/4/8/16	x6	0	+2	0.18	3	-
LAC	Light Autocannon	108	2/4/8/16	x8	0	+2	0.28	4	-
MAC	Medium Autocannon	163	3/6/12/24	x10	0	+1	0.51	4	-
HAC	Heavy Autocannon	220	3/6/12/24	x12	0	+1	0.68	5	-
VHAC	Very Hvy Autocannon	324	3/6/12/24	x15	0	+1	1.01	5	-
LAG	Light Artillery Gun	1107	25/50/100/200	x12	-2	+1	4.4	8	Ind. Fire, AE=0, Min. Range 10
VLFG	Very Lt Field Gun	525	5/10/20/40	x20	-1	0	2.10	6	Indirect Fire
LFG	Light Field Gun	915	5/10/20/40	x22	0	0	3.65	8	Indirect Fire
HFG	Heavy Field Gun	1945	8/16/32/64	x28	0	0	7.78	10	Indirect Fire
VHFG	Very Hvy Field Gun	3134	10/20/40/80	x33	0	0	12.54	12	Indirect Fire
SC	Snub Cannon	524	1/2/4/8	x28	-1	0	2.10	6	-

Rockets & Missiles

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
VLRP/8	Very Lt. Rocket Pack/8	114	1/2/4/8	x8	-1	+3	0.26	3	Indirect Fire
VLRP/32	Very Lt. Rocket Pack/32	129	1/2/4/8	x8	-1	+4	0.26	3	Indirect Fire
VLRP/128	Very Lt. Rocket Pack/128	165	1/2/4/8	x8	-1	+6	0.26	3	Indirect Fire
LRP/8	Light Rocket Pack/8	194	1/2/4/8	x12	-1	+1	0.58	3	Indirect Fire
LRP/16	Light Rocket Pack/16	209	1/2/4/8	x12	-1	+2	0.58	3	Indirect Fire
LRP/24	Light Rocket Pack/24	226	1/2/4/8	x12	-1	+3	0.58	3	Indirect Fire
LRP/32	Light Rocket Pack/32	245	1/2/4/8	x12	-1	+4	0.58	3	Indirect Fire
MRP/9	Med. Rocket Pack/9	425	2/4/8/16	x18	-1	+1	1.33	4	Indirect Fire
MRP/18	Med. Rocket Pack/18	469	2/4/8/16	x18	-1	+3	1.33	4	Indirect Fire
MRP/36	Med. Rocket Pack/36	494	2/4/8/16	x18	-1	+4	1.33	4	Indirect Fire
IRP/10	Inc. Rocket Pack/10	339	1/2/4/8	x13	-1	+1	1.02	4	Ind. Fire, Slow Burn Inc.
IRP/20	Inc. Rocket Pack/20	363	1/2/4/8	x13	-1	+2	1.02	4	Ind. Fire, Slow Burn Inc.
IRP/30	Inc. Rocket Pack/30	390	1/2/4/8	x13	-1	+3	1.02	4	Ind. Fire, Slow Burn Inc.
HRP/24	Heavy Rocket Pack/24	596	3/6/12/24	x20	-1	+3	1.71	5	Indirect Fire
HRP/48	Heavy Rocket Pack/48	623	3/6/12/24	x20	-1	+4	1.71	5	Indirect Fire
HIRP/24	Hvy Inc. Rocket Pack/24	606	3/6/12/24	x16	-1	+3	1.70	5	Ind. Fire, Slow Burn Inc.
HIRP/48	Hvy Inc. Rocket Pack/48	641	3/6/12/24	x16	-1	+4	1.70	5	Ind. Fire, Slow Burn Inc.
AAM	Anti-Aircraft Missile	2066	8/16/32/64	x10	+1	0	8.30	7	Guided, Min. Range 10
ABM	Airburst Missile	508	3/6/12/24	x10	0	0	2.00	6	AE=1
AGM	Anti-Gear Missile	756	3/6/12/24	x15	+1	0	15.12	4	Guided,Indirect Fire
ATM	Anti-Tank Missile	1956	3/6/12/24	x25	+1	0	39.12	6	Guided, Indirect Fire
HATM	Heavy AT Missile	3075	5/10/20/40	x30	+1	0	61.50	9	Guided, Indirect Fire

Bryce Hubbard (order #5318102)

Recoilless Weapons

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
LPZ	Light Panzerfaust	14	1/2/4/8	x10	-1	0	-	2	Disposable
MPZ	Medium Panzerfaust	30	1/2/4/8	x15	-1	0	-	2	Disposable
HPZ	Heavy Panzerfaust	55	2/4/8/16	x20	-1	0	-	3	Disposable
RFB	Rapid-Fire Bazooka	278	1/2/4/8	x14	0	+2	0.79	4	-
LBZK	Light Bazooka	234	2/4/8/16	x15	0	0	0.93	4	-
MBZK	Medium Bazooka	409	2/4/8/16	x20	0	0	1.63	4	-
HBZK	Heavy Bazooka	634	2/4/8/16	x25	0	0	2.53	5	-

Support Weapons

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
LFL	Light Flamer	14	0/0/0/0	x5	+1	0	0.06	2	Slow Burn
MFL	Med Flamer	68	0/0/0/1	x7	+1	+1	0.17	2	Slow Burn, Indirect Fire
HFL	Heavy Flamer	134	0/0/1/2	x9	+1	+2	0.27	3	Slow Burn, Ind. Fire
APM	Anti-Personnel Mortar	95	2/4/8/16	x4	0	0	0.36	3	Anti-Inf., Ind. Fire, AE=0, Min Rg 2
LGM	Light Guided Mortar	304	3/6/12/24	x15	-1	0	6.05	4	Guided, Ind. Fire, Min Range 3
HGM	Heavy Guided Mortar	632	5/10/20/40	x20	-1	0	12.60	5	Guided, Ind. Fire, Min Range 5
LFM	Lt. Field Mortar	522	4/8/16/32	x15	-1	0	2.09	5	Indirect Fire, AE=0, Min Rg 4
MFM	Med. Field Mortar	947	5/10/20/40	x20	-1	0	3.79	6	Indirect Fire, AE=0, Min Rg 5
HFM	Hvy Field Mortar	1516	6/12/24/48	x25	-1	0	6.06	7	Indirect Fire, AE=0, Min Rg 6
APGL	Anti-Personnel G.L.	29	1/2/4/8	x3	-1	0	0.10	2	Anti-Inf., Indirect Fire, AE=0
LGL	Light G.L.	316	1/2/4/8	x15	-1	+2	0.90	4	Indirect Fire
HGL	Heavy G.L.	529	2/4/8/16	x20	-1	+1	1.63	5	Indirect Fire

Advanced Weapons

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
LPA	Light Particle Acc.	270	2/4/8/16	x10	+1	0	1.07	6	-1 Dam. per R.B., Haywire
HPA	Heavy Particle Acc.	672	3/6/12/24	x15	+1	0	2.68	8	-1 Dam. per R.B., Haywire
LRG	Light Railgun	603	5/10/20/40	x14	0	+2	1.93	7	-
HRG	Heavy Railgun	3339	10/20/40/80	x35	0	0	13.35	12	-
SLC	Sniper Laser Cannon	371	5/10/20/40	x12	+1	0	1.48	4	-1 Dam. per R.B.
HGLC	Gatling Laser	350	2/4/8/16	x16	+1	+1	1.06	4	-3 Dam. per R.B.
LLC	Light Laser Cannon	483	5/10/20/40	x16	+1	0	1.93	5	-2 Dam. per R.B.
HLC	Heavy Laser Cannon	623	5/10/20/40	x20	+1	0	2.48	5	-3 Dam. per R.B.
LPLC	Lt Pulse Laser Cannon	474	3/6/12/24	x20	+1	0	1.90	5	-3 Dam. per R.B.
HPLC	Hvy Pulse Laser Cannon	642	3/6/12/24	x24	+1	0	2.57	5	-4 Dam. per R.B.

Close Combat

Code	Name	Rating	Range	Dam.	Acc.	RoF	Ammo (ea.)	Min. Size	Special
CR	Chassis Reinfor.	Veh. Size	0/0/0/0	+1 Dam.	0	0	n/a	n/a	Physical Attack Only
MF	Mauler Fist	61	0/0/0/0	x9	+1	0	n/a	3	Armor Crushing
HWP	Haywire Whip	110	0/0/0/0	x7	+1	0	0.44	4	Entangle, Haywire
CS	Chain Sword	20	0/0/0/0	X9	0	0	n/a	3	-
VB	Vibroblade	16	0/0/0/0	x8	0	0	n/a	3	Physical Attack Only
VR	Vibrorapier	27	0/0/0/0	x6	+1	0	n/a	3	Armor Piercing
VA	Vibroax	34	0/0/0/0	x10	-1	0	n/a	3	Armor Crushing
SKG	Spike Gun	38	0/0/0/0	x12	-1	0	0.15	3	-
HSKG	Heavy Spike Gun	66	0/0/0/0	x14	-1	0	0.27	4	Armor Piercing
HWG	Haywire Grenade	10	0/0/0/0	x10	-1	0	n/a	2	Haywire
HG	Hand Grenade (1)		0/0/0/0	x15	-1	0	11	2	Anti-Infantry
HHG	Heavy Grenade	21	0/0/0/0	x25	-1	0	n/a	2	-
SDG	Self-Destruct Grenade	60	0/0/0/0	x30	-1	0	n/a	2	AE=0

Bryce Hubbard (order #5318102)

COMMAND AND CONTROL

"Give me satellite imagery." Brigadier Markus spoke with the calm assurance of a seasoned commander. Tension was spreading like a disease among some of his subordinates, but he remained almost serene despite the fact that his two Gear companies were being boxed in by the enemy.

The large display table switched views, giving a real-time overhead view of the area. Atmospheric distortions were minor because of the dry desert air, and the imaging software compensated for the thermal and wind turbulence. Tactical markers lit up around the units as they were identified.

"Good Prophet." The young lieutenant serving as an imaging specialist had obviously never seen anything quite like this. Companies B and D were outnumbered; it looked like a full Gear regiment was advancing towards them, with a cavalry regiment boxing them in from the other side. The Northern forces seemed doomed.

"I thought the snakes had their fangs out, Captain Fideles."

The intelligence officer looked up from her station in the command center. "I'm working on it sir. I still have confirmed reports that the Azov garrison is having a logistical crisis. They should be largely immobilized awaiting repair."

"Air support on the way in, sir." The officer's voice was sharp with adrenaline.

"Okay, that should slow down the advance. But once those cav units get into place, artillery will cut them to pieces. Tell air support to make a pass at those batteries."

The display showed that the MILICIA was sending out recon units to get precise fixes on the trapped companies' positions. They were readying for a heavy attack once the artillery was in place.

"Zoom out display." The scale decreased, taking in more of the map area and revealing the Badlands around Azov. "Somebody find me that third regiment. The snakes don't operate without a full brigade."

The satellite imagery revealed very little for several minutes. The top portion of the screen seemed to blur, however — an indication of a storm that could conceal their target. A Captain spoke up. "They must be, but we should have gotten reports of a regiment moving that far north." He pulled up a meteorological summary before continuing. "That storm is recent, I'm not sure they could have used it for cover." Markus looked at the tactical display for almost a full minute, trying to make sense of what he was seeing. The MILICIA always used full brigades in attacks, they were almost as fanatical about that as they were about their quest for glory.

"Captain Fideles," the Brigadier said with a thin smile. "Get me those estimates on the vehicles waiting for repair at Azov." The smile grew as he scanned the figures Fideles transferred to his station. Azov Command had made a spare parts request to MILICIA command for strider actuators; satellite imagery revealed upwards of twenty-five *Hun* tanks in the maintenance bays. It added up to one thing. "The third regiment is still in Azov. The bloody snake is gambling on an easy kill."

Fideles — cautious as all intel agents learn to be — hesitated for a second. "That's possible sir, but —" She stopped when she realized the Brigadier had turned away from her and was issuing orders through the tactical communications channel.

"Colonel Manz," he said into the microphone, "move your forces South toward the Azov defense zone. Colonel Stane and the 13th will back you."

Fideles knew what Markus was doing. The attacking Southern regiments — if indeed they were without a reserve force — would be required to move back to defend Azov if the 13th and 14th attacked. That would give Companies B and D time to escape. She only hoped the Brigadier was right.

Bryce Hubbard (order #5318102)

7.1 STANDARDIZED VEHICLE CODE [TN 1914-1933]

During the War of the Alliance, the joint military staff of Terra Nova realized that the identification procedures used for the military hardware of the different armies were very different and often highly confusing. Not only did identification codes vary between city-states and leagues, they also sometimes differed between the manufacturers themselves.

Faced with the colossal task of organizing supply lines for multi-national units and keeping tabs on Terra Nova's now precious weapon store, the brass commissioned the drafting of a new type of identification system that would answer the needs of quartermasters planet-wide, regardless of their allegiance or equipment. A selected team was hastily assembled and put to work in a marathon session that would quickly become known as the "Committee from Hell" (see sidebar on next page).

The newly-designed identification system was then systematically applied to all vehicles in service at the time, regardless of their previous ID codes. Many officers on all sides argued loudly (and still do) that such a system would just cause even more confusion than before. Unfortunately, they were right — the new codes, although seemingly logical at first glance, were never truly standardized and soon proved extremely confusing.

The identification process works well enough for the most common machines in the armed forces, or the more traditional ground vehicles. It only breaks down when applied to the myriad of specialized Gear models in service. Gears, by virtue of their humanoid shape, are extremely versatile. Although they are generally assigned a standardized weapon payload (and thus ID code) to simplify the supply and maintenance process, Gears can and do exchange their weapons simply by picking a new one up. The identification code changed with the fortunes of war and supply lines, making it difficult for quartermasters to keep track of individual vehicles. This phenomenon is one of the reasons why there are so many fully functional military Gears in service in civilian and paramilitary groups in the Badlands — these machines simply "disappeared in the cracks of the system."

A data entry specialist at Integrated Logistical Command receives the thirteenth update on the new standardized vehicle code. Renumbering every military vehicle while trying to ward off a global invasion force is extremely unpopular with officers in the field. From **War Report**, TN 1915.

7.1.1 NORTHERN CODES

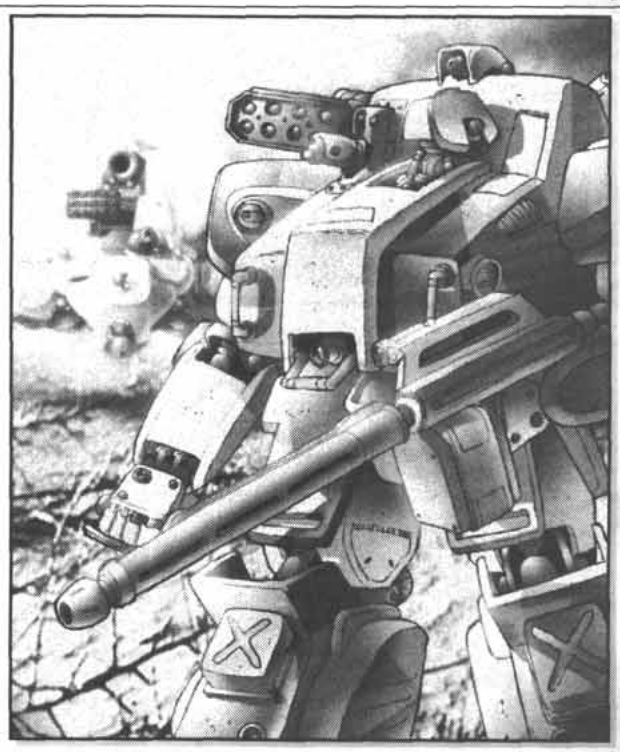
Two sets of ID codes are in general use: one for the North and one for the South. For Heavy Gears and striders, the provenance prefix is first (either HACS or WACS in the North), followed by a number indicating the frequency of the unit of this size class in the ranks. The suffix explains the function of the vehicle. Northern armored vehicles were identified by a letter indicating the type of vehicle, followed by a serial number. The new system is similar, except that the ID letters are more standardized and preceeded by the prefix "N" (for Northern vehicles). Aircraft are generally exempted from this rule. Since the War, the new code classification is more prevalent than any other.

Example: the *Hunter*'s new code is HACS-01MG-MP. This means that the vehicle is a Northern unit (HACS), is the most commonly present (01), is a medium-sized, general purpose Gear (MG) and is mass-produced (MP).

Northern Military ID Code

HMVS	Humanoid Multi Vehicle System (used for civilian models)
HACS	Humanoid Armored Combat System
WACS*	Walker Armored Combat System
LG	Light Gear (Scout, Light Assault)
MG	Medium Gear (General Purpose)
HG	Heavy Gear (Fire Support)
AA	Anti-Aircraft
AMPH	Amphibious
ART	Artillery
AST	Assault
C	Commander
DT	Desert Specialist
ENG	Engineering
FS	Fire Support
HC	Heavy Commando
MP	Mass Produced
MPS	Mass Produced Soldier
PARA	Airdroppable Unit
SEC	Military Police
SNP	Sniper
STH	Stealth
TR	Trainer

*This is a strider ID Code prefix.



Bryce Hubbard (order #5318102)

7.1.2 OLD PRODUCTION ID CODES

As mentioned previously, before the War of the Alliance all manufacturers used different systems to assign identification codes to the machines they produced. Many still do, even though they know the vehicle will be assigned an "official" code if and when it enters military service. This may make the study of Terranovan military history very confusing for students, as each vehicle will often have more than one ID code depending on the historical period and the point of view considered.

Heavy Gears were so innovative at the time of their introduction that a traditional millennia-old custom was ignored. Unlike many other vehicles whose identification codes normally consisted of one letter plus some number, all original Gear codes consisted of two letters followed by a number, plus some letters and numbers to express variants. In general, Gears received numbers in the order in which they entered service (for example, the *Hunter* was the first Heavy Gear to enter service, as denoted by its GP-01 code). Later on, they would receive even more complex ID numbers.

For the reader's information, the table below lists the original identification codes of some of the most common walkers presented in this volume. Note that individual production serial numbers are not included in this list for clarity and simplicity.

Pre-War ID Codes

Vehicle	Original ID code(s)
Armored Hunter	GP-01F
Assault Grizzly	FS-03A1
Assault Hunter	GP-01TK
Assault Mammoth	WA-64
Bear	FS-02
Black Cat	SC-03S
Bobcat	SC-01
Bricklayer	GP-01ARV
Cheetah MP	n/a
Cheetah Para	SC-03P
Den Mother	FS-02A
Ferret	SC-02
Fire Jaguar	Field Variant
Headhunter	GP-01/C, GP-01A1
Hunter Commando	GP-01HC
Hunter Minelayer	GP-01MLV
Hunter Paratrooper	GP-01P
Hunter Recon	GP-01L, RGP-01
Hunter Zerstörer	GP-01TK
Kodiak	FS-03ZA (prototype code)
Mad Dog	GP-0L
Rabid Grizzly	FS-03B
Razorback	FS-01
Strike Cheetah	SC-03TK
Strike Jaguar	GP-06TK
Thunderhammer	WA-35
Tiger	GP-05
White Cat	SC-03EW

The Committee from Hell

As the first warships of the Colonial Expeditionary Force appeared in orbit around the planet, the various leagues and organizations on Terra Nova found themselves forced to cooperate to ensure their common survival. One of the first things they realized was that a concerted effort to manage planetary resources was required. Some form of standardization was urgently needed to help quartermasters figure out which unit was going where.

The allied forces wasted no time in assigning a committee to work on the problem. They were told to design, from the ground up, an identification system that would integrate the various types of vehicles in service. Noted vehicle historian Maytar O. Lethe was appointed as head of the board. The team soon found they had a major problem on their hands: no identification systems matched, and no one was willing to switch to, or even admit, that a former opponent's system was better.

After many rounds of negotiation, the team made a system that assigned a string of letters and numbers to each vehicle. Each string contained information such as the origin of the vehicle, its relative availability and its mission. Weary, pressed for time, Lethe quietly slipped out of the conference room and sent the results to headquarters. Although the concept behind them was sound, the resulting code numbers quickly became so cumbersome that they were a nightmare to use. Everybody in the field hated the system, but at least they hated it equally; one more step towards Terranovan unity had been made.

Bryce Hubbard (order #5318102)

7.2 COLOR SCHEMES

Like most military vehicles, Gears are painted according to several criteria: the environment in which they will operate, the unit to which they belong and other, more mundane considerations such as ease of maintenance and the color of the cheapest paint available (although, with military budgets rising, the latter is rarely a factor). Like other military vehicles, Heavy Gears generally have a drab and functional paint scheme when they are assigned to the field, but can and do sport more colorful attire when on guard duty in the city-states.

Painting a vehicle with as many moving parts as a Gear or a strider is no small affair. Using spray guns and lots of masking mediums and templates, the technicians apply colors and markings to the hull of the vehicles under their care, their work based on established patterns laid down by headquarters. In times of conflict, the vehicles sometimes must be painted in the field, using whatever type of paint is available from the quartermaster or can be scrounged up, in hopes of matching the required colors.

All vehicles must be periodically repainted because paint rubs off on moving parts such as hip armor plating or foot plates. Damage to the paint may also be caused by minor collisions with other vehicles or objects such as rocks or buildings.This is especially true of Heavy Gears, which have a lot of moving parts coming in contact with each other. Some of the older Gear models had to have their feet and lower legs completely repainted every half cycle just to avoid metallic reflections that might give them away on the battlefield.

To facilitate the task, a standardized system has evolved over the cycles. Each vehicle is separated into several distinct areas for the purpose of describing their color scheme: hull, turret, wing, etc. Heavy Gears, by virtue of their many articulations, are usually considered to consist of more than eighteen different areas: feet, lower legs, thighs, hip armor, torso, shoulders, upper arms, lower arms, hands, head and backpack. Some military historians consider the generator and pump housings on the backpack to be separate areas.

Each limb section is considered to be one area (for example, each foot counts as one); this helps when describing the Gear's colors and determining the location of the regimental markings.

▲ Before going into the field, military vehicles are repainted in an appropriate camouflage scheme. The technicians who repaint Gears are often taken for granted by commanders, but are appreciated by pilots. From **Fort William Military Review**, TN 1929.

7.2.1 BASE COLORS

Most modern war machines are immediatly repainted according to their unit's specifications soon after delivery. It is not unknown, however, for some parts to remain bare, either by economy, practicality or design. These parts will then have the original paint scheme applied at the factory or the natural color of the material(s) that comprise them.

Mechanisms, depending on the material used in their manufacture, will generally be a dull, metallic blue-gray in their natural, unpainted state. Some parts, such as actuators, may have a high chrome finish to reduce friction and increase resistance to corrosion, but their high reflectivity means they are likely to be hidden within the structure.

The same reasoning also applies to the armor plates. Bare durasheet (i.e. before painting) has a dull gray finish, the upper ceramic glazing being semi-transparent. Some glazings have a different chemical composition and range from sand to pure gray in color, so a base camouflage paint may be unnecessary.

7.2.2 ENVIRONMENTS

Terra Nova is a planet of contrasts and features many different ecosystems, each with its own colors and characteristics. It would be impossible to create a camouflage pattern that would be effective in all of them, and so standard patterns have evolved in several distinct categories, each one corresponding to a specific environment.

The following categories represent the camouflage patterns most commonly used by Northern military forces. As the tactical doctrines change over the cycles and new ideas and concepts are tried out, the patterns morph and change much like the living terrain they are supposed to emulate. As a result, these examples should not be considered all-encompassing: there are many more in use.

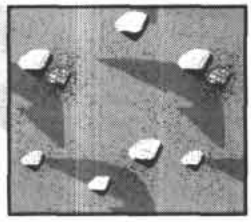
7.2.3 THE EFFECT OF CAMOUFLAGE

Combat units have a wide variety of complex sensors at their disposal, all of them designed to find an enemy vehicle or unit among the clutter of the battlefield. Normally, in this age of high powered sensors, camouflage would seem obsolete — any unit capable of causing harm usually has the sensors to give itself some worthy targets.

Still, sensors are not fool-proof. Monopole deposits can confuse magnetic anomaly detectors, stealth systems and ground obstacles can send back phantom radar echoes, heat signatures can be disguised, etc. Giving the enemy a brightly colored hull to spot would be pure folly, especially with so many sensor systems being based on visual input.

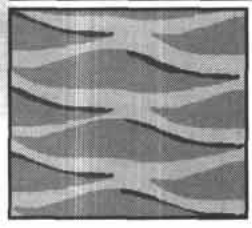
Camouflage does not make a unit invisible, but it does tend to make it a lot less conspicuous (and a whole lot more likely to be disregarded by a weary sentry). Contrary to what many think, camouflage does help to fool visual sensors. It is also highly practical for hiding and storing a vehicle.

Bryce Hubbard (order #5318102)



Broken Ground

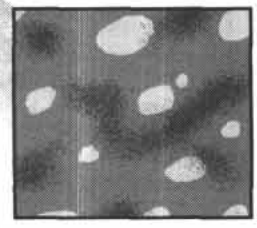
Broken ground is a common term that covers a wide variety of hilly and rocky terrain, such as the savannah and sloping terrain that leads to the great northern mountain chains. Broken ground, as its name implies, features numerous small hills and elevation changes as well as the occasional boulder or large rock formation. The soil itself is covered with shrubbery, other small vegetation and loose rocks that make high-speed travel very difficult for vehicles. The camouflage pattern worn by units operating in such an environment often reflects the one shown at left. A base of light earth color is covered by shades of brown or green, while spots of tan and very dark brown dot the lower surfaces of the hull. The spots and darker colors are often concentrated on the lower body of the vehicle.



Desert

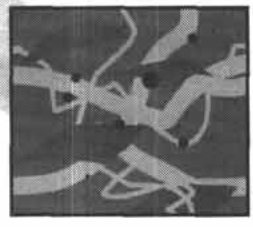
The denomination "desert" is perhaps the broadest camouflage category in existence. Although the word conjures up images of pale brown sand stretching to infinity, the actual reality is somewhat different. There are dozens of different types of desert, each with its own individual colors and patterns, and even in the gigantic Badlands, more than one type can be found within a specific region.

The simplest and perhaps most popular desert camouflage is a sand-colored coat of paint. This color can be either desert yellow, a yellowish pale brown, or beige — whatever matches the local sand. While this works well aginst an uninterrupted sand backdrop, it is of little help when the terrain becomes more chaotic. Still, it remains in wide use, mostly because of its great simplicity.



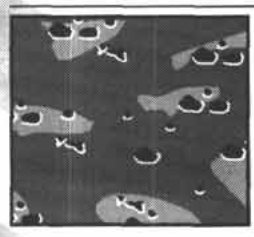
The desert pattern currently favored by the northern armies is best represented by the *Desert Sharks*, a Northern Guard unit stationed in the Badlands. Often called the "desert splinters" pattern, it consists of large geometric plates in brown and red-brown, seemingly painted at random over an overall coat of pale beige. The splinters serve to break up the silhouette of the vehicle and make identification difficult, but the pattern also works exceptionally well in some regions where jagged terracotta rocks are found.

The last type of desert camouflage that is popular with the northern armies is "spotted sand," a series of drab gray or brown paint spots on a sand-colored base coat. "Spotted sand" is especially effective in savannah and arid regions where small shrubbery and rocks litter the ground.



Jungle

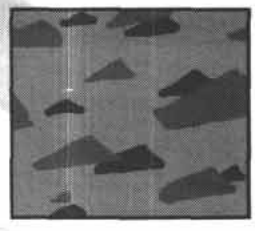
Jungles tend to be rare in the temperate north, unlike in the lower basins of the Southern Hemisphere. There are simply no hot and humid climates to allow huge rain forests to prosper. The only true jungle in this part of the world is found along the edge of the Badlands, where hot winds mix with the water of the northern waterways to grow tall and lanky trees along the shores of the rivers. The Northern Guard's high command has thus developed only one official jungle camouflage pattern, which is shown here at left. The base color is a medium olive green, on top of which "leaves" of a darker, richer green are applied at random. Strips of earth colors, such as tan and light brown, are then applied to the surface to further break up the overall silhouette of the machine.



Mountain

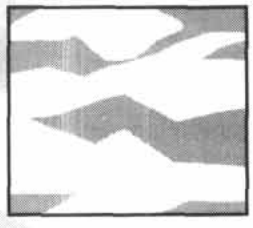
Mountains and other rocky areas are a prominent feature of Terranovan geography. For a time, Terra Nova was very geologically active — the large mountain ranges of the Northern Hemisphere are proof of this. Northern Guard combat groups are often called to deploy in mountainous regions, both within the leagues' boundaries and at the borders. As a response to their particular needs in the different types of mountains and operational roles, several types of mountain camouflage have been developed and officially recognized.

The simplest mountain camouflage is a coat of gray paint that matches the color of the local stone. Like the one-color desert camouflage, it is well liked by technicians for its simplicity (both for maintenance and repainting). This is sometimes combined with a shape-breaking pattern for extra effectiveness, usually jagged bands of black and white. This is an unofficial addition, however, made at the request of individual pilots.



There are several mountain patterns currently favored by the northern armies. They all start with a medium-gray base, which is then followed by a pattern of mottled brown or green patches that get progressively denser toward the lower segments of the body. Some units replace the patches with long spray-painted bands.

A camouflage type that has recently been approved for general use is the so-called "pyramid" paint scheme: small, roughly conical shapes in shades of gray and dark brown applied over a base coat of blue-gray echoing the slate of some locations in the Westridge Range.

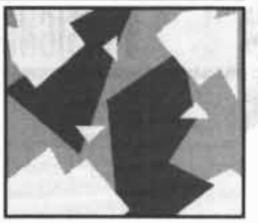


Polar

Terra Nova is a hot world, slightly closer to its sun than Earth. As a result, few locations on the planet possess what could be described as a polar climate. Still, the summits of the highest mountains and the regions around the north pole can come very close. Snow accumulates and almost never melts, piling up in large snow banks shaped by the high winds into fantastic shapes. The camouflage shown at right has been developed to take advantage of this type of terrain. It consists of an overall white coat with blue-gray horizontal geometric patterns on top. The pattern helps blend the vehicle with the edges of the snow banks. Units operating in snowy mountain areas often add a few touches of deep green on the lower body of each vehicle to match the sparse vegetation of the area.

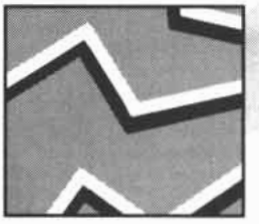
Bryce Hubbard (order #5318102)

Pattern-breaker



Pattern-breaker camouflage does not actually hide the unit, but breaks up its shape and silhouette to make visual identification more difficult. The actual colors used do not matter much, although they are always flat and muted to avoid attracting unnecessary attention. Pattern-breakers are most often applied to very large units such as landships and main battle tanks, which would not benefit much from more classic forms of camouflage.

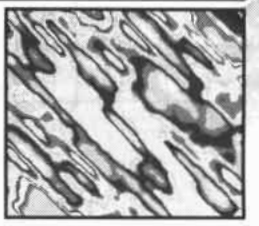
Some pattern-breakers are used with local colors to merge the advantages of both traditional camouflage and pattern-breaking color schemes: the "desert splinter" camouflage described previously (in the "Desert" category) is a typical example of this. It is shown at the upper right and consists of a beige base color covered with red-brown and medium brown splinters.



The illustration at the lower right shows another typical example of a pattern-breaking paint scheme, this time using no color other than medium gray, black and white. The vehicle is first given a gray base coat. Jagged stripes of black and white are then applied in parallel over the surface, running continuously from head to toe (or turret to tread). The final effect does not really hide the vehicle, but rather breaks up its outline to make identification and targeting locks more difficult. In certain environments, such as a barren rocky mountain side or an industrial complex, this pattern is exceedingly effective.

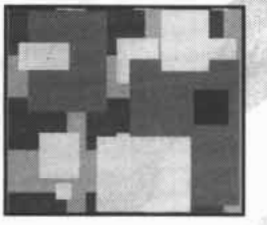
Other pattern breakers have been tested over the cycles, though the basic principle remains the same. In general, stripes of contrasting color will be painted across the various features. Others geometric forms have been tried, such as dots and rectangles, but with only limited success.

Swamp



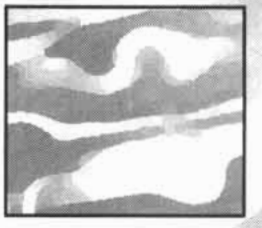
Like jungles, swamps are rare in the Northern Hemisphere, though by no means nonexistent. They are usually found on the southern edge of the northern territories, next to emergences of the MacAllen system where water freed by surface erosion or the occasional cave-in has inundated a shallow region. Northern swamps are generally ravaged ecologies and feature a great degree of organic decay as the vegetation suffocates and dies under too much water. As a result, the few northern swamp-inspired camouflage patterns have been marked by various shades of dull brown and green, interlaced with stripes of a similar color. Some technicians have experimented with an oil-based carrier that distributes the paint pigment in patterns similar to those found on the surface of the stagnant ponds.

Urban



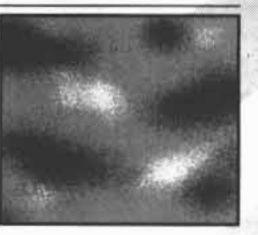
Although most combat vehicles are far too large to fit into the narrow streets of most Terranovan towns (like the winding paths of the quasi-arcologies that are the city-states), Gears are usually able to negotiate them without too many problems. An urban camouflage series has been officially recognized by the high command of all northern armed forces. Its function is not so much to hide the war machine, but to break its silhouette as it moves between the buildings in search of prey. The pattern shown at right is typical of the most recent trend, with various shades of gray, semi-random squares on the hull of the vehicle. Variations on this pattern are often designed to match the shades and shapes of the urban environment in the city-state or town where the regiment is stationed and will most likely have to fight.

White Sand



The Great White Desert remains one of the most unexplored areas on the planet. This is primarily due to the presence of large deposits of white sand, a mildly corrosive, fine volcanic ash. White sand can be carried by the high winds of the Badlands from the volcanoes in the middle of the desert to the very edge of civilized territory. Experienced desert travelers have learned to avoid the regions where it accumulates. Battlegroups may sometimes face off in a region known to harbor some white sand. At least one type of desert camouflage has been developed to take advantage of this: it consists of a bleached tan color, extremely faded, covered by waves of very light brown. Together, these colors imitate the small dunes of white sand and have proven extremely effective in the past.

Woodland



Large forests are a typically northern geographical feature. The micro-climates of the northern valleys, sheltered from the Badlands heat by tall mountains, have led to the formation of large forested areas where conifer and leafy trees cover the ground and the hill sides. The trees can vary in height and density from the small shrubbery of the savannah border regions to the dense and tall saguaro forests of the Big Valley.

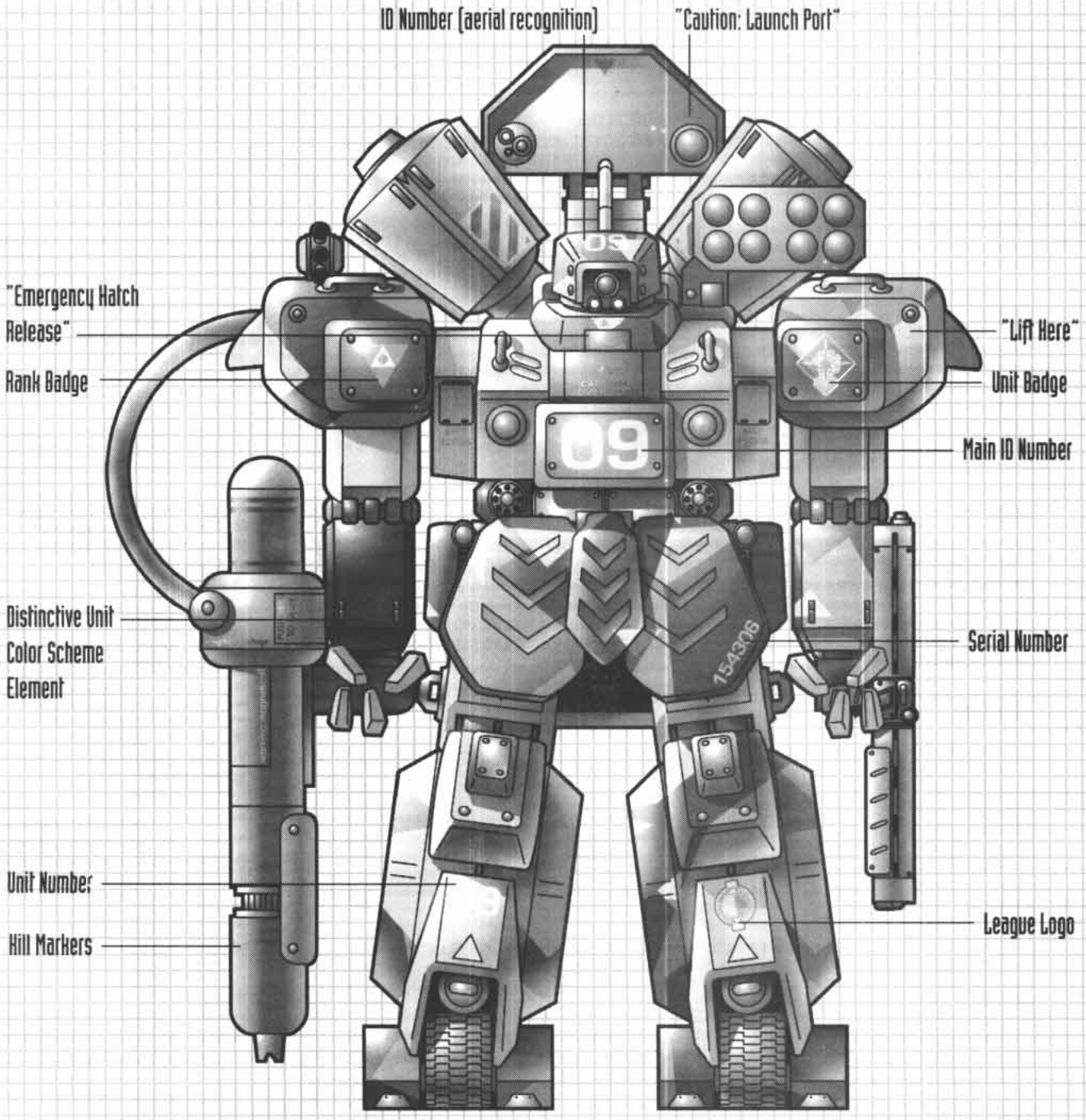
The most common camouflage used in this terrain is a dull medium green base coat. Variations on this pattern are common, either by design (with the color matching the most common local vegetation) or by weathering caused by the elements (the sun-bleached, olive drab color of the units stationed in the Cajun Plain are typical of this).

There are two other widely used camouflage patterns: dark forest and forest/swamp. Both were created and officially recognized during the formation of the Northern Guards to standardize the patterns in use at the time and to facilitate resupply and maintenance. The first one, found at the upper right, consists of a medium green base with spots of light green and dark forest green on top. The spots are spray-painted in a random pattern, though the lower body usually contains more dark green

The second pattern has been designed both as forest and swamp camouflage. Instead of a green base, a medium brown one is used. Large zones of forest green are then applied on top, using fairly well defined edges. This camouflage pattern was popular during the war because it could be easily applied using just an old paintbrush and whatever shades of green or brown paint were available at the time.

Bryce Hubbard (order #5318102)

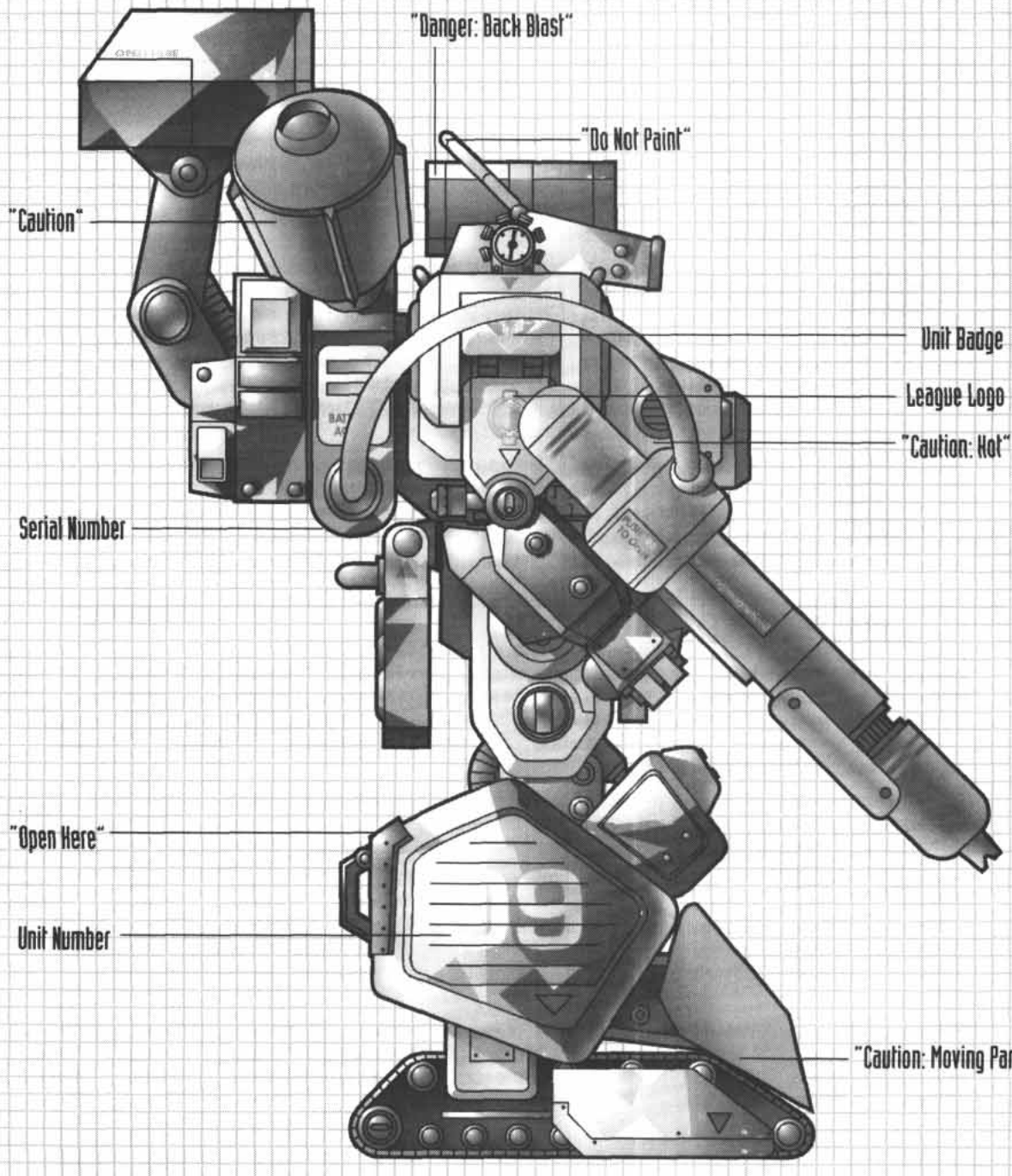
7.3 INSIGNA & MARKING PLACEMENT



Unit Colors and Heraldry

The unit colors and heraldry are one of the most disputed subjects in the officer's mess. Some officers would think nothing of going into battle in full parade dress, their vehicles resplendent in brightly colored livery. Others argue (often with reason) that doing so is an open invitation to get shot and shun all except the smallest identification codes on the hull of their battle machines. Most walk the middle road and adorn their charge with small, muted color versions of their standard badges and insignias.

Bryce Hubbard (order #5318102)

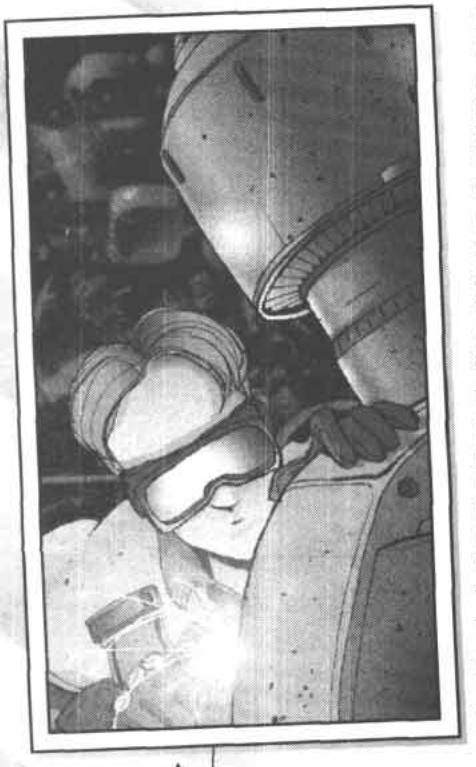


Unit Colors and Heraldry (continued)

The two views above show the most common placement of unit colors and heraldry on the body of a Heavy Gear. Although a *Kodiak* of the *Nova Redriders* is shown here, the general pattern applies to most northern combat units. Since all Gears are built around a humanoid layout, the placement of the various danger signs and caution markers will be somewhat similar, regardless of the actual model.

Bryce Hubbard (order #5318102)

7.4 HEAVY GEAR HANGAR



▲ Steele Enterprises engineer Maverick Alex, hard at work on the S-V1000A V-engine of a HACS-08MG-MP *Tiger*. Steele Enterprise recently acquired the maintenance contract for the WFPA's few *Tigers* and regularly sends engineers and technicians to oversee modifications. From **Fort William Military Review**, 11 Winter TN 1933.

Like all combat vehicles, Heavy Gears need a minimum amount of constant maintenance to remain functional. Whenever possible, they are rotated back to their unit's main base for regular check-ups. This is not always possible (or practical) during extended campaigns or when operating far from headquarters. While Gear transport vehicles with limited repair facilities do exist, their technicians are often hampered by the lack of elbow room and spare parts, and are also greatly limited in their mobility. Airlifted portable maintenance facilities have thus been developed by Terranovan armies for use during extended campaigns. The best-known field hangar design is the northern Modular Advanced Maintenance Outpost, or MAMO for short.

A MAMO unit is a self-contained field maintenance workshop that can be broken down into a series of modular packages. These modular segments can fit most of the transport aircraft and trucks in service in the northern armies, especially the helicopters. Once a secure location has been cleared, the MAMO unit is brought to the site via an aircrane or large truck, with as many hangar, storage or living units as called for by the campaign planners. All the components have been designed to collapse into each other or otherwise be removable so as to take as little space and weight as possible inside a module.

The various plates are assembled by technicians into a sturdy, semi-cylindrical structure. Standard northern procedures then call for at least a thirty square meter trench to be dug (large enough for the standard-sized module). The module is lowered into the trench and the soil bulldozed over the structure's roof, leaving only a ramp at one end for access (the other door of the hangar is hooked up to the central module of the MAMO — see page 211 for a floorplan). Burying the installation affords it a much greater degree of protection than just assembling the various modules above ground (which is also possible if time is lacking). MAMOs in prepared positions are considered to be protected by their own revetment (see the **Tactical Field Support** sourcebook, page 40, for more information on revetment and field engineering).

The field equipment is then unpacked and locked down in prepared positions inside the shell. An experienced team can put the entire unit together in less than a day. Although most MAMOs are based on this model, the modular nature of the system allows more complex facilities to be created. Field technicians have proven adept in the past at modifying the modules to increase their comfort (and that of the vehicles' crew). Notable additions include barracks, lounges and even, in one well-publicized case, a small swimming pool.

7.4.1 GENERAL APPEARANCE

The MAMO unit is a geometric bunker consisting of interlocking ferroplastic plates. Ferroplastic is a sturdy composite material that has good insulating and structural qualities. Alloy spars are added to the internal face of the walls during assembly for additional strength. The entire structure (when not buried under a few decimeters of ground) has a hulking and angular appearance, with heavy plating, big doors and a thick support structure. The walls and structural spars of the modules are generally painted a dull army green, but sand and gray are also available from the manufacturers.

The most commonly seen MAMO configuration features many modular hangars (each with a ventilation system, a powerful winch and torso braces) arranged around a central storage module. There can be up to three general workstations per hangar, each with its own low-power winch and complete tool array. More specialized work areas can be found lined up along the back wall. Among those, a NNet analysis station (linked to the main computer in the office module) and an armored weapons station can be designed into specialized hangar modules.

Each hangar also includes some secondary stations for electronic and weapon maintenance. A specialized, distinct module type is available for storing and handling explosive material such as ammunition. It is separated from the rest of the MAMO by a sturdy blast wall designed to deflect any explosion away from the main structure. Likewise, fuel is stored in an armored, fire-proof cylindrical tank outside the hangars.

MAMO units looks ominously dark when seen from the outside because the ferroplastic is fairly opaque. Only the access doors are visible, lit by a row of spotlights. Inside, however, powerful banks of lights illuminate the work area. They are mounted in self-contained pods, requiring only to be connected to a live power feed in order to function. Adjustable connectors allow them to be placed in any orientation, as required by the technicians for maximum efficiency.

Although the technicians try to keep the various surfaces somewhat clean, dirt from the fumes and dust of the repairs accumulate over time as the MAMO is shipped from place to place without much more than a routine check-up. Grime accumulates in the nooks and crannies, resisting any attempt to dislodge it, and the floor retains an oily sheen in spots even though it has been mopped many times. The outer surfaces of the hangar, on the other hand, are constantly exposed to harsh climatic conditions and present a well-worn appearance to the casual observer.

Just like the dirt, odors accumulate on the inside. Whenever someone enters a MAMO, even a freshly scrubbed one, his nose is assailed by remnants of half-burned pressure fluid mixed with the ozone tang of the cutting torches' plasma arcs, and the acrid smell of incomplete combustion from the engines and weaponry. The smell never completely fades away, as if it were etched into the tough ferroplastic, and no one ever gets completely accustomed to it. There are some, however, who swear they find it a pleasant odor because it reminds them of the machinery they love so much.

Bryce Hubbard (order #5318102)

7.4.2 TOOLS AND EQUIPMENT

Ladders: big mobile step ladders like those used to get into jet planes are a must to comfortably work on a Gear's upper body. Some well-equipped modules have small-scale, cherry-picker type cranes, to get to the more difficult-to-reach areas.

Torso Winches: a type of harness, this is used to lift the entire Gear by the torso. Depending on the design in use, this can be a forklift-like arrangement where the Gear is pushed up from the ground or a winch arrangement where it is pulled up from the ceiling's supporting structure. The winch can grip the Gear in different ways to position it as the technician requires. The winch can also hold just the torso for special repairs to the waist and lower body.

Tool Array: a ceiling-mounted structure supports the main hand tools, ensuring their availability when a technician requires them. All power and air pressure (for high-speed ratchets, etc.) comes from centralized units in the ceiling, with tools on mechanized arms. Technicians can just bring the tool down, with the mechanical arm acting as support and stabilizer (it also keeps the power connections out of the way). Smaller, more traditional versions of the tools are available for fine adjustments.

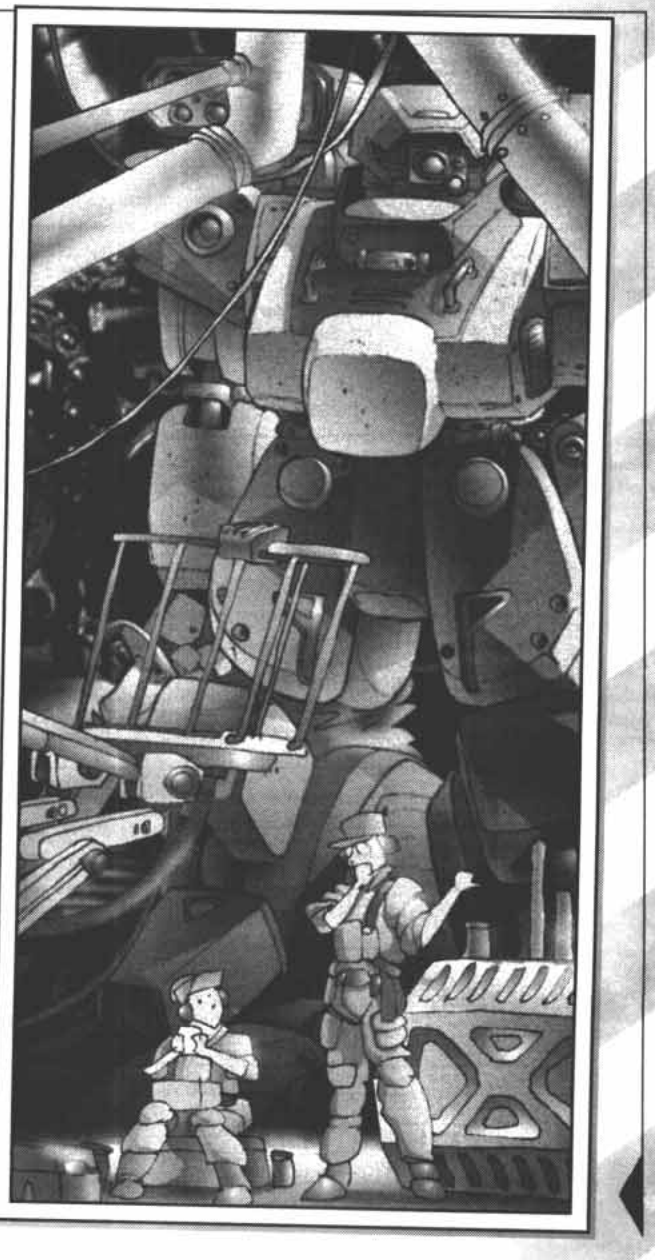
7.4.3 CONTENTS AND CAPABILITIES

The exact equipment and personnel found in each MAMO varies enormously, but the following list can be considered average and fairly representative of the typical unit.

Typical Modular Advanced Maintenance Outpost

Name	Qty	TV equivalent
Hangar Modules	3	200
Canteens (one liter)	6	-
Cutting Torches	2	-
Electronic Tool Kits	1	-
First Aid Kits	1	-
Flashlights	3	-
Gas Masks	1	-
Geiger Counters	1	-
Goggles	3	-
Mechanical Tool Kits	2	-
Personal Computers	1	-
Ropes (250 m)	1	-
Smart Glue Packs (2.5 kg)	5	-
Office Module	1	40
Canteens (six liters)	1	-
First Aid Kits	1	-
Flashlights	3	-
Personal Computers	1	-
Trideo Receiver	1	-
Water Distiller	1	-
Storage Module	1	30
Canteens (one liter)	6	-
First Aid Kits	1	-
Flashlights	3	-
Ropes (250 m)	1	-
Smart Glue Packs (2.5 kg)	5	-
Spare Cerachip Boxes (100 chips)	3	-
Ammunition Storage (500 pts worth)	1	500
Clerks	2	-
Fuel Tank (10,000 liters)	1	-
Spare Parts (50 Electronic Salvage Points)	1	-
Spare Parts (500 Mechanical Salvage Points)	1	-
Technicians, Rating 1	2	100
Technicians, Rating 2	6	600
Technicians, Rating 3	3	600
Total		**6770**

The Garage normally also has at least a few *Camels* and *Groundhogs* (or locally available equivalent) to move Gears and arrays of spare parts around.



Bryce Hubbard (order #5318102)

• HANGAR MODULE

Threat Value:	200
Size:	6
Crew:	3
Armor:	10/20/30

Hangar modules are semi-cylinders with a universal door at both ends.

Perks & Flaws

Name	Rating	Game Effect
Easy to Modify	-	+2 to Repair and Modify rolls
Fire Resistant	-	Halve fire Intensity
Hostile Environment Protection	-	Desert
Micro-Lab	-	Electronic, NNet or Weaponry
Tool Arm	8	Torso Winch, cannot punch
Vehicle Bay	8	Can house one walker up to Size 8
Annoyance	-	Foul smells
No Sensor	-	Cannot perform Active Sensor checks
Large Sensor Profile	2	Easier to detect

• STORAGE MODULE

Threat Value:	30
Size:	3
Crew:	2
Armor:	8/16/24

Storage modules are similar to hangars, but do not feature any built-in equipment.

Perks & Flaws

Name	Rating	Game Effect
Cargo Bay	8	Can house one walker up to Size 8
Easy to Modify	-	+2 to Repair and Modify rolls
Fire Resistant	-	Halve fire Intensity
Hostile Environment Protection	-	Desert
No Communication	-	Cannot communicate
No Sensor	-	Cannot perform Active Sensor checks
Large Sensor Profile	2	Easier to detect

• OFFICE MODULE

Threat Value:	40
Size:	3
Crew:	2
Communications:	0/10 km
Armor:	8/16/24

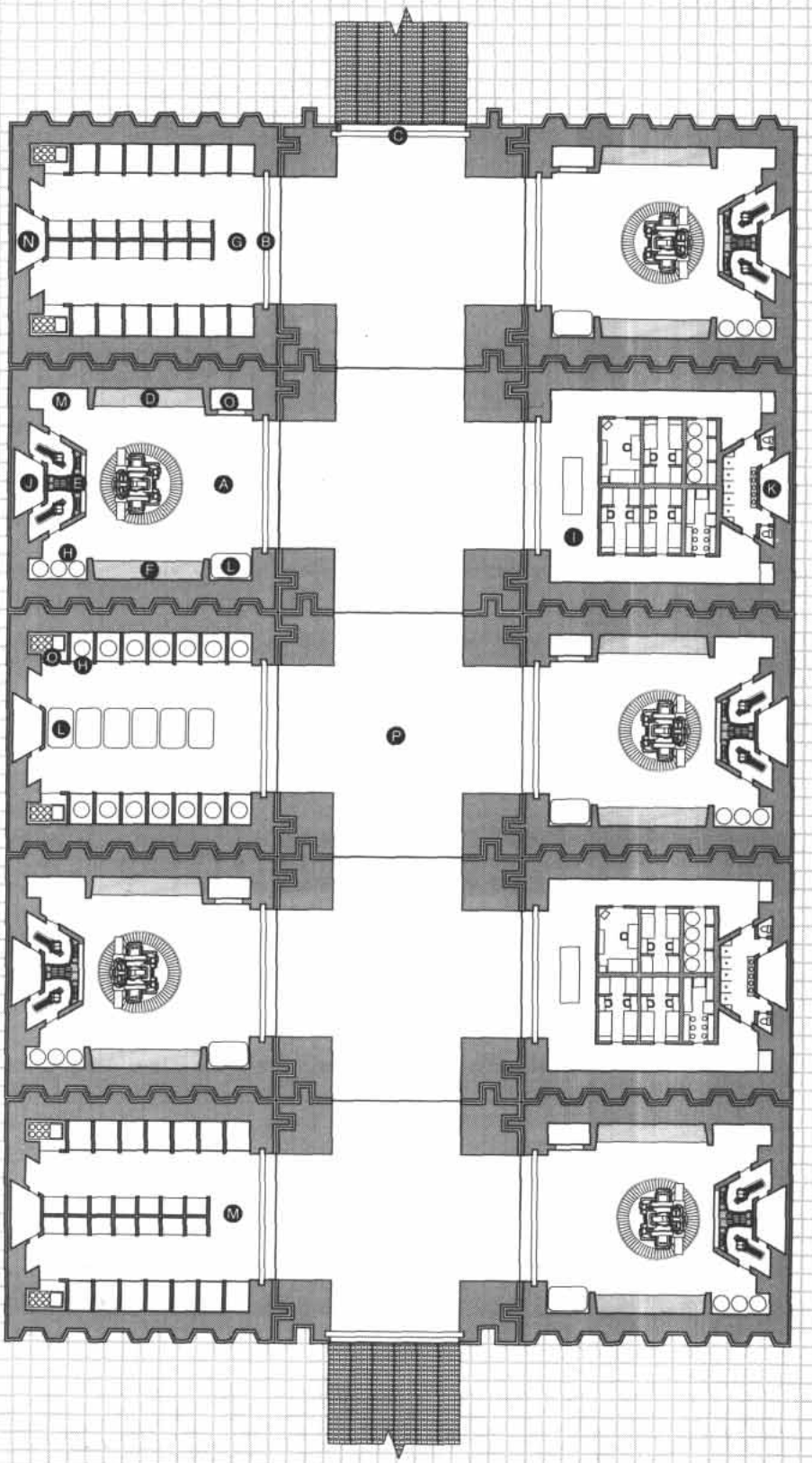
The Office module serves as the "brain" of the MAMO.

Perks & Flaws

Name	Rating	Game Effect
Audio System	-	
Easy to Modify	-	+2 to Repair and Modify rolls
Fire Resistant	-	Halve fire Intensity
High-Capacity Computer	-	Mainframe computer
Hostile Environment Protection	-	Desert
No Sensor	-	Cannot perform Active Sensor checks
Large Sensor Profile	2	Easier to detect

Bryce Hubbard (order #5318102)

7.5 MODULAR ADVANCE MAINTENANCE OUTPOST



Floor Plan

A ..... Repair Shop
B ..... Access Door
C ..... Main Hall Door
D ..... Tool Rack (typical)
E ..... Electronic Testing Equipment
F ..... Weapon Workbench
G ..... Parts & Armor storage
H ..... Pressure oil
I .. Maintenace Crew Living Quaters
J ..... Electronics Closet
K ..... Waste-disposal Facilities
L ..... Fuel Storage
M . Ammunition & Weapon Storage
N ..... Supply Officer Office
O ..... Generator
P ..... Access Tunnel

Bryce Hubbard (order #5318102)

Name	TV	Size	Crew	Armor	Prim. Move	Sec. Move	Man.	D. Range	Sensor	Comm.	Fire Con.	Weapons	Page
Bear	599	7	1	17	Walk (3/6)	Ground (5/10)	-1	380 km	0	0	0	HAC, 2 x MRP/36, LMG, LGM, VB	116-118
Mauler Bear	814	7	1	17	Walk (3/6)	Ground (5/10)	-1	380 km	0	0	0	LGL, 2 x MRP/36, 2 x HMG, APGL, LGM, VB	199
Black Cat	806	6	1	10	Walk (6/11)	Ground (8/15)	+2	250 km	+2	+1	0	LAC, LRP/16, HG, VB	48-50
Black Claw	689	6	1	10	Walk (6/11)	Ground (8/15)	+2	250 km	+2	+1	0	HRF, HG, VB	51
Bobcat	527	6	1	13	Walk (4/8)	Ground (7/13)	+1	650 km	+1	+1	0	DPG, LRP/24, HG, VB	124-126
Bird Arrow	414	6	1	13	Walk (4/8)	Ground (7/13)	+1	650 km	+1	+1	0	LAAC, HG, VB	127
Cheetah	625	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	DPG, LRP/24, HG, VB	32-34
Cheetah Air Claw	551	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	LAAC, HG, VB	35
Cheetah Fang	517	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	LBZK, HG, VB	36
Cheetah MP	522	6	1	10	Walk (6/11)	Ground (8/15)	+2	220 km	-1	-1	0	FGC, 2 x APGL, VB	37
Cheetah Paratrooper	763	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+1	0	0	LAC, LGL, CR	38
Cheetah Polizei	413	6	1	10	Walk (6/11)	Ground (8/15)	+2	220 km	-1	-1	0	VLMG, 2 x APGL	39
Lightning Cheetah	716	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	LGL, APGL, HWP, LAC, HG, VB	45
Silver Cat	500	6	1	13	Walk (5/9)	Ground (7/13)	+1	600 km	+2	+1	0	LAC, LRP/8, HG, VB	47
Stalking Cheetah	690	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	SLC, HG, VB	40
Stalking Cheetah RFL	628	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	MRF, HG, VB	41
Strike Cheetah	668	6	1	14	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	DPG, RFB, VB	42
Strike Cheetah SecComm	711	6	1	14	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	DPG, VB	43
White Cat	710	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	LAC, LRP/8, HG, VB	44
White Cat EWH	1254	6	1	10	Walk (6/11)	Ground (8/15)	+2	600 km	+2	+1	0	LAC, AGM, HG, VB	46
Cheetah Mark II	978	6	1	12	Walk (6/12)	Ground (8/15)	+2	300 km	+2	+1	+1	LAC, LRP/24, APGL, HG. HHG, SKG, VB	162-164
Cheetah Mark II Prototype	1104	6	1	11	Walk (6/12)	Ground (8/15)	+2	300 km	+2	+1	+1	MAC, 2 x MPZ, LRP/24, APGL, VB	165
Den Mother	735	7	1	17	Walk (3/6)	Ground (5/10)	-1	360 km	0	+1	0	HAC, 2 x MRP/36, LMG, LGM, VB	120-122
Den Mother II	829	7	1	18	Walk (3/6)	Ground (6/11)	-1	360 km	0	+1	0	HAC, 2 x MRP/36, LMG, LGM, VB	123
Ferret	323	5	1	12	Walk (3/6)	Ground (7/13)	+1	700 km	+1	+1	0	DPG, LRP/24, VB, HG	128-130
Ferret Mk. II	379	5	1	12	Walk (3/6)	Ground (8/16)	+1	800 km	+2	+1	0	LAC, LRP/24, VB, HG	132
Mauler Ferret	248	5	1	12	Walk (3/6)	Ground (7/13)	+1	700 km	+1	+1	0	MF	135
Rabid Ferret	329	5	1	12	Walk (3/6)	Ground (7/13)	+1	700 km	+1	+1	0	2 x APGL, LRP/24, 2 x LPZ, VB	134
Saboteur Ferret	361	5	1	12	Walk (3/6)	Ground (7/13)	+1	700 km	+1	+1	0	LAC, 6 x SDG, VB	131
Wild Ferret	229	5	1	12	Walk (3/6)	Ground (7/13)	+1	700 km	+1	+1	0	DPG, VB, HG	133
Grizzly	889	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	0	0	HAC, 2 x MRP/18, HMG, DPG, HGM, VB	76-78
Assault Grizzly	749	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	+1	0	MBZK, 2 x IRP/20, HMG, DPG, VB	79
Crossbow Grizzly	851	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	+1	0	HAC, ATM, HMG, DPG, VB	80
Defender Grizzly	957	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	+1	0	0	SLC, AAM, MRP/18. HMG, DPG, VB	81
Engineering Grizzly	101	7	1	16	Walk (3/6)	Ground (6/11)	-1	400 km	-2	-1	0	CS	82
Field Support Grizzly	121	7	1	16	Walk (3/6)	Ground (6/11)	-1	400 km	-2	-1	0	none	83
Grizzly Destroyer	1009	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	+1	0	HBZK, 2 x IRP/30, FGC, HMG, HSKG	86
Polar Grizzly	767	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	0	0	MFM, HGL, HMG, DPG, VB	87
Rabid Grizzly	873	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	0	0	LGL, MRP/36, MFM, DPG, APGL, VB	84
Thunder Grizzly	953	7	1	18	Walk (3/6)	Ground (6/11)	-1	400 km	0	+2	0	HAC, 2 x MRP/18, HMG, LGM, DPG, VB	85
Hunter	380	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	LAC, LRP/24, APGL, HG, VB	52-54
Armored Hunter	348	6	1	17	Walk (3/6)	Ground (6/11)	-1	480 km	0	-1	0	LAC, LRP/24, APM, APGL, HG, VB, CR	55
Assault Hunter	435	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	SC, APGL, HG, VB	56
Assault Hunter AC	499	6	1	16	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	DPG, APGL, HG, VB	57
Bearhunter	396	6	1	17	Walk (4/8)	Ground (7/13)	-1	500 km	0	-1	0	LAC, LRP/24, APM, APGL, HG, VB, CR	58
Bricklayer	316	6	1	12	Walk (3/6)	n/a	0	600 km	-1	-1	-1	none	59
Bricklayer Bulldozer	173	6	1	14	Walk (4/7)	n/a	0	500 km	0	0	0	none	75
Demolisher	550	6	1	12	Walk (3/6)	n/a	0	600 km	-1	-1	-1	SC, SKG	60
Desert Tankhunter	249	6	1	14	Walk (4/7)	Ground (6/11)	-1	500 km	-1	-1	-1	LBZK, LRP/24, APGL, HG, VB	61
Headhunter	392	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	+1	0	LAC, LRP/24, APGL, HG, VB	62
Hunter Commando	603	6	1	15	Walk (4/7)	Ground (7/13)	0	480 km	0	0	0	LBZK, MRP/18, APGL, SKG, HG, VB	63
Hunter Commando EW	626	6	1	15	Walk (4/7)	Ground (7/13)	0	480 km	0	0	0	LBZK, SKG, HG, VB	64

Bryce Hubbard (order #5318102)

Bryce Hubbard (order #5318102)

Name	TV	Size	Crew	Armor	Prim. Move	Sec. Move	Man.	D. Range	Sensor	Comm.	Fire Con.	Weapons	Page
Hunter Minelayer	407	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	SKG	65
Hunter NBC	864	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	LGM, APGL, HG, VB	66
Hunter Para-Mortar	596	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	LAC, LFM, CR	68
Hunter Paratrooper	526	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	LAC, LGL, 2 x APGL, CR	67
Hunter Recon	233	6	1	14	Walk (4/8)	Ground (7/13)	0	600 km	0	0	0	MAC	67
Hunter Recon AG	506	6	1	14	Walk (4/8)	Ground (7/13)	0	600 km	0	0	0	2 x AGM	68
Hunter UC	407	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	0	0	FGC, 4 x HPZ, HMG, APGL, HHG, VB	74
Hunter Zerstörer Mk II	497	6	1	17	Walk (4/7)	Ground (6/11)	-1	450 km	0	0	0	LBZK, FGC, MRP/18	71
Hunter Zerstörer Mk II A	233	6	1	17	Walk (4/7)	Ground (6/11)	-1	450 km	0	0	0	3 x MPZ, 2 x APGL, HG, VB	72
Spearhead	503	6	1	15	Walk (4/7)	Ground (6/12)	0	500 km	0	+1	0	HAC	73
Hunter XMG	863	6	1	16	Walk (4/7)	Ground (6/12)	+1	500 km	+1	+1	+1	MAC, MRP/18, APGL, HHG, VB	166-168
Hunter XMG Prototype	814	6	1	15	Walk (4/7)	Ground (7/13)	+1	500 km	+1	+1	+1	MAC, MRP/9, 2 x MPZ, APGL, VB	169
Jaguar	628	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	MAC, LRP/32, APGL, HG, VB	92-94
Arrow Jaguar	919	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	MAC, AGM, HG, VB	95
Fire Jaguar	694	6	1	16	Walk (5/9)	Ground (7/13)	+1	530 km	0	+1	0	MAC, 2 x MRP/36	96
Firefighter Jaguar	1190	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	MFL, 2 x MRP/18, VA	102
Flak Jaguar	452	6	1	16	Walk (5/9)	Ground (7/13)	+1	530 km	0	+1	0	MAAC, VB	97
Flash Jaguar	684	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	LLC, APGL, HG, VB	98
Jaguar MP	568	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	-1	+1	+1	FGC, APGL, VB	99
Jaguar Pathfinder	735	6	1	16	Walk (5/9)	Ground (7/13)	+1	1050 km	+1	+1	+1	3 x HPZ, APGL, VB	105
Jaguarundi	1147	6	1	16	Walk (5/10)	Ground (7/13)	+1	550 km	0	+1	+1	RFB, MRP/9, 3 x HWG, VB	100
Magma Jaguar	649	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	MFL, ARP/10, APGL, HG, VB	101
Mountain Jaguar	861	6	1	16	Walk (5/9)	n/a	+1	550 km	0	+1	+1	MAC, MRP/36, APGL, HG, VB, CR	103
Panther	1123	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	+1	+1	+1	HRF, LRP/16, HG, VB	104
Predator Jaguar	1059	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	+1	+1	+1	SC. MRP/9, APGL, HG, VB	106
Strike Jaguar	880	6	1	16	Walk (5/9)	Ground (7/13)	+1	550 km	0	+1	+1	MBZK, IRP/20, APGL, HG, VB	92-94
Kodiak	1072	7	1	20	Walk (3/6)	Ground (6/11)	-1	400 km	+1	+1	0	LPA, MRP/36, 2 x HMG, APGL, AGM, HG, HHG, VB	88-90
Kodiak Destroyer	1274	7	1	20	Walk (3/6)	Ground (5/10)	-1	400 km	+1	+1	0	HBZK, MRP/36, DPG, 2 x HMG, APGL, AGM, HG, HHG, VB	91
Mad Dog	342	7	1	16	Walk (3/5)	Ground (5/9)	-1	350 km	-2	0	0	HAC, HRP/24, LMG, VB	112-114
Mad Dog R	390	7	1	16	Walk (3/5)	Ground (5/10)	-1	350 km	-2	0	0	HAC, 2 x MRP/9, LMG, VB	115
Mammoth	1500	11	2	25	Walk (3/5)	n/a	-2	320 km	+1	0	0	MAC, 2 x LMG, ATM, SC	148-150
Assault Mammoth	991	11	2	25	Walk (3/5)	n/a	-2	320 km	0	0	0	HAC, 2 x LMG, 2 x SC	151
Brawler Mammoth	699	11	2	25	Walk (3/5)	n/a	-2	320 km	+1	0	0	2 x MAC, 2 x VLRP, 2 x LMG, 2 xFGC	152
Command Mammoth	1754	11	2	25	Walk (3/5)	n/a	-2	320 km	+2	+1	0	MAC, SC, APGL	153
Damocles	913	11	2	25	Walk (3/5)	n/a	-2	320 km	+1	0	0	LAG, 2 x SLC, 2 x HMG	154
Damocles A2	913	11	2	25	Walk (3/5)	n/a	-2	320 km	+1	0	0	LAG, 2 x SLC, 2 x HMG	155
Mastodon	902	10	2	27	Walk (3/6)	n/a	-1	420 km	+1	0	0	VHAC, SC, FGC, HGL	178-180
Mastodon II	993	10	2	27	Walk (3/6)	n/a	-1	420 km	+1	0	0	VHAC, SC, FGC, HGL	181
Nemesis Jaguar	735	6	1	15	Walk (5/9)	Ground (7/13)	+1	380 km	0	0	+1	MAC, LRP/32, VB, CR	108-110
Southern Special Nemesis	738	6	1	15	Walk (5/9)	Ground (7/13)	+1	380 km	0	0	+1	MAC, LRP/32, VR	111
Panda	960	7	1	18	Walk (3/6)	Ground (6/11)	0	450 km	+1	+1	0	VHAC, HRP/24, FGC, HGM, APGL, HHG, VA	170-172
Savage Panda	1113	7	1	18	Walk (3/6)	Ground (6/11)	0	450 km	+1	+1	0	HBZK, HRP/24, FGC, LGM, APGL, HHG, VA	173
Razorback	500	7	1	20	Walk (3/6)	Ground (5/10)	-1	350 km	0	0	0	SC, MRP/9, LMG, DPG, APGL	136-138
Peacemaker Razorback	522	7	1	20	Walk (3/6)	Ground (5/10)	-1	350 km	0	0	0	VHAC, HRP/24, LMG, DPG, APGL, CR	139
Sand Cat	780	6	1	15	Walk (5/10)	Ground (7/14)	+1	450 km	+1	+1	+1	MAC, MRP/18, APGL, DPG, HG, VB	174-176
Sticky Cat	786	6	1	15	Walk (5/9)	Ground (7/14)	+1	450 km	+1	+1	+1	MAC, MRP/18, APGL, DPG, HG, VB	177
Thunderhammer	2315	12	2	35	Walk (3/5)	n/a	-2	250 km	0	0	+1	HAC, LFG, MRP/36, APGL	156-158
Recovery Hammer	868	12	2	35	Walk (3/5)	n/a	-2	250 km	0	0	0	2 x MAC, MRP/36	159
Tiger	625	6	1	17	Walk (4/8)	Ground (6/12)	0	500 km	0	0	+1	MAC, MRP/9, APGL	140-142
Sabertooth	719	6	1	17	Walk (4/8)	Ground (6/12)	0	500 km	0	+1	+1	DPG, MAC, MRP/9, APGL, VB	143
Weasel	384	6	1	14	Walk (4/7)	Ground (7/13)	0	500 km	0	+2	-1	LAC, APGL, HG, VB	144-146
Tattletale	280	6	1	14	Walk (4/7)	Ground (7/13)	0	500 km	+1	+3	-1	LAC, APGL, 2 x HG, VB	147

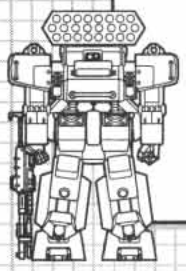
8.2 NORTHERN GEARS GENEALOGY

HEAVY GEARS

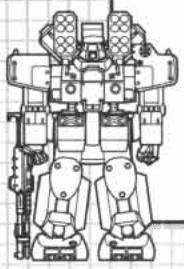
MEDIUM GEARS

LIGHT GEARS

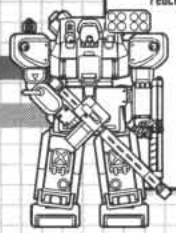
Mad Dog
HACS-15MG-MP
Mad Dog R HACS-15MG-MP/R



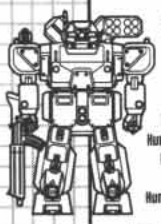
Bear
HACS-01HG-FS
Mauler Bear HACS-01HG-AP



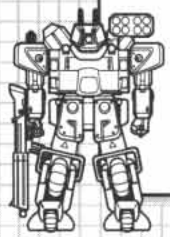
Razorback
HACS-04HG-AST
Peacemaker Razorback HACS-04HG-FS



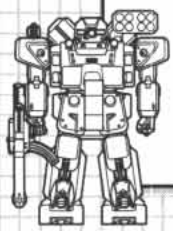
HUNTER
HACS-01MG-MP
Armored Hunter HACS-01MG-FU
Assault Hunter HACS-01MG-AST
Assault Hunter AC HACS-01MG-AC
Bearhunter HACS-01MG-FU/A
Bricklayer HACS-01MG-ENG
Demolisher HACS-01MG-DEM
Headhunter HACS-01MG-C
Hunter Commando HACS-01MG-HC
Hunter Comm. EW HACS-01MG-HG/EW
Hunter Minelayer HACS-01MG-MLV
Hunter NBC HACS-01MG-NBC
Hunter Paratrooper HACS-01MG-PARA
Hunter Recon HACS-01MG-SNT
Hunter Para-Mortar HACS-01MG-PARA/FS
Desert Tankhunter HACS-01MG-DT/TH
Hunter Recon AG HACS-01MG-L/TH
Hunter Zerstörer MK2HACS-01MG-TH
Hunter Zerstörer MK2A HACS-01MG-TH/A
Spearhead HACS-01MG-C/A
Hunter UC HACS-01MG-UC
Bricklayer Bulldozer HACS-01MG-ENG/A



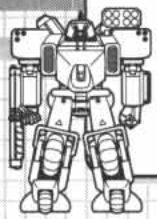
Wildcat
HACS-12LG-SCT
No Variants Produced



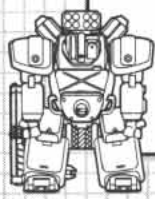
Tiger
HACS-08MG-MP
Sabertooth HACS-08MG-C



Bobcat
HACS-03LG-SCT
Bird Arrow HACS-03LG-AA

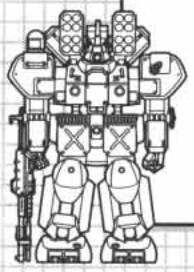


Ferret
HACS-02LG-SCT
Saboteur Ferret HACS-02LG-DEM
Ferret Mk. II HACS-02LG-SCT/A
Wild Ferret HACS-02LG-EW
Rabid Ferret HACS-02LG-AST
Mauler Ferret HACS-02LG-OL

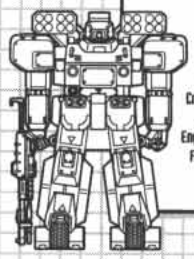


Bryce Hubbard (order #5318102)

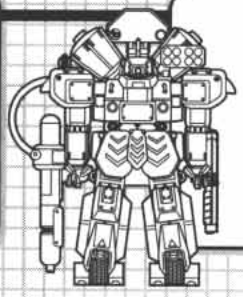
DEVELOPMENT CHART



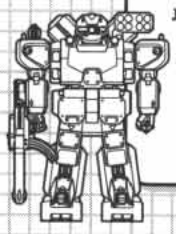
Den Mother
HACS-01HG-ART
Den Mother II HACS-01HG-ART/A



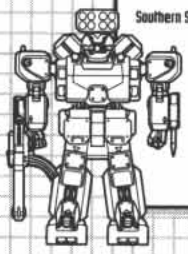
Grizzly
HACS-02HG-MPS
Assault Grizzly HACS-02HG-AST
Defender Grizzly HACS-02HG-AA
Rabid Grizzly HACS-02HG-FS
Thunder Grizzly HACS-02HG-ART
Crossbow Grizzly HACS-02HG-HAST
Grizzly Destroyer HACS-02HG-TH
Engineering Grizzly HACS-02HG-ENG
F. Support Grizzly HACS-02HG-SUP
Polar Grizzly HACS-02HG-ALP



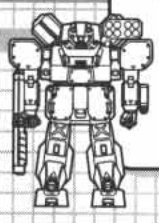
Hodiak
HACS-10HG-AST
Hodiak Destroyer HACS-10HG-TH



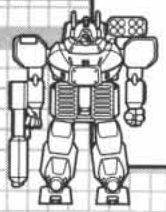
Jaguar
HACS-02MG-MPS
Panther HACS-02MG-STL
Jaguar Pathfinder HACS-02MG-SCT
Predator Jaguar HACS-02MG-JG
Strike Jaguar HACS-02MG-AST
Arrow Jaguar HACS-02MG-HFS
Fire Jaguar HACS-02MG-FS
Flak Jaguar HACS-02MG-AA
Flash Jaguar HACS-02MG-SNP
Jaguar MP HACS-02MG-SEC
Jaguarundi HACS-02MG-ANN
Magma Jaguar HACS-02MG-FL
Firefighter Jaguar HACS-02MG-FF
Mountain Jaguar HACS-02MG-ALP



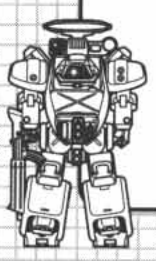
Nemesis Jaguar
HACS-12MG-DL
Southern Special Nemesis HACS-12MG-DL/B



Cheetah
HACS-01LG-SCT
White Cat HACS-01LG-EW
Lightning Cheetah HACS-01LG-HW
White Cat EWH HACS-01LG-EWH
Silver Cat HACS-01LG-EW/A
Cheetah Air Claw HACS-01LG-AA
Cheetah Fang HACS-01LG-TH
Cheetah MP HACS-01LG-SEC
Cheetah Para. HACS-01LG-PARA
Cheetah Polizei HACS-01LG-CP
Stalking Cheetah HACS-01LG-SNP
Cheetah RFL HACS-01LG-SNP/A
Strike Cheetah HACS-01LG-AST
Str. Cheetah SC HACS-01LG-AST/C



Black Cat
HACS-01LG-STH
Black Claw HACS-01LG-STH/SNP

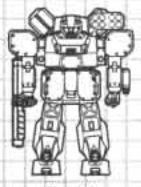


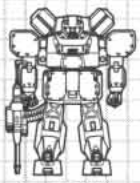
Weasel
HACS-05LG-EW
Taffiefale HACS-05LG-C

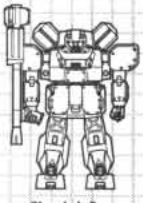
Bryce Hubbard (order #5318102)

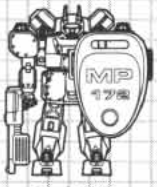
8.3 VEHICLE RECOGNITION CHART

Gears Recognition


Cheetah
HACS-01LG-SCT

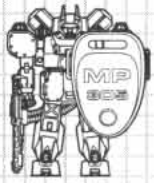

Cheetah Air Claw
HACS-01LG-AA


Cheetah Fang
HACS-01LG-TK



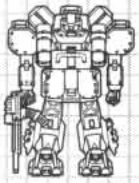
Cheetah MP
HACS-01LG-SEC

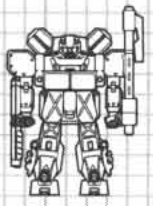

Paratrooper
HACS-01LG-PARA



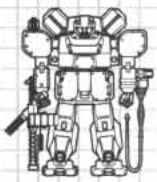
Cheetah Polizei
HACS-01LG-CP

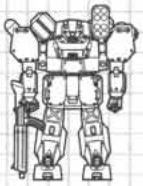

Stalking Cheetah
HACS-01LG-SNP

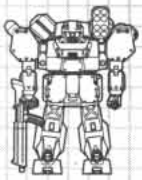

Stalking Cheetah AFL
HACS-01LG-SNP/A

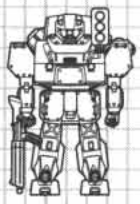

Strike Cheetah
HACS-01LG-AST

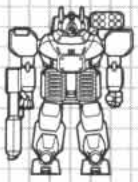

Strike Cheetah SecCom
HACS-01LG-AST/C


Lightning Cheetah
HACS-01LG-HW

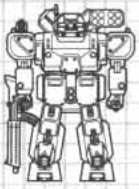

White Cat
HACS-01LG-EW

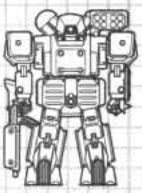

Silver Cat
HACS-01LG-EW/A

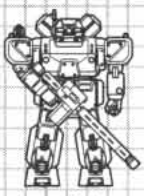

White Cat EWH
HACS-01LG-EWH

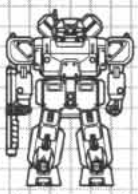

Black Cat
HACS-01LG-STH

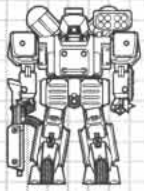

Black Claw
HACS-01LG-STH/SNP

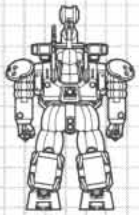

Hunter
HACS-01MG-MP

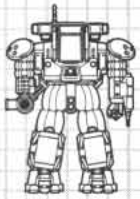

Armored Hunter
HACS-01MG-FU

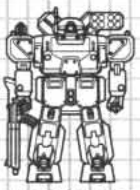

Assault Hunter
HACS-01MG-AST

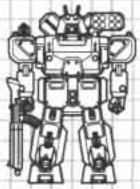

Assault Hunter AC
HACS-01MG-AC


Bearhunter
HACS-01MG-FU/A

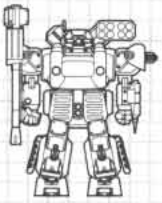

Bricklayer
HACS-01MG-ENG


Demolisher
HACS-01MG-DEM

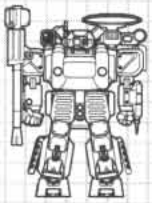

Desert Tankhunter
HACS-01MG-DT/TK


Headhunter
HACS-01MG-C

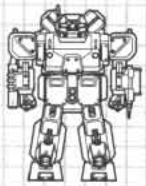
Bryce Hubbard (order #5318102)



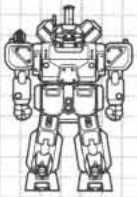
Hunter Commando
HACS-01MG-HC



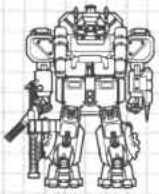
Hunter Commando EW
HACS-01MG-HC/EW



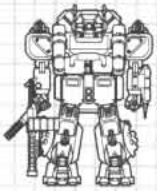
Hunter Minelayer
HACS-01MG-MLV



Hunter NBC
HACS-01MG-NBC



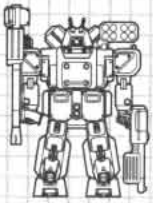
Hunter Para-Support
HACS-01MG-PARA/FS



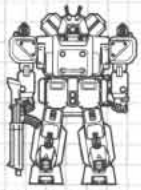
Hunter Paratrooper
HACS-01MG-PARA

Hunter Recon
HACS-01MG-SKT

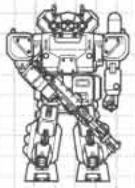
Hunter Recon AG
HACS-01MG-L/TK



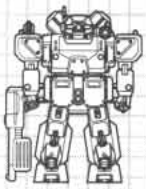
Hunter Zerstörer Mk2
HACS-01MG-TK



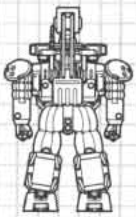
Hunter Zerstörer Mk2a
HACS-01MG-TK/A



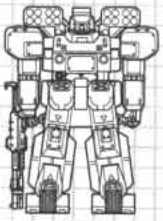
Spearhead
HACS-01MG-C/A



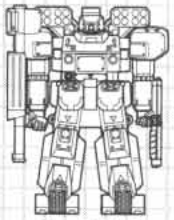
Hunter UC
HACS-01MG-UC



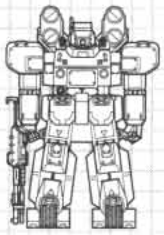
Hunter Buldozer
HACS-01MG-ENG/A



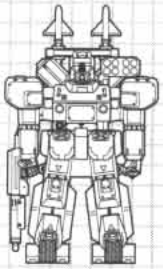
Grizzly
HACS-02HG-MPS



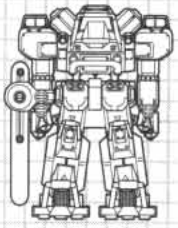
Assault Grizzly
HACS-02HG-AST



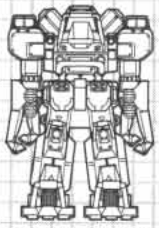
Crossbow Grizzly
HACS-02HG-HAST



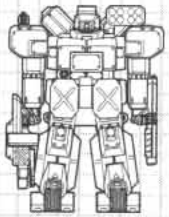
Defender Grizzly
HACS-02HG-AA



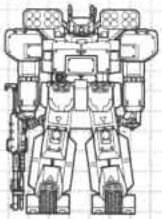
Engineering Grizzly
HACS-02HG-ENG



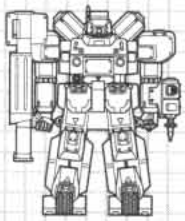
Field Support Grizzly
HACS-02HG-SUP



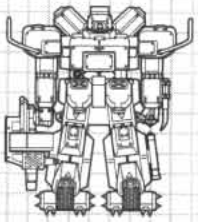
Rabid Grizzly
HACS-02HG-FS



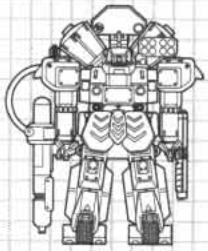
Thunder Grizzly
HACS-02HG-ART



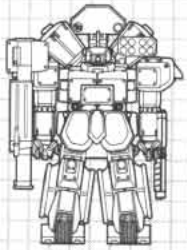
Grizzly Destroyer
HACS-02HG-TK



Polar Grizzly
HACS-02HG-ALP



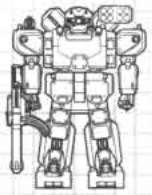
Kodiak
HACS-10HG-AST

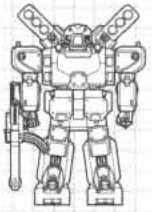


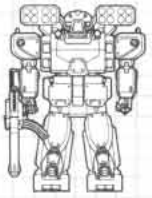
Destroyer Kodiak
HAST-10HG-TK

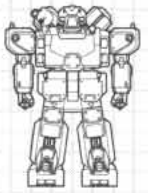
Bryce Hubbard (order #5318102)

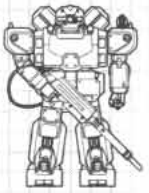
8.3 VEHICLE RECOGNITION CHART

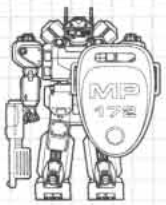

Jaguar
HACS-02MG-MPS


Arrow Jaguar
HACS-02MG-HFS

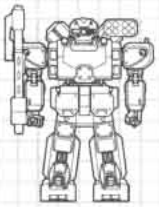

Fire Jaguar
HACS-02MG-FS

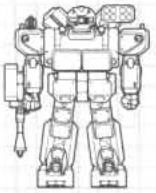

Flak Jaguar
HACS-02MG-AA


Flash Jaguar
HACS-02MG-SNP

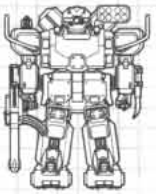


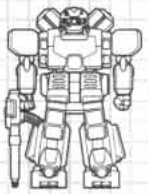
Jaguar MP
HACS-02MG-SEC

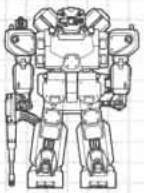

Jaguarundi
HACS-02MG-ANN


Magma Jaguar
HACS-02MG-FL

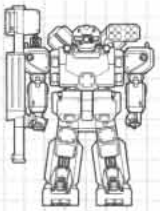

Firefighter Jaguar
HACS-02MG-FF


Montain Jaguar
HACS-02MG-ALP

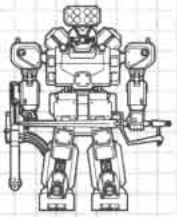

Panther
HACS-02MG-STL

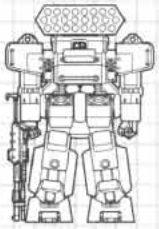

Jaguar Pathfinder
HACS-02MG-SCT

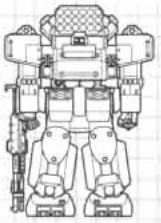

Predetor Jaguar
HACS-02MG-JG

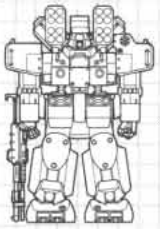

Strike Jaguar
HACS-02MG-AST

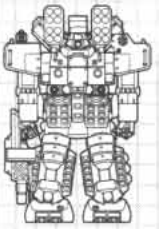

Nemesis Jaguar
HACS-12MG-DL

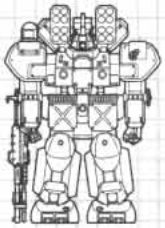

Southern Special
HACS-12MG-DL/B

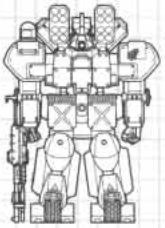

Mad Dog
HACS-15MG-MP

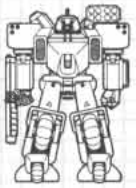

Mad Dog-R
HACS-15MG-MP/R

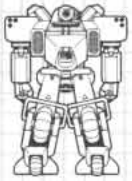

Bear
HACS-01HG-FS

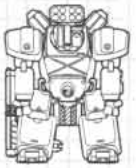

Mauler Bear
HACS-01HG-AP


Den Mother
HACS-01HG-ART


Den Mother 2
HACS-01HG-ART/A


Bobocat
HACS-03LG-SCT


Bird Arrow
HACS-03LG-AA


Ferret
HACS-03LG-SCT

Bryce Hubbard (order #5318102)

VEHICLE RECOGNITION CHART

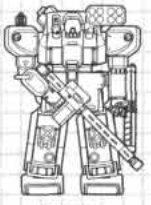
Saboteur Ferret
HACS-02LG-DEM

Ferret Mk 2
HACS-02LG-SCT/A

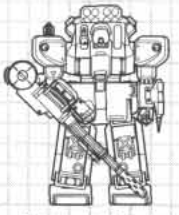
Wild Ferret
HACS-02LG-EW

Rabid Ferret
HACS-02LG-AST

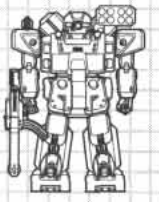
Mauler Ferret
HACS-02LG-DL



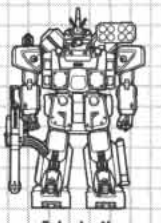
Razorback
HACS-04HG-AST



Peacemaker Razorback
HACS-04HG-FS



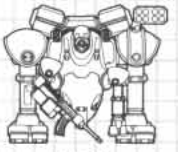
Tiger
HACS-08MG-MP



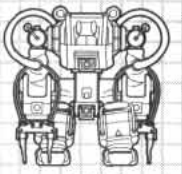
Sabertooth
HACS-08MG-C

Weasel
HACS-05LG-EW

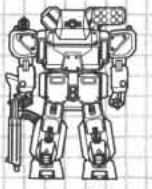
Tattletale
HACS-05LG-C



Racoon
X-BOT-1

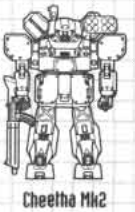


Hard Hat
HU-0124L

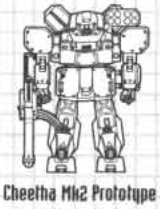


Hunter Mk1
X-BOT-2

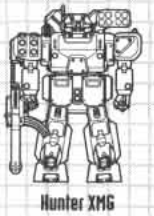
Gears Prototypes Recognition



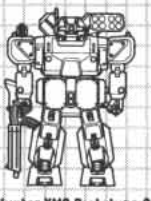
Cheetha Mk2
S-C2001X



Cheetha Mk2 Prototype 3
S-C2001X-B

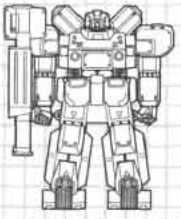


Hunter XMG
N-103X

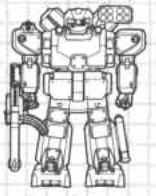


Hunter XMG Prototype 2
N-103X-2

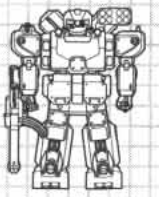
Grizzly Panda
NG-1549X



Grizzly Panda Protype 3
NG-1549X-3



Jaguar Sandcat
N-1521XSAP

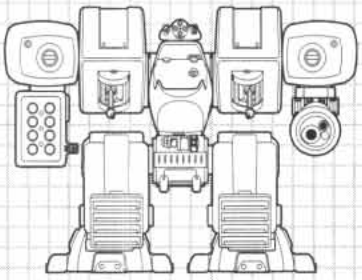


Jaguar Sticky Cat
N-1523XSAP

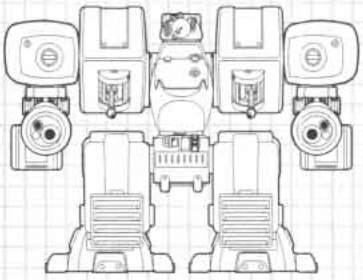
Bryce Hubbard (order #5318102)

8.3 VEHICLE RECOGNITION CHART

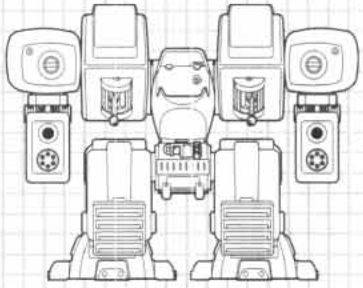
Striders Recognition



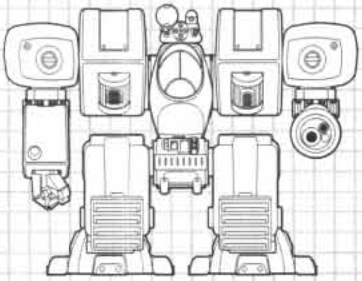
Mammoth
WACS-01FS-AST



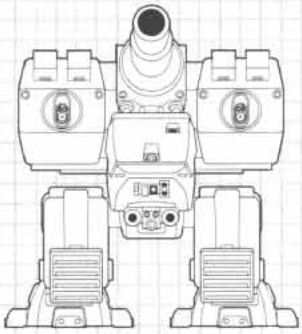
Assault Mammoth
WACS-01FS-HAST



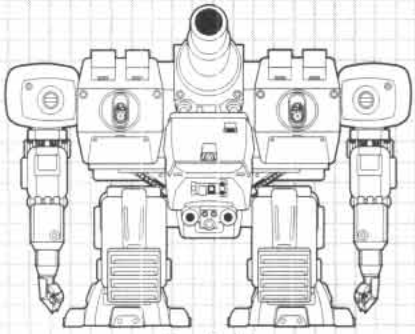
Brawler Mammoth
WACS-01FS-SRT



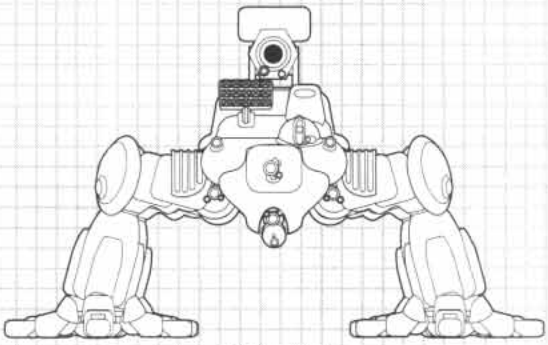
Command Mammoth
WACS-01FS-C



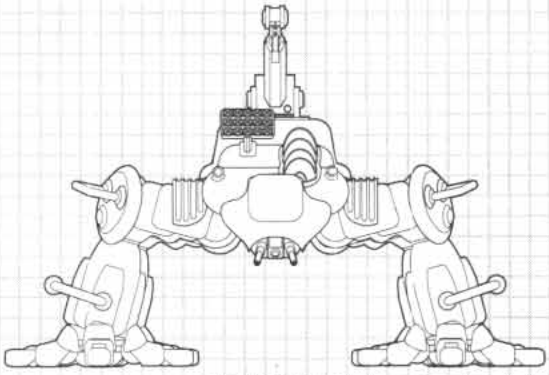
Damocles
WACS-01FS-ART



Damocles A2
WACS-01FS-ART/A

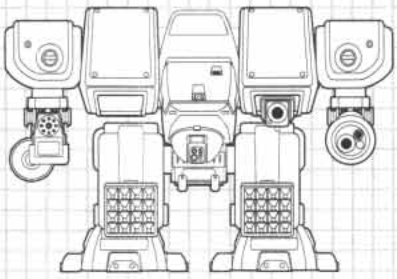


Thunderhammer
WACS-03-FS

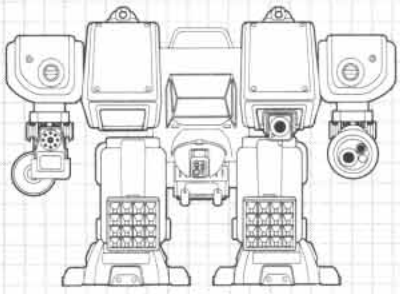


Recovery Hammer
WACS-03-ENG

Striders Prototypes Recognition



Mastodont
N-MA4203X



Mastodont Protoype 2
N-MA4204X

Bryce Hubbard (order #5318102)

VEHICLE RECORD SHEET

NAME:

ARMOR DAMAGE

10

20

30

40

50

SYSTEMS DATA

VEHICLE SPECIFICATIONS
- SIZE:
- CREW:
- BONUS ACTIONS:

CREW SKILLS
- PILOT (LVL/ATTR):
- GUNNERY (LVL/ATTR):

MOVEMENT
- PRIMARY COMBAT SPD:
- PRIMARY TOP SPD:
- SECONDARY COMBAT SPD:
- SECONDARY TOP SPD:
- MANEUVER:

ELECTRONICS
- SENSORS:
- COMMUNICATION:
- FIRE CONTROL:

ARMOR
- LIGHT DAMAGE:
- HEAVY DAMAGE:
- OVERKILL:

SYSTEMS DAMAGE

VEHICLE
- CREW •
- BONUS ACTIONS •

MOVEMENT
- COMBAT SPD •
- TOP SPD •
- COMBAT SPD •
- TOP SPD •
- MANEUVER •

ELECTRONICS
- SENSORS •
- COMM •
- FIRE CONTROL •

ARMOR
- LIGHT DAMAGE •
- HEAVY DAMAGE •
- OVERKILL •

WEAPONS

NAME	CODE	FIRE ARC	S	M	L	EX	Acc	Dam	Qty	Special

AMMO

FULL	LEFT

WEAPONS
- WEAPON 01 •
- WEAPON 02 •
- WEAPON 03 •
- WEAPON 04 •
- WEAPON 05 •
- WEAPON 06 •
- WEAPON 07 •
- WEAPON 08 •
- WEAPON 09 •
- WEAPON 10 •

PERKS

NAME	RATING	GAME EFFECT	AUX

PERKS
- PERK 01 •
- PERK 02 •
- PERK 03 •
- PERK 04 •
- PERK 05 •
- PERK 06 •
- PERK 07 •
- PERK 08 •
- PERK 09 •
- PERK 10 •
- PERK 11 •

FLAWS

NAME	RATING	GAME EFFECT

DEFECTS

NAME	RATING	GAME EFFECT

HEAVY GEAR

Bryce Hubbard (order #5318102)

SQUADRE/CADRE SHEET

Vehicle:	Walker Speed
Threat Value:	Combat/Top: /
Size:	Ground Speed
Crew:	Combat/Top: /
Bonus Actions:	Maneuver:
Piloting : /	Fire Control:
Gunnery: /	Armor:
Leadership: /	□□□□□ □□□□□
EW: /	□□□□□ □□□□□
Tactics: /	□□□□□ □□□□□
Sensors:	□□□□□ □□□□□
Communications:	□□□□□ □□□□□

Weapons: Unit ID #:

Name	Fire Arc	S	M	L	EX	Acc.	Dam.	ROF	Special	Ammo/Left
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/

Perks & Flaws:

Round Notes:
0:
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Vehicle:	Walker Speed
Threat Value:	Combat/Top: /
Size:	Ground Speed
Crew:	Combat/Top: /
Bonus Actions:	Maneuver:
Piloting : /	Fire Control:
Gunnery: /	Armor:
Leadership: /	□□□□□ □□□□□
EW: /	□□□□□ □□□□□
Tactics: /	□□□□□ □□□□□
Sensors:	□□□□□ □□□□□
Communications:	□□□□□ □□□□□

Weapons: Unit ID #:

Name	Fire Arc	S	M	L	EX	Acc.	Dam.	ROF	Special	Ammo/Left
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/

Perks & Flaws:

Round Notes:
0:
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Vehicle:	Walker Speed
Threat Value:	Combat/Top: /
Size:	Ground Speed
Crew:	Combat/Top: /
Bonus Actions:	Maneuver:
Piloting : /	Fire Control:
Gunnery: /	Armor:
Leadership: /	□□□□□ □□□□□
EW: /	□□□□□ □□□□□
Tactics: /	□□□□□ □□□□□
Sensors:	□□□□□ □□□□□
Communications:	□□□□□ □□□□□

Weapons: Unit ID #:

Name	Fire Arc	S	M	L	EX	Acc.	Dam.	ROF	Special	Ammo/Left
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/

Perks & Flaws:

Round Notes:
0:
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Vehicle:	Walker Speed
Threat Value:	Combat/Top: /
Size:	Ground Speed
Crew:	Combat/Top: /
Bonus Actions:	Maneuver:
Piloting : /	Fire Control:
Gunnery: /	Armor:
Leadership: /	□□□□□ □□□□□
EW: /	□□□□□ □□□□□
Tactics: /	□□□□□ □□□□□
Sensors:	□□□□□ □□□□□
Communications:	□□□□□ □□□□□

Weapons: Unit ID #:

Name	Fire Arc	S	M	L	EX	Acc.	Dam.	ROF	Special	Ammo/Left
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/

Perks & Flaws:

Round Notes:
0:
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Vehicle:	Walker Speed
Threat Value:	Combat/Top: /
Size:	Ground Speed
Crew:	Combat/Top: /
Bonus Actions:	Maneuver:
Piloting : /	Fire Control:
Gunnery: /	Armor:
Leadership: /	□□□□□ □□□□□
EW: /	□□□□□ □□□□□
Tactics: /	□□□□□ □□□□□
Sensors:	□□□□□ □□□□□
Communications:	□□□□□ □□□□□

Weapons: Unit ID #:

Name	Fire Arc	S	M	L	EX	Acc.	Dam.	ROF	Special	Ammo/Left
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/
							x			/

Perks & Flaws:

Round Notes:
0:
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Copyright ©1998 Dream Pod 9, Inc. Permission granted to photocopy for personal use.

Bryce Hubbard (order #5318102)

HEAVY GEAR™

MINIATURES

HUNTER
DP9-215

CHEETAH
DP9-219

JAGER
DP9-217

IGUANA
DP9-221

ASSAULT HUNTER
DP9-223

HEADHUNTER
DP9-224

BLITZ JAGER
DP9-225

COMMAND JAGER
DP9-226

JAGUAR
DP9-216

STRIKE JAGUAR
DP9-227

BLACK MAMBA
DP9-218

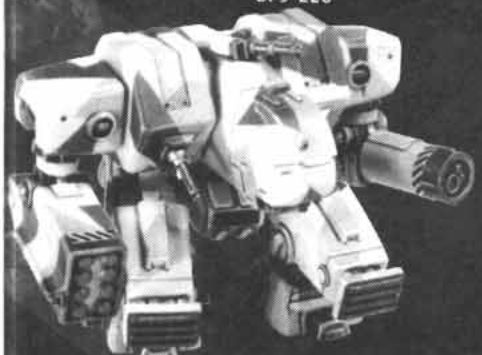
BRAWLER B.M.
DP9-228

GRIZZLY
DP9-220

ASSAULT GRIZZLY
DP9-229

SPITTING COBRA
DP9-222

KING COBRA
DP9-230

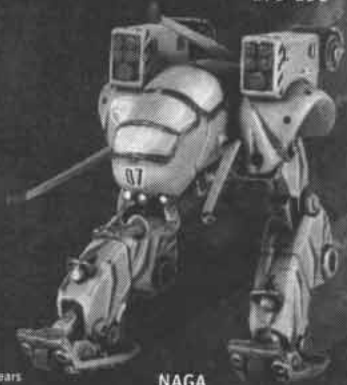


MAMMOTH DP9-209
ASSAULT MAMMOTH DP9-213 (Not Shown)

DREAM POD 9

www.dp9.com

All new DP9 miniature releases are packaged in a clear plastic blister, with a color picture of the miniature visible above the metal parts. All blisters include a sheet of decals. There are new releases scheduled for Heavy Gear & Jovian Chronicles each month, and releases for our new Gear Krieg game will start in early 2001.



NAGA
DP9-210

Pictures of the miniatures are not shown to scale. Pewter miniatures not recommended for children under 6 years of age due to small parts. Models supplied unpainted and unassembled. Glue, paints & scenery not included.

Heavy Gear, Jovian Chronicles and Gear Krieg are trademarks of Dream Pod 9, Inc.
All artwork copyright © 2000 Dream Pod 9, Inc. All Rights Reserved.

Bryce Hubbard (order #5318102)

THE ULTIMATE WARRIOR FOR THE ULTIMATE WAR.

HEAVY GEAR™

THE SCIENCE FICTION COMBAT GAME

IN STORES FEBRUARY

TACTICAL MINIATURES RULEBOOK

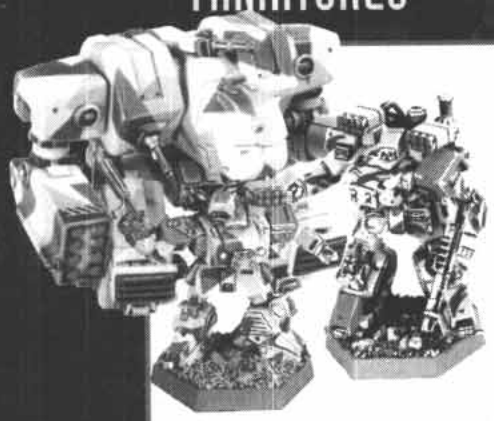
THE BEST IN EXPLOSIVE MECHANIZED SCIENCE-FICTION WARFARE COMES TO THE TABLETOP!

The Tactical Miniatures Rulebook brings the best-selling Heavy Gear science fiction universe to the world of miniature wargaming. A companion to the finely-crafted Heavy Gear miniature line, this manual introduces complete Silhouette tactical rules for miniature-based tabletop combat. The advanced rule set supports game play ranging from one-on-one duels in confined areas to full-blown military invasions across the Badlands, and can even be used with the large Heavy Gear toys from Bandai®!

In addition to the rules, the manual includes a complete guide to creating exciting combat scenarios, several sample missions which can be played individually or as part of a larger military campaign and a detailed miniature painting guide–in full color! Pre-generated squadrons and step-by-step rules let you start playing immediately.

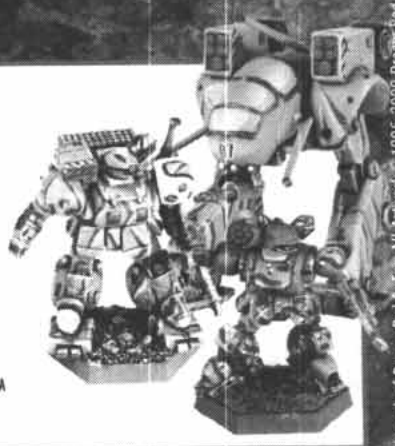
DP9-106, 80 PAGES + 16 COLOR PAGES, $19.95

MINIATURES



DP9-209, Mammoth Strider, $29.95
DP9-210, Naga Strider, $16.95
DP9-213, Assault Mammoth Strider, $29.95
DP9-215, Hunter, $5.95
DP9-216, Jaguar, $6.95
DP9-217, Jager, $5.95
DP9-218, Black Mamba, $6.95
DP9-219, Cheetah, $5.95
DP9-220, Grizzly, $7.95
DP9-221, Iguana, $5.95
DP9-222, Spitting Cobra, $8.95
DP9-223, Assault Hunter, $5.95
DP9-224, Head Hunter, $5.95
DP9-225, Blitz Jager, $5.95
DP9-226, Command Jager, $5.95

DP9-227, Strike Jaguar, $7.45
DP9-228, Brawler Black Mamba, $7.45
DP9-229, Assault Grizzly, $8.45
DP9-230, King Cobra, $9.95
DP9-231, N. Regiments Decal Pack $4.95
DP9-232, S. Regiments Decal Pack $4.95
DP9-233, Kodiak, $8.95
DP9-234, Striking Cobra, $8.45
DP9-235, Cheetah paratrooper, $6.45
DP9-236, Iguana Paratropper, $6.45
DP9-237, Hunter paratrooper, $6.45
DP9-238, Jager Paratropper, $6.45
DP9-239, Ferret (December 2000) $TBA
DP9-240, Earth Hovertank (Dec. 2000) $TBA



Pewter miniatures not recommended for children under 6 years of age due to small parts.
Models supplied unpainted and unassembled. Glue, paints & scenery not included.

Available in all fine gaming and comic stores or directly from Dream Pod 9.

CHECK US OUT ON THE INTERNET AT: HTTP://WWW.DP9.COM

DREAM POD 9

Heavy Gear™ is a trademark of Dream Pod 9, Inc. All Artwork © 1996-2000 Dream Pod 9, Inc. All Rights Reserved.

Bryce Hubbard (order #5318102)