Returner Final Fantasy Role-Playing Game

V E H I G L E M A N U A L



Version: 0.6 (Beta 2, Public Beta 1) **Released:** 4/13/01

Project Leader Robert Pool

Additional Support By

Richard Gant Gabe Gilreath M R Sachs Jeff Taft

Table Of Contents

Introduction

Using the Vehicle Manual Vehicle Manual Terminology Recommended Games Version History

Chapter One: Nuts & Bolts

New Rules Crew Members Vehicle Origins Campaign Ideas

Chapter Two: Creation

- 1. Concept
- 2. Determine Type & Size
- 3. Level
- 4. Attributes
- 5. Combat Stats
- 6. Systems & Defects
- 7. Weapons & Upgrades
- 8. Final Costs

The Enterprise Mk. II (Complete)

Chapter Three: The Big Guns

Vehicle Weapons Vehicle Items

Chapter Four: Systems & Defects

Systems Defects

Chapter: Combat

Movement Initiative Action!

Vehicle Locations (Optional) Vehicle Status Conditions

Chapter Five: The Enemy

- 1. Concept
- 2. Determine Type & Size
- 3. Level
- 4. Attributes
- 5. Combat Stats
- 6. Systems & Defects
- 7. Weapons & Upgrades
- 8. Final Costs

The Red Wing (Complete)

FINAL FANTASY, CHRONO TRIGGER, SAGA FRONTIER, XENOGEARS, SEIKEN DENSETSU [HOLY SWORD LEGEND], and related titles, characters and imagery referred to herein are the protected intellectual property of Square, Ltd and their licensed subsidiaries. SKIES OF ARCADIA, SAKURA WARS, and related titles, characters, and imagery referred to herein are the protected intellectual property of SEGA, Ltd and their licensed subsidiaries. The use of said material in this document should not be misconstrued as a threat to this accepted copyright, nor is any profit being made from their use here. This has always been a product of our affection for Square's games. The material presented in this document is under no circumstances to be sold in any medium or form, aside from covering basic costs of printing or computer storage. Suggestions, comments and other feedback should be addressed to returners@yahoogroups.com.

Introduction 2

INTRODUCTION

In most Final Fantasy games, gaining access to a vehicle (normally an airship) is an important step in the game. It allows the player to go to places where they were previously unable to go on by foot, chocobo, or, if it was available in the game, a boat. *Normally* a vehicle doesn't really do much in the Final Fantasy games else.

But this Vehicle Manual does things differently. Inspired by games such as Skies of Arcadia and Xenogears, the Vehicle Manual allows players or gamemasters to construct nearly any type of vehicle-be it a tank, mecha, submarine, airship, or spaceshipfor the Returner Final Fantasy RPG system. These vehicles can then be used to fight with other similar vehicles, which is what this sourcebook was created for. The Vehicle Manual includes comprehensive rules for vehicle creation, combat, equipment, enemy vehicles, and even gamemaster advice for campaigns where the game centers on the use of vehicles nearly as much as it does around the characters themselves.

Using the Vehicle Manual

Since the Vehicle Manual is a sourcebook, all gamemasters have the option of whether or not to use it. A lot of times when some gamemasters see a sourcebook for a game, they feel they absolutely must use it and this is not the case. There are going to be times when using the Vehicle Manual to create a vehicle (or vehicles) will make perfect sense and add depth to a campaign.... And there will be times when using it will be a waste of time or worse slow things down. Remember that the Vehicle Manual was made with Vehicle-to-Vehicle combat and long-term customization in mind. If the player characters come across an airship that will allow them to fly from point A to point B, then there is little need for the gamemaster to pump out stats for the airship using the Vehicle Manual. If the character come across an airship and are forced to fight other airships, then perhaps the Vehicle Manual will be useful.

Vehicle Manual Game Terms

Like the Final Fantasy RPG Rulebook, the Vehicle Manual has its own set of unique terminology. For easy reference, these new terms are explained below.

Gunner: A character that is specifically in charge of firing a vehicle based weapon, normally a Cannon.

Mecha: A term from Japanese animation used to describe anything that involves advanced mechanical creations such as power armor, giant robots, synthetic humans (bioroids), robots, and so on. Over the years, it has become synonymous with animation OAVs and TV series that involve giant robots. Any reference to a mecha refers to a giant robot.

Part: Any crucial component of the vehicle that has an affect on the vehicle's attributes or combat stats. There are five types of Parts: Chassis, Control, Engine, Motor, and Movement System. Each part is assigned a level from one to ten with one being a weak part while ten is the best available. Each part is linked with a specific vehicle attribute. When the part level increases, the linked attribute increases by two points.

Pilot: Any character, be they a player character or a non-player character, that is involved in controlling the movements of the vehicle.

Size Level: The Vehicle Manual uses an unique scale to determine the size of a very small vehicles from vehicles that are absolutely humongous. On this scale, a size level one vehicle is very small (a motorcycle) while a size level ten vehicle would be several hundred times the size of a human (the flagship of a spaceship armada). The vehicle's size level determines how many Hit Points the vehicle has and in larger vehicles grants a Damage Capacity bonus to all vehicle based weapons such as cannons or missles.

Recommended Games

The following console RPGs involve the use vehicles or giant robots (mecha) in combat. These games inspired much of the Vehicle Manual.

Author's Note: This list covers mainly games released outside of Japan. There are other console RPGs such as the Super Robot Wars series that use giant robots from numerous different anime series produced by the anime production house Sunrise, but since they have never has been released outside of Japan- and most likely never will- were omitted. Sakura Wars, which has yet to get an American release, was included since there is hope the Playstation 2 release of the game will get an overseas release.

Introduction 3

Skies of Arcadia (Sega, Dreamcast): Features a motley cast of Air Pirates that use their airship to seek adventure, collect the fabled Moon Crystals, and fight the Valuan Armada. Features an entertaining set of characters and allows you to customize your own airship for ship-to-ship battles. Later in the game you can even supply crewmembers that will join your cause and grants your airship with additional abilities. Skies of Arcadia inspired much of the equipment used in Chapter Three: The Big Guns.

Xenogears (Square, Playstation): Easily one of the best games that Squaresoft has released. Xenogears features perhaps the strongest plot ever in a console RPG as well as interesting combo system for combat. The game employs the use of giant robots known as Gears. Each character has their own unique gear, which can be upgraded with new parts to improve different parameters such as their HP or Defense stats.

Front Mission (Series, SNES/Playstation):

One of the lesser known Squaresoft series since only the third game in the series was released outside of Japan. Front Mission is an RPG Strategy game set in the near future where giant robots (known in the game as "Wanzers") have become the most common form of military vehicle. In the games, the player could purchase different parts for their wanzers or claim them from destroyed enemy wanzers. These parts could then be customized, changed around, or upgraded as the player saw fit.

Vanguard Bandits (WD/Playstation): (Need description for Vanguard Bandits. Anyone interested should send one to mechaboy@verizon.net)

Sakura Wars (Sega, Saturn/Dreamcast): A series that has as of yet not seen release outside of Japan, Sakura Wars- also known as Sakura Taisenfeatures a cast of girls that are responsible for

defending Tokyo from evil menaces while their commander, Ogami Ichiro, attempts to win their favor. Each girl has their own unique giant robot, which they use to do battle in. Sakura Wars is also available as an anime published in America and Europe by ADV Films.

Version History

Version 0.6 (Beta 2)

Short update based on initial feedback from the co-contributors. Added new Systems & Defects as provided by the mailing list and made a Systems & Defects Chapter.

Version 0.5 (Beta)

This is the "pre-release" version of the Vehicle Manual. Splits the previous VCS into five separate chapters, adding the material on combat, equipment, enemy vehicle construction, and gamemaster advice. Made available only to the Returner Mailing List for reviewing purposes before the public release (1.0).

Version 0.0 (VCS v. 1.1)

The Vehicle Construction System (FFRPG v. 1.1). The VCS was removed due to new material being added at the 11th hour that led to the creation of the Vehicle Manual.

Planned Upgrades

Version 1.0

Any inconsistencies made in the beta version will be corrected. Also planned will be two appendixes: one for giving game stats for vehicles used during the Final Fantasy series and another as a depository for enemy vehicles. A list of the vehicles that will be listed in Appendix I: Examples will be posted to the mailing list.

Introduction 4

Chapter One:

NUTS & BOLTS

Okay so now you know to create vehicles for players, wage war in airship, what kind of equipment is available for vehicles, and how to make enemy vehicles for your player characters to fight. The last thing to is come up with a campaign for the players to enjoy.

This chapter of the Vehicle Manual explores how to create a campaign built around the exploits of the characters and their vehicle(s).

New Rules

The following section are new rules for character generation or skills in vehicle heavy games.

Default Vehicle Skills

If this rule is used, each player character starts with the skills Vehicle Systems and Piloting at 40%. If the character takes one of the fighter aspects, they get 50% instead because of their combat related training.

Author's Note: These two skills are extremely important for any character that is involved in vehicle combat. Piloting is used to determine the vehicle's defense as well as determine the success of any type of tricky vehicle maneuver such as the Dive Bomb or Vertical Climb. Vehicle Systems is used for attack rolls when the character uses a vehicle based weapon system such as a cannon or a missle.

New Skills

The following skills were created with vehicle use in mind. The skill type and the character attribute which it defaults to are listed in parenthesis.

Mecha Weapon (Weapons/Agility)

The character's mastery over the use of mecha scaled melee weapons. Each type of mecha weapon requires a separate skill. For instance a character that uses swords and polearms will need one Mecha Weapon skill for swords and a second for polearms.

New Advantages & Disadvantages

Conditional Ownership (-1): The character's vehicle doesn't necessarily belong to him. The vehicle is on loan to the character either from a powerful non-player character or a group that the character is a member of such as a military. If the character falls out of favor with the group or person, they may send someone after the vehicle and the character's head.

No Vehicle Training (-3): In games where the default vehicle rule is used, a character with this disadvantage does not get the skills Vehicle Systems or Piloting for free. This disadvantage cannot be used if the default vehicle rule is not used.

Vehicle Pro (+2): The character has a natural aptitude to using vehicle based weapons and piloting a vehicle. In game terms, the character gets the skills Vehicle Systems & Piloting at 40% for free. This advantage is not available in games where the vehicle default rule is used.

The Vehicle Pot

Upgrading a vehicle takes Gil. LOTS of Gil. The cost for a level 10 Chassis along costs nearly as much gil as most of the best character weapons or armor that money can buy. As a way to provide character with the extra money needed to upgrade vehicle in a vehicle heavy game, we have the "Vehicle Pot" rule. Each time the player(s) defeat another vehicle in battle, they get 200 x the vehicle level in gil. This gil is then put into the Vehicle Pot and is used *exclusively* with part or weapon upgrades. Gil from the vehicle pot cannot be transferred to the character's Gil for buying new equipment or vice versa. If each character has their own vehicle (ie, a group of mecha pilots), each character should have their own vehicle pot for spending on their vehicle equipment or upgrades. If the party owns & operates a single vehicle (ie, an airship), the captain (the character that owns the vehicle) is in charge of how the vehicle pot is used.

Vehicle Origin

If the players will be using one or more vehicle throughout the campaign, it is a good idea to determine how the characters come to own the vehicle they use.

Ancient Vehicle

's said that the airships of the ancient empire of Barmecia were powerful war machines capable of reducing a city to ashes". With this original, the characters have managed to stumble across a vehicle-often something more "like an airship, mecha, or tank- that was created by a long lost civilization. This origin is best for games that use the Ancient Civilization plot element.

Conditional Ownership

The character doesn't technically "the vehicle- it's on loan from a power NPC or group such as an army. The character thus has to do what the person/group says in order to continue using the vehicle. If the character falls out of grace with the person/group, they may take away access to the vehicle until they make up for it. The character must also take up the Conditional Ownership disadvantage. If the character was part of an organization that formerly owned the vehicle and went rogue, use the vehicle origin Stolen instead.

Inheritance

The character comes from a long line of engineers or pilots and for whatever reason the game feels necessary (usually coming of age), the vehicle has passed from parent or other relative (my old screwey grandpa) to the character.

Purchased

The character(s) purchased the vehicle for a tidy sum of money. This may work okay for mid level characters who just get their first vehicle. The cost of the vehicle is always equal to the sum of its parts. For instance, a vehicle a set of level one parts would 10000 Gil.

	Chassis:	2000
	Control System:	1500
	Engine:	2000
	Motion System:	1500
<u>+</u>	Motor:	1500
	Total (Gil)	10500

Stolen

The vehicle previously belonged to someone else- most likely an army, corporation, or evil

empire- until the character(s) decided it would be a good idea to steal it. This origin has both pluses and negatives. On the plus side, the character doesn't have to pay for the vehicle. On the other hand, the previous owners will be more than a little angry that someone stole one of their airships, sailboats, mecha, spaceships, etc. This vehicle origin works well for creating a set of re-occurring villains.

Campaign Ideas

It's hard enough coming up with ideas for a regular Final Fantasy RPG campaign, let alone a game that features the widespread use of vehicles. The following are campaign ideas that can used to develop into full blown games or can be used as subplots in larger games.

Pirates!

Genre: High Fantasy (sea pirates) or Steampunk (air pirates)

Vehicles: Sea, Space, or Air

The characters are member of a pirate gang who carelessly go about taking from the rich and giving to themselves or the poor, pending on the group. In between adventuring for hidden treasure, the characters are often at ends with enemy pirate gangs, law enforcement, and the monsters that guard the ruins they are plundering. This campaign type is fun if you want to do something more light and comic. The Evil Empire, Rebellion, and Civilization campaign elements work really well with a pirate campaign and the World To Explore is a must. The characters are usually in charge of their own pirate ship- be it a regular sailboat, a mighty airship, or a sleek spaceship. At early levels, this ship may belong to someone else such as one of the character's parents (blood or adopted) or could be owned by an NPC that travels with the characters early on.

Player Jobs: Any, although there should be at least one actual thief in the party. An Engineer may be a good idea to repair damage done to the ship.

Enemies: Since the characters are taking from the rich, the rich are going to be pretty pissed off. The main two enemies in any pirate game are going to be the law and enemy pirates (the type that steal from anybody). The law can be particularly aggressive if the player characters give them a hard time on a regular basis. A good idea for an group for a pirate game would be either a coalition of pirates or the highest ranking admirals in the local kingdom's navy.

The Gentleman's Adventurer Club

Genre: Steampunk

Vehicles: Any but Walker/Space

The characters are part of an elite club for adventurers during a period of time where not all the world's mysteries have been unraveled. There are still the ruins of the ancient Egyptians, the unexplored remainder of South America & Africa, the mysteries of China, and other places around the world. In an alternate history of Earth where magic is real, the players may be searching for the lost magic of the druids, Atlantis, or even older civilizations. Like the Pirates! campaign idea, the Gentleman's Adventure Club offers plenty of light hearted fun and opportunities to try out your choice of accent..

Character Jobs: Any at all. There are no classes in particular that are more popular than others. Because of the higher technology level, any character may use a pistol while the Warrior jobs may use the Rifle. By this point in time, bows and crossbows are the weapons of primitives.

Enemies: If there are anything the characters will lack, it will not be a lack of enemies. Angry law enforcement, greedy brigands, agents of evil secret organizations, and rival adventurers are all a possibility. If you need an enemy group to go up against the players, an elite team of enemy agents or rival adventures that want to out-do the player character's team work well.

The Red Baron Squadron

Genre: Alternate Earth

Vehicles: Air

The characters are members of an international team of jet fighters during WWII with one mission: defeat Germany's dreaded Baron Squadron that have scoured Europe. In order to best combat the fear inspiring elite squadron, the powers that be of the Ally forces have put together their own. The actual name should be up to the players, but would be a good idea to include Blue somewhere.

Author's Note: Only problem this campaign idea is that it has limited appeal. Sure, it's cool that the characters will be pilots that go up against the elite Nazi squadron and the battle should be cool, but what else? Different missions surrounding the war efforts may help fill in the blanks, but will it be enough?

Character Jobs: In general, this campaign idea would be restricted to either the fighter job (Warrior) or generating characters by Point Based Character System (PBCS) found in the Player Companion. That is unless the gamemaster decides to

make a truly alternate Earth where magic exists during World War II.

Enemies: Aside from the obvious Red Baron Squadron, other enemies could include enemy secret agents, the occasional enemy commander or solider, or rival pilot teams (THIS is the elite pilot team... Feh, I could out fly the whole lot of you any day!").

The Mailmen

Genre: Post-Apocalypse Vehicles: Ground

After the holocaust and the rise of monsters & raiders, getting a package or mail from city to city has become a dangerous task. There are always the chance the package will be stolen by greedy raiders or the deliverer eaten by hungry monsters. In a way to make to a honest living for those that live by fighting, the mail guild pays good money for those that can deliver important mail or packages between cities.

Author's Note: Admittedly, this campaign idea has little to do with vehicles. Sure, you could have Road Warrior type bandits cruising around in big trucks loaded with weaponry, but you could just as easily pull off a Chocobo Express deal as well.

Character Jobs: Warrior jobs are by far the common job type with Adepts come in second. Mages or Battle Mages are up to the gamemaster and his feelings on whether or not magic exists. In either case, they tend to be very rare.

Knights of Fire & Steel

Genre: Sci-Fantasy Vehicles: Walker (Mecha)

In this world of dragons and magic, wars are no longer waged by knights and warriors riding warhorses but by great mecha knights built of magic and steel. This type of campaign often puts the players into the role of being knights who control these powerful mecha (almost always known by another name such as Armor) who become wrapped in a large scale war throughout the kingdom or empire. Honor, love, and treachery should be the major themes of the game as the characters try survive in this brutal war and keep their House or kingdom alive.

Character Jobs: Any job, for the most part, is feasible. Knights, Magic Knights, Paladins, Dark Knights, Swordmaster, Dragoon, and other "jobs tend to be common due to the concept of the campaign.

Enemies: The most obvious enemies would be rivals of the player's house or kingdom. As said earlier, Love, Honor, & Treachery should be the themes of the day as friends become spiteful enemies and the foes of one battle may become staunch allies

in the next. A good idea for an enemy group could be an elite team of enemy knights or generals for the

enemy's House or kingdom.

Chapter Two:

CREATION

Question: What is the use of a Vehicle manual if you can't make vehicles with it?

Answer: None at all

This chapter is dedicated to exploring the process required in order to create different types of vehicles for the Final Fantasy RPG. Whether you are looking for an airship, submarine, three-mass battleship, magitek armor, or spaceship, the Vehicle Manual allows for the creation and customization of nearly any vehicle possible. As with Chapter One: Character Creation, this chapter is explained through a series of steps starting with the basic ideas of the vehicle and progressing through how it moves, its size, its attributes, its stats, its equipment, optional systems & defects, and any finishing touches. Included at the end of each step is an example vehicle, the airship Enterprise Mk. II, which will fold out as you progress through each step of the creation system. Its final result is listed at the end.

- 1. Concept
- 2. Size
- 3. Form and Movement System
- 4. Attributes
- 5. Combat Stats
- 6. Equipment
- 7. Systems & Defects
- 8. Final Parts and Values

1. Concept

The first step in designing a new vehicle is coming up with a theme for it that will be used throughout the design process. We like to call this the "Vehicle Concept". The Vehicle Concept does not have be anything long or complex- in fact, it's best to make it simple and loose so not to conflict with any changes made later down the road in the process. By this point, you should have some idea of what kind of vehicle it is (a giant robot, car, tank, airplane, etc.) and some idea what it might look like.

The Enterprise Mk. II (Part 1)

Hiro's player Rob has been given an unique proposal by his gamemaster, Carscaddon: the captain of his grandfather Cid's latest airship design- the Enterprise Mk. II! Since Carscaddon is a notorious Slacker, he leaves designing the airship's stats in Rob's lap. Rob's concept of the Enterprise Mk. II would be a good balanced airship with exception handling and speed for its size. Visually it would be a large airship that resembles the zeppelin like airships from Final Fantasy VI rather than the helicopter propeller design used in Final Fantasy IV.

2. Size & Movement Type

Having come with the basic idea behind your new vehicle, it's time to make two decisions that are required before developing the attributes & combat stats of the vehicle: the vehicle's size and movement type. The vehicle's size affects the amount of HP, Armor, and with larger vehicles grants a DC bonus. Movement Type (MT for sure) determines how the vehicle moves around be it rolling across the ground, walking, flying, sailing, and so on.

Size

As the clichéd saying goes, "size matters". The cannons of a colossal 500 yard long airship will do more damage and take more punishment than a smaller 50 yard long airship. To emphasize this in game terms, the Vehicle Manual uses a size scale that ranges from one (very small) to ten (very large). A vehicle's size level has many important affects on the vehicle's attributes and combat stats such as determining the vehicle's HP and armor values as well as granting a Damage Capacity bonus to the pilot or gunner of the vehicle.

	Table 1-1: Size Level Chart					
Size	HP	HP Armor V		DC+	Size	
	Base	Base	Slots		(M/Y)	
1	25	5	0	0	1	
2	50	10	1	0	2	
3	75	15	1	+1	4	
4	100	20	2	+2	8	
5	125	25	3	+3	16	
6	150	30	4	+4	32	
7	175	35	5	+5	64	
8	200	40	6	+6	128	
9	225	45	7	+7	256	
10	250	50	8	+8	512	

Base HP: The amount of HP the vehicle starts out with prior to its Vitality attribute and upgrades to the Chassis part. This reflects the fact that a large vehicle is capable of soaking up more damage than a smaller vehicle would be able to.

Base Armor: The amount of Armor the vehicle starts out with prior to its Vitality attribute and upgrades to the Chassis part.

Weapons: The maximum amount of weapons that can be equipped on the vehicle. A size 1 vehicle cannot use vehicle weapons and a size 2 vehicle can only use the light cannon type weapon.

DC+: A Damage Capacity bonus that is applied to all attacks performed by any character or NPC that is in control of one the vehicle's weapons. Thus a character with a Damage Capacity of x5 that fires a Cannon from a vehicle of DC Bonus of +5 would have a Damage Capacity of x10 instead of x5. This bonus is used to reflect the size differences between vehicles. Obviously a cannon fired from a gigantic mecha the size of the moon is going inflict more damage that a small tank.

Size: The vehicle's relative height or length pending on the vehicle's form (see 3. Movement Type and Form). Mecha have a height equal to the size, width equal to $\frac{1}{2}$ the size, and length equal to the $\frac{3}{4}$ th the size. Other vehicles have a height equal to $\frac{1}{2}$ th esize, a width equal $\frac{3}{4}$ th the size, and length equal to the size. The player character may change the exact measurements if they care to modify them by up to $\frac{25}{6}$.

In order to better give you an idea of how the different size levels compare to each other, the following are examples of vehicles based on their sizes.

Air Vehicles

<u>Size</u>	<u>Examples</u>
1	Remote Control Plane
2	Hang Glider
3	Small Fighter Jet
4	Regular Fighter Jet
5	Large Fighter Jet
6	Convoy/Bomber/Jumbo Jet
7	Small Airship
8	Regular Airship
9	Large Airship
10	Aerial Battle Station

Ground Vehicles

Size	Examples
1	Bike
2	Car
3	Van
4	Small Tank
5	Regular Tank
6	Large Tank
7	Giant Tank

Sea Vehicles

<u>Size</u>	<u>Examples</u>
1	Canoe, jet ski, or small raft
2	Small Sailboat
3	Large Sailboat or Long boat
4	Three Masted Sailboat, or Destroyer
5	Galleon or Cruiser
6	Smaller Battleship
7	Battle cruiser, or large Cruise Ship
8	Dreadnought
9	Aircraft carrier

Walker Vehicles

<u>Size</u>	<u>Examples</u>
1	Power Armor
2	Small M-tek Armor
3	Regular M-tek Armor
4	Small Mecha
5	Regular Mecha
6	Large mecha
7	Huge Mecha
8	Colossal Mecha

Movement Type

There are eight Movement Types or MTs: Walker, Air, Ground, Sea (Wind), Sea (Powered), Space, and Submersible. A vehicle can be built to have multiple movement types by taking the Extra Movement Type System. This System is, in fact, required for the Space and Space movement types.

The Movement Types that the vehicle is equipped with have three important effects on vehicles. The most obvious one is that they determine where the vehicle can move and how. For instance a vehicle with the Sea MT cannot fly through the air nor can a vehicle with the ground MT fly through space. The 2nd effect is that it determines how fast the vehicle can move (the Movement Rate stat, which is explained in Step 4. Combat Stats). The MR Multiplier increases the total and maximum MR that a vehicle can travel at. Lastly, it determines how fast

the vehicle can accelerate at. Some MTs accelerate quickly while others are much slower at it.

Table 1-2: Movement Rate Table					
Movement	Acceleration	MR Multiplier			
Type	Rate				
Walker	X 1	X 0.75			
Air	X 2	X 3			
Hover	X 1	X 1.5			
Ground	X 1	X 1			
Sea (Wind)	X 0.5	X 1			
Sea (Powered)	X 1	X 2			
Space	X 5	X 10			
Submersible	X 2	X 3			

Example: The Enterprise has a speed of 10, giving it a Safe MR stat of 30 and Maximum MR of 60. Because it uses the Air MT (it's a freaking Airship), these two stats increase to 90 and 180 because the Air MT has a MR Multiplier of x3. It also grants the Enterprise a x2 acceleration rate, thus each turn spent accelerating increases the MR by 20 (2 x 10 = 20).

Air

The air movement type grants the vehicle the ability to fly through the air. Some examples include the wide variety of different airships used throughout the Final Fantasy series and similar console RPGs.

Hover

Similar to the Air movement type, the Hover movement type allows the vehicle to float over obstacles. It does not, however, allow for full flight as the air movement type does. It also does not permit the vehicle to manuever over large bodies of water. Examples of this movement type include the hovercraft from Final Fantasy IV.

Ground

The vehicle is designed to move over the ground. This is the most common movement type for vehicles and examples include any number of different cars, trucks, bikes, and similar vehicles.

Sea (Wind)

This ship, boat, or similar vessel lacks the engines found in more "modern" ships and must rely on oars or sails in order to move. Taking this MT requires the vehicle to take the Unpowered Defect.

Sea (Powered)

The vehicle is designed for traveling across water such as a battleship or boat and has an engine in which to do so.

Space

The vehicle is capable through a set of powerful jets to move through outer space. Unlike other movement types, the space movement type requires the Air MT in order for the vehicle to travel through space. The movement rate multiplier for Space is only applied once the vehicle is out of the planet's atmosphere. The Space MT is rare in most FFRPG campaigns.

Submersible

This MT allows the vehicle to travel underwater like a submarine at a faster rate than a normal sea going vessel would. The Submersible MT requires the Sea movement type since the vehicle can also travel above the sea if necessary. The movement rate multiplier is only applied when the vehicle is underwater.

Walker

The vehicle is designed to walk on two or more legs. This grants the vehicle exceptional maneuverability when moving through rough terrain. Some examples of Walker type vehicles include the Magitek armor from Final Fantasy VI as well as the mecha found in today's most popular anime series such as Gundam Wing. Since the vehicle walks, Walker types are slightly slower than regular ground vehicles.

The Enterprise Mk. II (Part 2)

Rob looks down the list of examples and spots the "medium airship" as being size level eight, which is where the Enterprise Mk. II will fit. That said, he notes down that the Enterprise Mk. II thus has a Base HP of 200, a Base Armor of 120, six weapons, a DC bonus of 6, and a size of 128. Since the Enterprise is an Airship, the choice of taking the Air MT is obvious. Rob also jots down the MR Multiplier of x3 and MR Acceleration of x2.

3. Attributes

Just as characters have attributes that determine their abilities, so do vehicles. All vehicles possess five attributes: Strength, Vitality, Handling, Speed, and Power. These attributes are used to determine combat stats or have other affects in combat such as Strength, which determines the damage done by Mecha Weapons. Each vehicle gets 50 attribute points upon creation. No vehicle can start with an attribute higher than 15.

Vehicle attributes can be upgraded by purchasing better parts. A "part" is defined as a component that is required for the vehicle to function.

There are five parts, each of which is aligned with a specific attribute. They are the Control System (Handling), Chassis (Vitality), Engine (Power), Motion System (Speed), and Motor (Strength). The exact names can vary based on the type of vehicle. For instance, the motion system part could be legs in the case of walker type vehicles. The titles used in the Vehicle Manual for vehicle parts were chosen since they span the largest variety of vehicles. Each part is rated from one (starting vehicle, weak) to ten (best that humankind can invent). By installing a better part (ie, installing an Engine 5 part over the vehicle's older Engine 4 part), the attribute linked to the part increases by two points. Two parts, Chassis and Engine, also greatly affect the combat stats Hit Points, Armor, and Energy Points.

In order to upgrade a part, they must pay for it with Gil. Assume that any Control System, Motion System, or Motor upgrade costs (part level x 1500) in gil. The Chassis and Engine parts cost more gil since they are more useful for vehicles (part level x 2000).

Optional Rule: Engineer player character can invent upgrades for their vehicles. Assume that the part level is equal to a similar level invention. Thus a Engine 5 part would have the same time requirements as a level 5 invention. The costs, however, remains the same as if the engineer bought the new part. This may be a good limit for characters that expect to buy level 10 parts.

Strength: For a vehicle, strength has two effects. The first is that it determines how much damage is done with Mecha Weapons in the case of mecha just as the strength of a character does. The second effect is that it determines the vehicle's towing power. A vehicle can safely tow ((strength + size) x 100) pounds. Thus a size 4 vehicle with a Strength rating of 13 can tow 1700 pounds $(13 + 4 \times 100 = 1700)$.

Vitality: As the character attribute of the same name, Vitality determines how durable and damage resistant the vehicle is. The Vitality rating is added to the vehicle's Base HP rating from its size level and increases the mount of HP the vehicle gains with each Chassis upgrade.

Handling: The vehicle's overall ability to react to the pilot's input. Thus, a vehicle with superior handling can dodge attacks, manuever tightly, and perform various tricks. The rating of this attribute is calculated differently than other attributes. Normally, all attributes begin at zero and go up based on the attribute points used by the player or gamemaster to increase the attribute. The Handling attribute, on the other hand, can start off as a negative value equal to the vehicle's size level. Thus a size level 5 vehicle

starts with a -5 Handling. Any points placed into the Handling attribute help bring the attribute into positive territory. This is done to reflect that larger vehicles are harder to manuever than smaller ones.

Speed: The vehicle's ability to move swiftly. Speed determines the vehicle's movement rate (MR), which determines how fast a vehicle, can move. Thus the higher the vehicle's speed, the faster it can move.

Power: The output level of the vehicle's engine. Thus with a higher Power attribute, the vehicle's engine can sustain a higher amount of energy. In game terms, they determine how many Energy Points the vehicle has. Thus by having a high Power attribute, the vehicle will be able to power more lethal weapons and accessories.

The Enterprise Mk. II (Part 3)

Rob looks over each attribute and considers where those 50 points should be put for the Enterprise Mk. II. Since the Enterprise is an Airship and not a mecha, strength is not a big deal so he gives it an 8. Hiro isn't going to be too worried about giving the Enterprise a hoard of expensive gadgets, so Rob puts down power as 8. The Enterprise should be able to take a licking and be highly maneuverable, so he gives Vitality & Handling 12 points each. Since the Enterprise is a size level 8 vehicle, Rob reduces the Handling rating to 4. Low, yes, but not compared to similar size level 8 vehicles. The final attributes for the Enterprise come out to:

Strength: 8 Vitality: 12 Handling: 4 Speed: 10 Power: 8

4. Combat Stats

Just like a player character, each vehicle has its own set of combat stats.

Hit Points: The amount of damage the vehicle can absorb without being blown to pieces or forced out of action. The HP formula for Vehicles is (Base HP x Chassis level) + (Vitality x Chassis level).

Energy Points (EP): The vehicle's energy source. Energy Points can be spent to power beam weapons, special accessories, and the vehicle itself for long periods of times. For each hour in use, the vehicle requires a number of EP equal to its Size level. Thus a Size 3 vehicle uses up 3 EP per hour. The EP formula is (((Size + Power) x 2) x Engine level).

Handling Modifier: This is included as a stat since it is so frequently used. The Handling Modifier

is equal to the vehicle's Handling attribute x 3. Thus a vehicle with a Handling of 5 would have a Handling Modifier of +15%. If the Handling attribute is a positive (1 or higher), the Handling Modifier is a bonus. On the other hand, if the Handling Modifier is a negative (-1 or lower), the Handling Modifier is a penalty. The Handling Modifier is applied to ALL piloting skill rolls made while using the vehicle including the vehicle's Defense stat.

Defense: Vehicles do not have a defense stat, per se. When vehicle is attacked, assume that the vehicle's defense is equal to the pilot's Piloting skill divided by 2 plus or minus the vehicle's Handling Modifier (Pilot/2 + H. Mod).

Example: Hiro has a Piloting skill of 110% and the Enterprise Mk. II has a Handling Modifier of +12 (Handling 4). As a result, the Enterprise Mk. II has a Defense of 55 + 12 = 67.

Armor: All vehicles are designed to withstand damage be they from drunk drivers or beam cannons. All vehicles have an armor rating each to its (Base Armor + Vitality x Chassis level). Because Vehicles are not normally created with magic in mind, there is no Magic Armor stat for vehicles.

Damage Capacity: Vehicles, because they have a much higher HP amount than players can ever dream of, have a higher Damage Capacity range. For every Size over 2, the vehicle gains a +1 Damage Capacity bonus up to +8 for a Size 10 vehicle.

Magic Damage Capacity: Normally, magic is not used in vehicle-to-vehicle combat. Gamemasters may, if they desire, to employ "Mana Cannons" that allows the character to focus their magic through the mecha and at their opponent(s). The mana cannon is a special weapon and is listed under the Vehicle Weapons section of the VCS. It essentially grants a MDC bonus.

Movement Rate (MR): This stat determines how many meters, yards, hexes, or squares the vehicle can travel in one combat round. The FFRPG assumes that one meter is equal to one yard, square, or hex, pending on whether or not the gamemaster is using the map combat rules from Chapter Six: Combat in the FFRPG Rulebook. This stat comes in two forms: Safe MR and Maximum MR. The Safe MR is the speed at which the vehicle may manuever safely without incurring any penalties. Once the Safe MR is surpassed, any Piloting Skill tests incur a -20% penalty until the vehicle decelerates. The Safe MR is equal to the (Speed attribute x 3) x movement system modifier). The Maximum MR is the absolute fastest that the vehicle can travel at in one turn and is equal to the (Speed attribute x 6) x movement system modifier). While going at the maximum MR has many benefits (such as going very fast), it has many disadvantages such as doubling the skill penalties for any Piloting skill test and halving the vehicle's Defense rating.

The Enterprise Mk. II (Part 4)

Now for the fun part. Having decided the attributes of the Enterprise Mk. 2, Rob gets ready to figure out the combat stats.

Hit Points: Flipping a few pages back to the size level chart, Rob notes that the Base HP of a size level 8 vehicle is 200. Adding the Vitality attribute, the Enterprise has 212 HP.

Energy Points: The Enterprise is a size level 8 vehicle and has a Power attribute of 8. 8 + 8 = 16. 16 $\times 2 = 32$.

Handling Modifier: With its Handling Attribute of 4, the Enterprise has a Handling Modifier of +12%.

Defense: Hiro, as the pilot of the Enterprise, has a Piloting skill of 110%. 110/2 = 55. 55 + 12 = a Defense stat of 67.

Armor: Rob notes that the Enterprise has a base armor of 40. Adding the Vitality attribute, the Enterprise has an Armor stat of 52.

Damage Capacity: Since it's a size level 8 vehicle, all gunners on the Enterprise Mk. II get a +6 DC bonus.

Magic Damage Capacity: The Enterprise does not have a Magic Amplifier, thus Rob puts down a zero by Magic Damage Capacity.

Movement Rate: Since the Enterprise Mk. II has a Speed of 10, it has a Safe MR of 30 (10 x 3 = 30) and Maximum MR of 90 (30 x 3 = 90). Since the Enterprise Mk II is an Airship using the Air Movement Type, the MR Multiplier of the MT increases the Safe MR to 90 and Max MR to 180.

5. Weapons

Vehicles, like players, need to be outfitted with good weaponry. All vehicles should have at least the number of weapons it can carry. For instance, a size 6 airship would have four weapons. There are five types of vehicle weapons: Mecha Weapons, Cannons, Beam Cannons, Missles, and Mana Amplifier. Make sure to pick one weapon for each weapon slot the vehicle has. The only weapon that a vehicle cannot start out with is the Mana Amplifier, since in most

campaigns this tends to be a major story plot. The other weapons vary based on the time period the game takes place pending on the explanation of the players or gamemaster. How would you explain the existence of Beam Cannons in a high fantasy campaign setting where the players are in command of a pirate ship?

Mecha Weapon

Mecha Weapons are strictly for mecha and resemble the weapons used by the character in character-to-character battles. They can cover knives, swords, axes, spears, and whatever else the player can imagine arming their mecha with. Although technically weaker than other vehicle weapons, a Mecha Weapon can be absolutely deadly in the hands of a mecha with a high Strength attribute. Mecha Weapons are the only type of vehicle weapon effected by the attributes of the vehicle or character, aside from the Pilot/Gunner's Damage Capacity rating.

Note: The damage die type for a Mecha Weapon is the same as if it was being used by a player character. For instance a

Cannon

A heavy gun that fires cannonballs, artillery shells, and other projectiles. Cannons come in two flavors: Light (LC) and Heavy (HC). Heavy Cannons have a hard punch while Light Cannons sacrifice power in favor of better accuracy.

Variations: Rifle (Walker) or Torpedo (Submersible)

Beam Cannon

If you've watched Gundam (Wing or otherwise), you probably have an idea of what a Beam Cannon is. Unlike regular cannons, a Beam Cannon fires a blast of concentrated energy like a laser blaster. Like Cannons, they come in Light (LBC) and Heavy (HBC) flavors. Because of the energy required to fire a Beam Cannon, their use requires a certain amount of EP to fire. The exact amount of EP required is listed with each Beam Cannon in Chapter Three: The Big Guns.

Variations: Beam Rifle (Walker)

Missles

Missles are bombs, rockets, torpedoes, and similar weapons of destruction that cause large amounts of damage. Because of their size, Missles are the most inaccurate weapon and have a (level x 5)% penalty to the character's Weapon System rolls.

Variations: Rockets (Walker) or Warhead (Submersible)

Mana Amplifier

The Mana Amplifier is a rare weapon that increases the Pilot or a mage's MDC rating. No player character controlled vehicle can start the game with a Mana Cannon without the direct permission of the gamemaster.

Other equipment can be bought if the character(s) have the money for it. If the vehicle is gained at 1st level (at the start of the campaign), the answer is usually no since their personal funds (300 Gil) should be spent on armor & a weapon for their character. See Chapter Three: The Big Guns for more details.

The Enterprise Mk. II (Part 5)

Being a Size level 8 vehicle, the Enterprise Mk II gets 6 weapon slots. After some thought, Rob puts three slots in as Heavy Cannons and two slots in as Missles. The "sixth" slot Rob talks with Carscaddon over and saves it for a Heavy Beam Cannon that he'll link to the Special Cannon system Rob plans on adding next.

6. Systems & Defects

For the sake of diversity, it is possible to modify the basic stats and abilities of a vehicle by taking Systems (advantages) and Defects (disadvantages). Each System & Defect is rated as a bonus (+) or negative (-) and in order to take a System, the vehicle must have an equal number of defects. For instance in order to take Heavy Armor (+2), the vehicle will need to take a Weakness defect (-1) and Reduced Fuel Capacity (-1) in order to pick up the slack.

Vehicle Systems can be added after the vehicle is constructed at a cost of 5000 x modifier. Thus adding a triple damage Special Cannon (+6 System) will cost 30000 Gil. Upgrading an older System (ie, raising the Special Cannon from x2 damage to x3 damage) costs the difference x 5000 gil. Thus upgrading a Special cannon from doing x2 damage to x3 damage would cost 10000 Gil (6-4 = 2. 2 x 5000 = 10000). Removing a defect also costs 5000 x the defect value.

The Enterprise Mk. II (Part 6)

"Getting close to finishing this hunk of junk", thinks Rob as he finally sees the end within reach. Looking over the defects and systems at his disposal, he finds himself really wanting that special cannon (Rob owns a Dreamcast and has played Skies of Arcadia. "It would be so cool to have something like the Moon Crystal Cannon," thinks Rob. "But Carscaddon would have my head..."), but decides to put off getting one until after he creates the

Enterprise MK. II- Maybe make it a special event or something.

7. Final Touches

Congrats- your new vehicle is finished! Before patting yourself on the back and going into battle, it would be a good idea to:

- Make sure all Attributes are listed correctly
- The formulas for Combat Stats are correct
- Picked all the weapons needed
- No leftover System & Defect points

The last thing to do is to count together the part level of each part intalled on the vehile. At this point, the result should be 5 since all parts start at one. The result is what is called the "threat level". As the vehicle attains new parts, the vehicle's threat level will also increase. The Threat level should be used by Gamemasters much like the Experience Level of player characters to determine 1) how strong the vehicle is overall and 2) How strong the vehicle is compared to other vehicles.

Enterprise Mk. II (Complete Stats)

Owner: Hiro Barrington

Player: Rob

Vehicle Type: Airship

Threat Level: 5

Size Level: 8 Base HP: 200 Base Armor: 40 Weapon Slots: 6

Movement Type

Air (Primary) Acceleration: x2 MR Multiplier: x3

Parts
Chassis: 1
Control: 1
Engine: 1
Motor: 1
Movement: 1

Attributes

Strength: 8 Vitality: 12 Handling: 4 (12) Speed: 10 Power: 8

Stats

HP: 224 EP: 32 Handling Modifier: +12% Defense: 67

Armor: 64 DC: +6 MDC: +0 MR: 90/180

Weapons

Standard Heavy Cannon (x3, 3d10 damage) Light Missle (x2, 5d12, -5% Hit%) Flame HBC (4d10 damage)

Systems

Sturdy (+1) Heavy Armor (+1)

Defects

Ablative Magic Armor (-1) Reduced Fuel Capacity (-1)

Chapter Three:

THE BIG GUNS

One of the main focuses of the Vehicle Manual is to support vehicle-to-vehicle battles where airships fire volley after volley of cannon fire and so on. This chapter includes the full lists for each of the five weapon types available to player character controlled vehicles: Mecha Weapons, Cannons (Light & Heavy), Beam Cannons (Light & Heavy), Missles, and the Mana Amplifier. Also included are the regular items available for vehicles that allow for temporary improvements to the vehicle or items that cure status conditions.

Vehicle Weapons

As mentioned earlier and before in Chapter Two: Creation, there are five types of weapons available to vehicles: Mecha Weapons, Cannons, Beam Cannons, Missles, and the Mana Amplifier. Each weapon is rated from one (the weapon you start the game with) to ten (best available). We recommend to gamemasters to cautiously watch how your characters buy new weapons so they don't overlook upgrading weapons rather that their vehicle's parts. As a general rule, the vehicle's weapon ratings should not be more than the Threat Level of the vehicle divided by 5.

Mecha Weapon

Mecha weapons resemble the normal melee weapons used by the character in character-to-character battles such as knives, swords, axes, and spears. Although technically weaker than other vehicle weapons, a Mecha Weapon can be absolutely deadly in the hands of a mecha with a high Strength attribute. Mecha Weapons are the only type of vehicle weapon affected by the attributes of the vehicle or character, aside from the Pilot/Gunner's Damage Capacity rating.

Note: The damage die type for a Mecha Weapon is the same as if it was being used by a player character. For instance a Mecha Sword would do d10 damage and a Mecha Axe would do d12 damage.

Cannon

A heavy gun that fires cannonballs, artillery shells, and other projectiles. Cannons come in two flavors: Light (LC) and Heavy (HC). Heavy Cannons

have a hard punch while Light Cannons sacrifice power in favor of better accuracy.

Variations: Rifle (Walker) or Torpedo (Submersible)

Beam Cannon

If you've watched Gundam (Wing or otherwise), you probably have an idea of what a Beam Cannon is. Unlike regular cannons, a Beam Cannon fires a blast of concentrated energy like a laser blaster. Like Cannons, they come in Light (LBC) and Heavy (HBC) flavors. Because of the energy required to fire a Beam Cannon, their use requires a certain amount of EP to fire. The exact amount of EP required is listed with each Beam Cannon in Chapter Three: The Big Guns.

Variations: Beam Rifle (Walker)

Missles

Missles are bombs, rockets, torpedoes, and similar weapons of destruction that cause large amounts of damage. Because of their size, Missles are the most inaccurate weapon and have a (level x 5)% penalty to the character's Weapon System rolls.

Variations: Rockets (Walker) or Warhead (Submersible)

Mana Amplifier

The Mana Amplifier is a rare weapon that increases the Pilot or a mage's MDC rating. No player character controlled vehicle can start the game with a Mana Cannon without the direct permission of the gamemaster.

Table 4-1: Mecha Weapons					
Name	Rating	Cost	Damage		
Iron [x]	1	-	2d*		
Battle [x]	2	2500	3d*		
Tek [x]	3	3750	4d*		
Heavy [x]	4	5000	5d*		
Fear [x]	5	6250	6d*		
Cleave [x]	6	7500	7d*		
Adaman [x]	7	8750	8d*		
Power [x]	8	10000	9d*		
Fatal [x]	9	11250	10d*		
Venus [x]	10	13000	11d*		

Table 4-2: Light Cannon						
Name	Rating	Cost	Damage	Hit%		
Normal Shell	1	-	3d8	+3%%		
Mythril Shell	2	2000	4d8	+6%%		
Aux Artillery	3	3000	5d8	+9%		
W-Cannon	4	4000	6d8	+12%		
Pulse Shot	5	5000	7d8	+15%		
Crisis Shot	6	6000	8d8	+18%		
Atlas Cannon	7	7000	9d8	+21%		
Max Buster	8	8000	10d8	+24%		
Corona Shell	9	9000	11d8	+27%		
Atma Shot	10	10000	12d8	+30%		

Table 4-3: Heavy Cannon					
Name	Rating	Cost	Damage		
Proto Shell	1	-	3d10		
Spark Shot	2	3000	4d10		
Empire Shell	3	4500	5d10		
Panzerfaust	4	6000	6d10		
Adaman Shell	5	7500	7d10		
Titan Shot	6	9000	8d10		
Grand Shell	7	10500	9d10		
Gigas Cannon	8	12000	10d10		
Odin Shell	9	13500	11d10		
Bahamut Shot	10	15000	12d10		

Table 4-4: Light Beam Cannon					
Name	Rating	Cost	Damage	EP Cost	Hit%
Gun Beam	1	-	4d8	1	+3%
Tek Laser	2	3000	5d8	2	+6%
Bolt Beam	3	4500	6d8	3	+9%
Harrier Beam	4	6000	8d8	4	+12%
Lapis Laser	5	7500	9d8	5	+15%
Light Ray	6	9000	10d8	6	+18%
W-Laser	7	10500	11d8	7	+21%
Homing Laser	8	12000	12d8	8	+24%
Surge Beam	9	13500	13d8	9	+27%
Kaiser Ray	10	15000	12d8	10	+30%

Table 4-5: Heavy Beam Cannon						
Name	Rating	Cost	Dmg	EP Cost		
Beam Cannon	1	-	4d10	2		
Atomic Ray	2	4000	5d10	3		
Wave Cannon	3	6000	6d10	4		
Gamma Ray	4	8000	7d10	5		
Pluto Ray	5	10000	8d10	6		
Particle Cannon	6	12000	9d10	7		
Sol Cannon	7	14000	10d10	8		
Merton Beam	8	16000	11d10	9		
Sister Ray	9	18000	12d10	10		
Ultima Beam	10	20000	13d10	11		

		Table 4-6: Missle	S	
Name	Rating	Cost	Damage	Hit%
Tek Missile	1	-	3d12	-3%
Launcher	2	5000	4d12	-6%
Micro Missile	3	7500	5d12	-9%
Rocket Punch	4	10000	6d12	-12%
Interceptor Rocket	5	12500	7d12	-15%
W-Rocket	6	15000	8d12	-18%
Counter Rocket	7	17500	9d12	-21%
Grav Bomb	8	20000	10d12	-24%
Ray Bomb	9	22500	11d12	-27%
Flare Star	10	25000	12d12	-30%

Table 4-7: Mana Amplifier					
Name	Name Rating Cost MDC Bonus				
Mana Amplifier	1	5000	+1		
Spirit Amplifier	2	10000	+2		
Soul Amplifier	3	15000	+3		
Holy Amplifier	4	20000	+4		
Saint Amplifier	5	25000	+5		
Seraphim Amplifier	6	30000	+6		
Ares Amplifier	7	lv.7 Invention	+7		
Deus Amplifier	8	lv.8 Invention	+8		
Chaos Amplifier	9	lv.9 Invention	+9		
Infinity Amplifier	10	lv.10 Invention	+10		

Vehicle Items

Vehicles feature their own line-up of special items that help boost the performance of the vehicle, do damage, or remove unwanted status conditions. There are three types of Vehicle Items: Attack Items, Support Items, and Recovery Items. Attack Items are expendable bombs and similar weaponry that do extra damage, inflict status conditions, or have elemental affinities. Support Items offer brief boosts to the vehicle's abilities such as Speed Boost which increases the vehicle's Acceleration Rate by 50%. All benefits from Support Items last 1d6 rounds. Recovery Items allow the vehicle crew to temporarily restore lost HP (Repair Kits), restore lost EP (Energy Cells), or remove unwanted status conditions.

Note: the Kits & Cells have two values that determines how many points they restore. The left hand value is when the item is used during combat and the value on the left is for when the items is used outside of combat.

Table 4-8: Vehicle Item List				
Name Type Cost (Gil) Effect				
Bomb	Attack	150	4d12 Damage	
Megaton Bomb	Attack	1500	8d12 Damage	
Infinity Bomb	Attack	6500	12d12 Damage	
Fire Bomb	Attack	200	4d12 Damage, Fire Affinity	
Flare Bomb	Attack	1800	8d12 Damage, Fire Affinity	
Ice Bomb	Attack	200	4d12 Damage, Ice Affinity	
Freeze Bomb	Attack	1800	8d12 Damage, Ice Affinity	
Bolt Bomb	Attack	200	4d12 Damage, Lightning Affinity	
Lumina Bomb	Attack	1800	8d12 Damage, Lightning Affinity	
Wind Bomb	Attack	200	4d12 Damage, Wind Affinity	
Tornado Bomb	Attack	1800	8d12 Damage, Wind Affinity	
Earth Bomb	Attack	200	4d12 Damage, Earth Affinity	
Quake Bomb	Attack	1800	8d12 Damage, Earth Affinity	
Water Bomb	Attack	200	4d12 Damage, Water Affinity	
Tsunami Bomb	Attack	1800	8d12 Damage, Water Affinity	
Acid Bomb	Attack	500	4d12 damage, flat 60% chance to inflict the	
			Acid Status Condition	
Super Acid Bomb	Attack	2500	8d12 damage, flat 60% chance inflict the Acid	
			Status Condition	
Stun Bomb	Attack	500	4d12 damage, flat 60% chance to inflict the Pilot	
			Stun Status Condition	
Concussion Bomb	Attack	2500	8d12 damage, flat 60% chance to inflict the Pilot	
			KO Status Condition	
Haywire Bomb	Attack	500	4d12 damage, flat 60% chance to inflict the	
			System Malfunction Status Condition	
Hacker Bomb	Attack	2500	8d12 damage, flat 60% chance to inflict the	
		100	System Hack Status Condition	
Smoke Bomb	Attack	100	Flat 80% chance to inflict the Smoke Status	
	~	7 00	Condition	
Motor Boost	Support	500	+20% Strength	
Gigas Boost	Support	2500	+40% Strength	
Speed Boost	Support	500	Doubles Acceleration	
Barrier Module	Support	3000	Casts "Barrier" on Vehicle	
Mana Barrier Module	Support	3000	Casts "Magic Barrier" on vehicle	
Wall Module	Support	5000	Casts "Wall" on vehicle	
Repair Kit	Recovery	150	Heals 500/250 HP	
Deluxe Kit	Recovery	450	Heals 1000/500 HP	
Complete Kit	Recovery	2000	Heals 2000/1000 HP	
Energy Cell	Recovery	250	Restores 50/25 EP	
Power Cell	Recovery	1000	Restores 150/75 EP	
Infinity Cell	Recovery	3500	Restores 250/125 EP	
Acid Away	Recovery	200	Removes Acid & Super Acid	
Fuel Patch	Recovery	200	Removes Fuel Leak & Power Outage	
Reboot Disk	Recovery	200	Removes System Malfunction or System Hack	
Smoke Eater	Recovery	150	Removes Smoke	

Chapter Four:

This chapter deals with all the Systems & Defects available to both player and enemy controlled vehicles. These are listed in their own chapter since both types of vehicles may pick from the same collection. Systems grant extra benefits such as barriers that reduce damage, plating that reduces elemental damage, or a special cannon that fire extremely powerful attacks. However, in order to buy a System, a vehicle must have an equal number of Defects. Defects are a variety of disadvantages that hamper the performance of the vehicle and make up for the benefits of the Systems installed on the vehicle.

-5

Unpowered

-3

Inefficient Engine **Inefficient Systems**

-2

Jumping Only Power Umbilical Vulnerability

-1 to -5

Ablative Armor/M. Armor Exposed Pilot/Crew

-1 to -3

Fragile **Expensive Components** Poor Handling Reduced Fuel Capacity

-1

Slow Acceleration Terrain Deficiency Weakness

+1

Cargo Hook Counter attack (50% chance) **HP** Drain Extra Movement Type Offensive power absorption Resistance @ Spell ability (level 1-2) Status condition attack (any)

+1 to +3

Escape Pod Improved Handling Increased Fuel Efficiency Sturdy

+1 to +5

Auto Pilot Heavy Armor Magic Armor

Barrier System

+2

Counter Attack (75% chance) Defensive Power absorption Efficient Engine **Efficient Systems Energy Barrier System** Final Strike Immunity @ **EP** Drain Mode Shift

Point Defense

Ram

Spell Ability (spell levels 3-4) Special Cannon (+50%) Weapon Link (2 weapons)

+2 to +5

Auto Gunner

+3

Absorbance @ Automated Repair System Spell ability (spell levels 5-6) Magical counter attack (35% chance) Self-Regenerating Engine System Super Efficient Engine Super Efficient System Teleport

+4

Magical counter attack (60% chance) Special Cannon (x2 damage) Spell Ability (spell levels 7-8) * Super Barrier System Weapon Link (3 weapons)

+5

Form Shift

+6

Special Cannon (x3 damage)

@ Vehicles that possess multiple resistances, immunities, and absorbances get the bonus only once (namely for the absorbance). For more than 3 of any one type, the bonus increases by 1 (+2/+3/+4). No vehicle can have more than 2 absorbances. All vehicles automatically have a resistance to normal weapons (excluding guns) and a weakness to lightning magic. Undoing the weakness to lightning requires a +1 level bonus.

Vehicle Systems

Any vehicle may possess the following vehicle systems, be it a rusty sports bike, a 20' mecha, or a 500' long airship armed to the teeth with weaponry. They can be bought by taking Defects of equal worth of the system (ie, -3 points worth of Defects would be necessary for a +3 System) or the character(s) that own the vehicle can buy them at a price of (System Cost x 5000) Gil.

Absorption (+3)

This system grants not only immunity to any attack or spell with an affinity to a specific combat element (Fire, Earth, Wind, Water, Light, Dark, Lightning, or Ice), but the damage done by the attack restores equal amount of HP.

Automated Repair System (+3)

The vehicle is capable of limited self-repair, and as a result regenerates 10% of the vehicle's total HP per round. Note that if the vehicle is destroyed (reduced to 0 or fewer HP) the Automated Repair System cannot 'revive' the vehicle.

Auto Gunner (+2 to +5)

The vehicle features a computer controlled system that controls the firing of the vehicle's weapon(s). At Auto Gunner +2 grants the computer a 100% Weapon Systems skill. For each level over +2, the skill rating increases by 25% (125% for +3, 150% for +4, and 175% for +5).

Auto Pilot (+1 to +5)

The vehicle features an Auto-Pilot system that can be used to control the movement of the vehicle. The cost of the System depends on how "intelligent" the Auto-Pilot is. The +1 version allows the vehicle to maintain course without pilot supervision, but not much else (Works well for spaceships and similar large scale ships. In some cases may be considered a freebie). Auto-Pilot +2 or higher essentially grants the Auto Pilot the same capabilities as if it had the Piloting skill. At +2, the vehicle has a piloting skill of 100% and for each level over 2 the skill rating improves by 25% (125% for +3, 150% for +4, and 175% for +5).

Auxiliary Power Source (+2 to +3)

The vehicle possesses a reserve supply of EP that comes into play when its main supply is exhausted. The amount held in reserve is equal to 1/3 the standard EP of the vehicle for the +2 version, and 1/2 for the +3 version. Note: The auxiliary EP is in addition to that of the vehicle's normal total. For example, a vehicle with 50 EP and the +3 version of this advantage has 50 EP normally, and 25 in reserve, not 25 normally, 25 in reserve.

Barrier Generator (+2)

This System generates a protective energy barrier around the vehicle that cuts all physical damage from cannons, missles, and similar attacks by one half. Each round the Barrier Generator is deployed costs 5 EP.

Cargo Hook (+1)

A heavy-duty hook and high-tension cable attached to a powerful winch, the Cargo Hook allows a Vehicle to tow or carry quantities of cargo, or even other, smaller vehicles. In order to deploy the Cargo Hook, the Vehicle must be either in the hex adjacent to the other vehicle or one height directly above it: the Armor Rating of the target may not be greater than four times the Strength of the Vehicle, nor may the Hook be used against Vehicles on a larger scale. Deploying the Cargo Hook takes up all of that Vehicle's Movement for that turn; while the Vehicle may make other Actions as normal, it must remain stationary while attempting to 'hook' the target. If the other Vehicle is at a full stop, the Cargo Hook will catch its target with a successful roll against the pilot's Weapon Systems skill; otherwise, the CoS is modified by both the Vehicle's Handling and their total Movement for this turn. Once hooked, the vehicle is essentially helpless, though may tear the Cargo Hook off by making an Attribute Check against its Strength with a Very Hard Difficulty Rating. In this case, the Cargo Hook is counted as Broken for the remainder of the battle, and must be repaired before the start of the next battle before it can be used again.

Counter Attack (+1)

This system requires that it be linked with one of the vehicle's weapons or cannons. When hit with a physical attack, the vehicle has a limited chance (either 50% or 75%) to retaliate with an attack of it own from the linked weapon. This extra attack doesn't count towards their action for the round. Any weapon linked to the Counterattack System cannot be linked to any other System.

Defensive Power Absorption (+2)

Unlike the offensive power absorption power, the defensive version increases the vehicle's armor rating by 1/10th of the damage incurred by the attack on the vehicle. There is usually a loophole howevereither the bonus will die out in a set number of rounds (usually 1d6) or the bonus can be eliminated through a certain elemental attack (fire, ice, or lightning for instance).

Efficient Engine (+2)

The vehicle uses 25% less EP per hour of use. The effects of this System are not accumulative with the Super Efficient Engine System.

Efficient Systems (+2)

All Beam Weapons consume 10% less EP. This System will not work with a Special Cannon, even if it attached to a Beam Weapon. Any weapon linked to this System cannot be linked to any other System. The effects of this System are not accumulative with the Supper Efficient System.

Energy Barrier Generator (+2)

Similar to the regular Barrier Generator, the Energy Barrier Generator reduces all damage by beam weapon or mana amplified spells by one half. For every round the Energy Barrier Generator is deployed, the vehicle must pay five EP. The Barrier Generator & Energy Barrier Generator *cannot* be employed at the same time. Doing so would instantly destroy both generators and reduce the vehicle's HP by 75%.

Energy Point Drain (+2)

This system is connected to one of the vehicle's weapons or cannons (preferably a beam cannon). When the linked weapon is used, it does normal damage with ½ the result restoring the EP of the vehicle. Any weapon linked to the Energy Point System cannot be linked to any other System.

Extra Movement System (+1 per MS)

Normally, most vehicles are restricted to one Movement System such as a car that can only cruise around on the ground. By taking this System, the vehicle gains an extra Movement System. For instance that car could be used in water (Sea) or fly around (Air). This System is required in order to take the Space and Submersible Movement Systems.

Fast Acceleration (+1)

The vehicle equipped with this System accelerates much faster than a normal vehicle. When using the Acceleration maneuver (see Chapter Five:

Combat), the vehicle's MR increases by (Speed x 1.5).

Form Shift (+5)

Purchasing this System gives a Vehicle the capacity to shift from one type of Vehicle to another at will; the components that make up the second form are installed 'underneath' the Vehicle's present systems, conveniently hidden out of sight until they are needed. The second form itself is created in exactly the same fashion as one would any normal vehicle; the only restriction is that the second vehicle must be on the same scale as the first. The cost of whatever Systems, Weapons and Parts are installed on the second form must be paid for in addition to the basic cost for the Form Shift system, and have no effect on the Vehicle until deployed. A vehicle may have a total of two Form Shifts installed at any one time, and may not install a Mode Shift system if a Form Shift is present as well. A Transform Action may be called on any turn by the Vehicle's designated pilot; once begun, it may not be interrupted or reversed until the shift to the next form is complete. The transformation itself becomes more and more time-consuming as the complexity of the 'hidden' components increases; for each Level of Threat Rating above 1 the Vehicle's second form possesses, the time taken to complete the Form Shift increases by one Round -- the absolute minimum delay between forms is one Round. Thus, a Mecha attempting to shift into an Airship form with a Threat Rating of 7 would take 6 Rounds to complete its transformation. While shifting, the vehicle may not make any Actions.

Good Mileage (+1)

The vehicle uses 10% less EP per hour of use (effectively adding 10% to the operational range).

Heavy Armor (Special)

The vehicle features extra armor plating that makes it resistant to damage at the cost of mobility & speed. The Heavy Armor system gives the vehicle a bonus to its Armor stat equal to its (Vitality x System level). Thus a Heavy Armor lv. 2 system installed on a vehicle with 20 Vitality would get an extra 40 points for the Armor stat. For each point placed in Heavy Armor, subtract ((Size level x System level) x Movement System Modifier) from the vehicle's Safe Movement Rating & Max Movement Rating.

Example: Hiro decides to tack on some Heavy Armor so the Enterprise doesn't get mangled in the airship battles he has become involved in. The Enterprise Mk. II is a size 8 vehicle and has a Heavy Armor lv. 2 System. $8 \times 2 = 16.16 \times 3$ (for the Air MT) = 48.

HP Drain

This system is connected to one of the vehicle's weapons or cannons (preferably a beam cannon). When the linked weapon is used, it does normal damage with ½ the result restoring the HP of the vehicle. Any weapon linked to the HP Drain System cannot be linked to any other System.

Immunity (+2)

The vehicle has a special coating on its armor plating that makes it immune to any attacks from one of the eight combat elements: Fire, Earth, Water, Wind, Light, Dark, Lightning, or Ice.

Increased Fuel Capacity (+1 to +3)

Add the level of this advantage to the level of the vehicle when determining the vehicle's EP.

Improved Handling (+1 to +3)

Add 10% to the vehicle's Handling Modifier per level of this advantage.

Magic Armor (Special)

The vehicle features a special armor plating that makes it resistant to all magic based attacks. The system grants a bonus to the Armor stat equal to (Vitality x System Level). Thus a vehicle with a Vitality Attribute of 20 would get a 40 point Armor bonus. This bonus ONLY applies when the vehicle is struck by either a magic based attack or a Beam Cannon.

Magical Counter Attack (+)

Similar to the regular counter attack power, the Magical Counter Attack power comes into play when the character is hit with a magic spell or vehicle power (particular wicked GMs could also count fighter powers in as well). When hit, the vehicle may retaliate with a quick spell of their own (only spellsno powers). The chance of success is either 35% or 60% depending on what level the power what 'bought' at.

Mode Shift (+2)

In contrast to Form Shifts, Mode Shifts are a far more common occurrence on the battlefield; involving the transformation of one specific Part rather than the whole vehicle. When installing a Mode Shift, the Vehicle's owner decides on a Part they wish to be affected by the System; aside from the System itself, the 'hidden' Part must also be paid for as normal. A Vehicle may have a total of four Mode Shifts installed at any one time, and may not install a Form Shift if a Mode Shift system is present as well. Parts installed with the Mode Shift system do not affect a Vehicle until deployed. A Transform

Action may be called on any turn by the Vehicle's designated pilot; the Part takes one Round to shift to its new form, during which time the vehicle may continue to make Actions as normal. Alternatively, a Mode Shift may also be installed with a Weapon System instead of a Part; once again, the cost of the Weapon must also be paid for; furthermore, this option may only be used if the Vehicle has the capacity for another Weapon at the time of the Mode Shift's installation. The Weapon System is considered to be 'disguised' and may not be used until a Transform Action is called, at which point the Weapon is revealed and may be used in Attack Actions as normal.

Offensive Power Absorption (+2)

For a vehicle with this power, each time the vehicle gets attacked it's power increases. There are two ways this can work: 1) the damage from the next physical attack is increased equal to 1/3rd the damage dealt to it (roll damage usually, then add the extra damage). 2) The vehicle builds up damage until it reaches a certain point, then it unleashes a super attack or spell of some sort (usually a pretty powerful one).

Point Defense (+2)

Capital space vessels and advanced airships are often in an environment where smaller attackers, in the form of fighters and mecha, pose a large threat. To provide a defense against these vehicles, many employ point defense weaponry to be used against enemy vehicles. This is done by making them more rapid fire weapons, but at extra energy cost and more difficulty targeting. This allows the weapon to attack four times at half damage. However, it suffers a -30% Weapon Systems penalty and beam cannons require double the EP cost. It is a + 2 system and can be used only on vehicles size level 7 and higher.

Ram (+2)

The vehicle is equipped with a large bumper or ram attached to the front of the vehicle. Thanks to this ram, the vehicle does an extra 50% damage when using a Ram attack and takes 1/4th damage from the collision instead of 1/2.

Resistance (+1)

The vehicle has a special coating on its armor plating that reduces the amount of damage done by any of the eight combat elements: Fire, Earth, Water, Wind, Light, Dark, Lightning, and Ice.

Self-Regenerating Energy System (+3)

The vehicle features an unique engine that does not require additional material or fuel in order to

restore lost Energy Points (EP) spent by beam weaponry or traveling. Each hour spent immobile restores 10% of the vehicle's EP.

Special Cannon (+2, +4, or +6)

The vehicle is equipped with a special cannon that when fired does devastating damage and never misses. At +2, the cannon does an extra 50% damage. At +4, the cannon does double damage. And at +6, the cannon does triple damage. The drawback to the use of a special cannon is that they require massive amounts of energy equal to the vehicle's Power + Level x version (x1 for +50% damage, x2 for double damage, and x3 for triple damage). A level 30 vehicle with a Power of 20 firing the x2 damage special cannon would require 120 EP to use the special cannon. The cannon also require a number of turns to "heat" up equal to the vehicle's System bonus. The +6 cannon would need six turns before it can be unleashed, for instance. Determine damage as if the Cannon was a regular cannon or missle and add the vehicle's power rating. If the cannon is linked to be a Beam Cannon, ignore the normal EP cost of using a beam cannon. Any weapon linked to the Special Cannon System cannot be linked to any other System.

Example: After waiting six turns for the Graviton Annihilator to charge up, Hiro jumps on his chance to employ the special cannon! The Enterprise, his airship, is a Size 6 Level 41 airship with a Power rating of 21. The Graviton Annihilator is a+6 system linked to an 8d10 Heavy Beam Cannon. We'll assume the attacker (Hiro) has a DC of x6 that is increased to x10 by the DC bonus from the vehicle's size. The special cannon does 8d10 + 21 (Power) x 10 x 3 damage. Hiro rolls and gets a 61! 61 + 21 = 82. 82 x $10 = 820. 820 \times 3 = 2460$ damage total! The attack has an EP cost of 186 (41 (level) + 21 (power) x 3 (modifier) = 186) out the Enterprise's 372 EP.

Spell Ability (+1, +2, +3, or +4)

This power allows a vehicle to do an attack that has the same effect rules-wise as a magic spell. It may not actually 'look' like a spell, but it has that effect. For instance, you could have a flame-thrower that does as much damage as a fire spell or a noisemaker that causes the status condition Confusion. Any spell type can be used save for ninja magic (which isn't very ninja-ish in a vehicle. Mecha ninjas might be a worthy exception though). The vehicle may have multiple powers, but no more than 3. The exact cost for the power is equal to the Magic level of the spell divided by 2 (minimum +1, maximum +4 for level 8 spells. Level 9 or 10 spells cannot be used as Spell Abilities).

It's possible to get spell ability and status condition attack mixed up. In general, if the power did no damage in the e-game when the character was initially attack, then it's a spell ability. If the condition was delivered through a physical attack, then it's a status condition.

Sturdy (+1 to +3)

The vehicle is solidly built, granting the vehicle a ((System level x 5) x Chassis level) bonus to its HP.

Super Barrier Generator (Special)

This vehicle system generate a barrier of energy that allows it reduce all forms of damage by ½. Because of the power needed to run the Super Barrier Generator, it costs (5 x size) EP per round to run it. The Super Barrier Generator can only be invented by an Engineer and counts as a level 10 invention.

Super Efficient Engine (+3)

The vehicle uses 50% less EP per hour of use.

Super Efficient Systems (+3)

Vehicle mounted systems consume 25% less EP. Must be applied to a specific type of system (such as the vehicle's Beam Cannons). Any weapon linked to the Super Efficient Systems cannot be linked to any other System.

Status Conditions Attack (+1)

Similar to, but different then innate magic ability, the status condition attack allows the vehicle to make a normal strike but in addition has a chance to inflict a status condition on the target. The condition must be a negative one (the exceptions being death, any wound related condition, or poison) and the chance for success is equal to the pilot/gunner's Weapon Systems Skill minus the target's Defense rating times 1.5 (Weapon Skill – (Defense x 1.5)). Any weapon linked to the Status Condition Attack System cannot be linked to any other System.

Teleport (+3)

With this, the vehicle is capable of teleporting from one point to another. The only hitch is that if the vehicle warps to far a distance, it'll simply fail and the character will be stuck where they are. Every meter/hex over it's "safe range" (the vehicle's Power attribute) that it teleports, there is a cumulative 5% chance that it'll fail. For instance, warping a vehicle with Power of 10 warping 20 meters/hexes have a 50% chance to fail $(20-10=10.\ 10\ x\ 5=50)$.

Weapon Link (+2 for 2 weapons, +4 for 3 weapons)

As an alternative to the Auto Gunner system from above, this system links multiple weapons together to that when one is fired, all of them are. This system cannot be combined with any cannon that is equipped with a system (ie, spell ability or status condition attack). No more than 3 weapons can be linked to the same gunner.

Vehicle Defects

A defect is a detrimental effect that can be chosen for a vehicle in order to cut down on the cost of a vehicle in order to afford more costly Systems. No more than 10 levels of Defects can be taken- any more than that would make it a wreck that nobody would want to use.

Ablative Armor (-1 to -5)

The vehicle's armor is more fragile than normal. Each time the vehicle takes damage, subtract (Defect level x Vitality attribute) from the Armor of the vehicle.

Ablative Magic Armor (-1 to -5)

The vehicle features armor that doesn't work very well against incoming spells or beam weapon attacks. Subtract (Vitality x Chassis level) Armor for each level in this defect from the vehicle's Armor stat whenever attacked with a beam cannon or magic spell.

Exposed Pilot/Crew (-1 to -5)

The pilot (or entire crew, depending on the vehicle) are vulnerable to attack from outside. Multiply the level of this disadvantage by 20% to find out how much Armor and M. Armor of the vehicle does not protect the crew. Furthermore, the pilot or crew may be attacked directly, at an attack penalty of -(100 - [level of the disadvantage x 2])%.

Expensive Components (-1 to -3)

The vehicle requires one or more rare or costly systems in order to function, or is constructed from a material which may be difficult to obtain. At level 1, this Defect adds 10% to the purchasing and repair costs of the vehicle. At level 2, the modifier is increased to %25. At level 3, the modifier goes to 50%.

Faulty Weapons System (-2)

One of the vehicle's weapons (chosen by the creator) suffers from faulty wiring, etc. As a result, any failure on an attack roll that falls within 20% of the needed score comes out a botch.

Fragile (-1 to -3)

The vehicle is not sturdy. Subtract the level of this disadvantage multiplied by the chassis level from the hit points the vehicle would normally receive.

Gas Hog (-1)

Vehicle consumes 10% more EP per hour of use (effectively reducing it's range by 10%).

Inefficient Engine (-2)

The Vehicle consumes 25% more EP per hour of use.

Inefficient Systems (-2)

The Vehicle mounted systems consume 10% more EP.

Jumping Only (- 2)

Some vehicles are not built for aerial combat. For whatever reason, however, they have enough thrusters for very brief flight: namely, thruster-powered jumps. This defect requires the Air MT and either Ground or Walker. With this, the vehicle can only remain in the air for a turn; it must then spend the next turn with a Ground or Walker MT.

Power Umbilical (-2)

Not all vehicles have the capacity to produce their own energy - given the situation, some may find it practical to have an external power source and use the space freed up to install a few additional and energy-intensive -- systems. This Defect means the Vehicle sports a Power Umbilical specifically attached to a generator -- either inside another Vehicle, or located on its own. All of the Energy Points produced by the generator are added to the Vehicle's reserves at the start of each Round, unless more than one Vehicle is hooked up to the generator by an umbilical; in this case, the amount of available EP is equally divided between all attached Vehicles. The Umbilical's range, however, significantly hampers the Vehicle's ability to move -- as long as the Umbilical is attached, the Vehicle may not move more than 10 hexes away from the generator; otherwise, the Umbilical snaps off, and the Vehicle receives no further EP.

Poor Handling (-1 to -3)

The vehicle suffers a 10% Handling Modifier penalty per level of this disadvantage.

Reduced Fuel Capacity (-1 to -3)

Subtract the level of this disadvantage from the level of the vehicle when determining the vehicle's EP.

Slow Acceleration (-1)

For one reason or another, be it size, engine specifications, or anything else, the vehicle takes much more than would be considered normal to accelerate to higher speeds.

Terrain Deficiency (-1 to -3)

The vehicle has a particularly difficult time maneuvering over a certain type of terrain. When traveling over the terrain in question, the vehicle subtracts 10% from its Handling for every level of this defect. Examples of acceptable terrain types include, but are not limited to: Forests, Mountains, Hills, Off-Road, etc.

Unpowered (-5)

The vehicle has no ability to move under it's own power, making it entirely reliant on some outside force (wind, animals, etc). Furthermore, it has no EP. Any vehicle mounted systems must have their own power supply.

Wasteful Engine (-3)

The Vehicle consumes 50% more EP per hour of use.

Wasteful Systems (-3)

Vehicle mounted systems and weaponry consume 25% more EP.

Weakness

This Defect has resulted in the vehicle being weak against one of the eight combat elements: Fire, Earth, Water, Wind, Light, Dark, Lightning, or Ice. When attacked by a weapon that uses the specific elemental type chosen by the player, the vehicle takes double damage.

Vulnerability

This is the superior to the Weakness defect in that while the spell/element doesn't do double damage, it automatically halves the vehicle's Defense, Armor, and initiative for 1d6 rounds. No vehicle can ever have more than one vulnerability.

Chapter Five:

COMBAT

Dating back to the horse driven chariot, vehicles have often been created with war in mind. Not long after the Wright brothers invented the plane did someone else figure out how to toss on a set of guns. This chapter is devoted to handling the process required by vehicle-to-vehicle combat.

Basics of Battle

This section of the chapter is much like the section of the same name found in the FFRPG2. It explains all of the basic concepts for vehicle combat-Movement, Initiative, and Actions.

Map Combat Rules & Distance

As a general rule, one meter equals one yard, hex, or square pending on which form of measurement the players are accustomed to or how the gamemaster chooses to handle combat. For vehicle combat, we strongly recommend using the Map Combat rules found in Chapter Six: Combat in the Final Fantasy RPG Rulebook since it allows for a better sense of where the vehicle is at the moment in combat.

Large Scale Hexes

Due to the effects of the Movement Rate Multiplier found in some Movement Types, there are some cases where a vehicle can travel over 600 meters in one round! Obviously, this makes it somewhat difficult to portray on a hex map that numbers twenty to twenty-five hexes. In such cases, it is best to employ a larger scale for each hex. For instance, the gamemaster could set one hex on the map to be equal to 50 regular hexes. The only problem that could result in the use of this rule is handling vehicles with different movement rates. What if one of the vehicles can travel 50 hexes? As a general recommendation, it would be best to set the ratio to a lower number pending on the types of vehicles being employed. A 10, 25, or 50 meter to hex ratio works well for most land, sea, or air vehicle campaigns while a 100-meter to hex ratio may work better for space campaigns.

Weapon Ranges

All vehicle based ranged weapons have a range equal to 10 + (# of dice - 3). Thus a Cannon that does 12d6 damage has a range of 19 hexes or meters (12 –

3 = 9.9 + 10 = 19).

Movement

Movement is an important decision during vehicle combat equaled only by how the vehicle is moving. Normally, a vehicle can move a number of meters, yards, hexes, or squares equal to their MR. Thus if an Airship is traveling at 23 MR, it travels 23 meters, yards, hexes, or squares per round. That is if the vehicle is going **straight**. What if the pilot is attempting a U-turn? What if the pilot needs to stop even though the vehicle is going at full speed? ("Oh shit, where'd that canyon come from?!?!")

For situations such as these, the Vehicle Manual supports the following # vehicle maneuvers. The character may perform any one maneuver per round without sacrificing an action or turn. Some maneuvers, however, may require a round or turn in order to perform.

Author's Note: If these vehicle maneuvers are used, be warned that they will add complexity to any combat situation. If you don't like extra complexity, then it may be best to simply ignore the maneuvers..

Accelerate: A vehicle cannot simply from 0 MR to its maximum MR in one round. For each round spent accelerating, the vehicle can increase its MR by an amount equal to its Speed. So a vehicle with a Speed attribute of 12 can increase its current MR by 12 points each round spent accelerating.

Ascend: This maneuver can only be used with vehicles that use the movement systems Air, Space, or Submersible. The Ascend maneuver allows any vehicle to increase its altitude level or decrease its depth level, pending on the system in question. By how much the vehicle ascends depends on the its current MR. Any ascending vehicle can safely ascend by a number of meters, yards, hexes, or square equal to one-half the current MR. Thus a vehicle going 60 MR can ascend by 30 MR (30 yards) per round. Ascending at a faster rating would require risking the Vertical Climb movement type.

Complete Acceleration: Normally, a vehicle can accelerate and still have an action. If the pilot decides to give up his action for the round, they can increase their MR by (Speed x 2) points.

Dead Stop: One of the more risky movement types (up there with the dive-bomb & vertical climb)

is the Dead Stop maneuver, where the vehicle performs a complete stop- in game terms, reducing the vehicle's MR to zero. The pilot cannot perform any other movement type that round and must make a Pilot skill test with a -40% penalty. If the pilot is attempting a Dead Stop while going at a higher MR than their MR rating, the penalty is increased to -60%. If trying to stop at the Maximum MR, the penalty is -80%! If the skill test fails, the vehicle can only decelerate for the following rounds until the vehicle comes to a complete stop (0 MR).

Vehicles with the Air movement system cannot stop unless they also have the hover movement system. Performing a dead stop while using the air MS will result in the dive bomb.

Decelerate: The pilot hits the brake and slows the vehicle down- in other words, decreases the present MR of the vehicle by their Speed attribute.

Descend: What goes up, must come down. This movement type is available to any vehicle with the air, space, or submersible Movement Systems. This maneuver allows the pilot to decrease the vehicle's altitude or increase the depth level, pending on the Movement System in question, at a 90-degree angle. By how much the vehicle descends depends on the current MR of the vehicle. A descending vehicle can safely descend by a number of meters equal to the current MR divided by two. Descending any faster would result in the Dive Bomb maneuver.

Dive Bomb: Rather than simply descending at a safe 90 degree angle, the pilot plunges the vehicle straight down a number of meters equal to their vehicle's MR. This maneuver requires a Piloting Skill with a -40 penalty. If the skill test fails, the vehicle continues to plunge into the next round, where the character can perform no action save make another piloting test in hopes of pulling out of the dive bomb. One reason this manuever can be dangerous is if the pilot doesn't pull out or dive bombs at a low altitude, he may wind up crashing.

Reverse: This manuever allows the vehicle to run in reverse, rather than go forward. If the pilot switches to reverse in the middle of combat, they will need to perform a Dead Stop manuever before executing reverse. All normal maneuvers afterwards such as accelerate and decelerate can be used while in reverse. Ground vehicles such as cars or tanks can only perform this maneuver. Using it with other vehicles is up to the gamemaster and should be based on whether or not the vehicle is capable of going backwards.

Turn: The pilot performs a 90-degree turn. When used, the vehicle cannot accelerate or decelerate in that round.

U-Turn: The pilot performs a 180-degree turn. When used, the vehicle cannot accelerate or

decelerate in that round.

Vertical Climb: This maneuver can only be executing by a vehicle using the Air, Space, or Submersible movement systems. The pilot, rather than ascending at a safe 90 degree angle, decides to go up at a 180 degree angle (ie, straight up) for a number of meters equal to the vehicle's current MR. The pilot must make a Piloting skill test with a –40% penalty. If the test fails, the engine stalls and the vehicle goes into the dive bomb manuever for two straight rounds. Afterwards, the player can attempt to break out of the dive.

Initiative

There are two types of initiative used in the Vehicle Manual: Individual initiative and Ship Initiative.

Individual Initiative

With this type of initiative each character rolls 1d10 and adds the average of the character's Agility and the vehicle's Handling attribute. Initiative is then carried out in a descending manner with each of the combatants, be he a character or enemy, acting based on whom scored the highest initiative result. Then the combatant with the 2nd highest initiative acts, then the 3rd, and so on until all the combatants have acted. Essentially, this is the same Initiative system found in Chapter Six: Combat of the FFRPG Rulebook. This type should be used if each character pilots a separate vehicle such as mecha, tank, or an airship (provided each character captains one).

Ship Initiative

The name for this initiative type comes from the fact that it assumes that each player character is a crewmember of a single large vehicle such as an airship, a normal ship, or even a spaceship. When using this type of initiative, each round consists of 'turns' based on the number of characters and enemies involved. The progression of turns is determined by which character or enemy has the highest speed rating.

Example: The player characters are Duncan, D, and (somebody else). Their Speed ratings are 11, 13, and 9. Thus D gets the first turn, then Duncan, and then (somebody else).

Then the gamemaster must determine the turn progression for the enemy characters.

Example: We'll just refer to them as 1, enemy 2, and enemy 3". Enemy 1 has a Speed of 10, Enemy 2 has a Speed of 11, and Enemy 3 has a Speed of 9. Thus the enemy turns will go Enemy 2, Enemy 1, and Enemy 3.

Finally, the gamemaster should map up the charts from character to enemy.

Example: For the first turn, D will go up against Enemy 2 while Duncan faces off against Enemy 1 and (Somebody Else)

In each turn a player character & enemy trade blows. Each participant rolls the normal 1d10 + speed and the higher result goes first in the turn.

Example: Duncan rushes toward his target in his Paladin M-tek, beam sword ready to unleash hell. Duncan's rolls his 1d10 and adds his Speed of 11 getting a total of 16 while his opponent screws up getting a 6. Thus Duncan gets to attack first on this turn.

Actions

This section mirrors Chapter Six: Combat from the Core Rulebook. The following are some of the actions that a character can execute when involved in vehicle battles.

Attack: The pilot/gunner attacks with the vehicle weapon of his or her choice. The player must make a Weapon Systems skill roll modified by the targeted vehicle's Defense. If the result is less than the modified number, the attack is a direct hit and damage is inflicted based on the damage of the weapon in question and the Damage Capacity of the pilot/gunner. With the sole exception of Mecha Weapons, no vehicle based weapon is modified by the attributes of the vehicle save for the DC bonus granted by the vehicle's size level.

Example: The Enterprise Mk. II is in a battle with an enemy Red Wing class airship. Omar, one of the gunners of the Enterprise, has a weapon Systems skill of 140% and the Red Wing has a Defense of 73. 140-73 = 67. The GM rolls to hit and manages to get a 43, giving Omar a clean hit. Omar is using the Enterprise's Standard heavy cannon (3d10 damage) and has a DC of 9 (3+6 for the Enterprise's DC Bonus). The GM lucks out with a 20, resulting in 180 damage before the Red Wing's Armor stat of 62.

Ram: A dangerous manuever often used as either an act of desperation or a suicide attack. The pilot maneuvers the vehicle straight into the enemy vehicle, causing both vehicles to collide. The damage formula for a ram is (Vitality + the current MR/2) x the pilot's modified DC including the DC bonus for the vehicle's size). While this does an extreme amount of damage to the target, 1/2 of the damage is done to the ramming vehicle as well although armor may reduce the damage.

Example: The Enterprise rams straight into the Goliath airship. It has a vitality of 28 and an MR of 120. 120/2 = 60. Hiro has a modified DC of 4. 88 x 14 = 1232 damage, prior to the target's armor. Of course, the Enterprise takes 618 damage from the impact.

Evasive Action: The Pilot widens the distance between the two vehicles and readies the vehicle to dodge the next incoming volley of cannon fire. Performing an Evasive Action effectively increases the vehicle's Defense stat by 50% and requires the action for the round/turn.

Item: The pilot/gunner uses a vehicle item. All vehicle items are split into three groups: Attack items that do damage, support items that give temporary ability boosts, or recovery items that repair damage, restore EP, or remove status conditions.

Activate System: The pilot/gunner activates a special system such as a Barrier Generator or a Special Cannon. Most special systems require EP in order to be used.

Restoring Lost HP & EP

In battle, no vehicle is completely immune to damage from enemy cannons and other weaponry. Eventually the vehicle's hull will feature marks from enemy cannons and the long hours spent moving from point A to point B will require Energy Points.

Repairing Damage

In order to repair damage to damage done to the vehicle, parts and supplies will be needed in order to make the repairs, which in turn require Gil. If one of the players is an Engineer fixing his vehicle, the cost is (1 x HP lost).

Example: The Enterprise Mk. II took 312 HP in damage. Since Hiro is an Engineer and will do the repairs himself, it will cost 312 Gil to do the repairs.

Of course, making all these repairs will take time. For every 8 hours spent working on the vehicle, the engineer can restore ((Repair skill/2) x (size level/2) HP.

Example: Hiro has a Repair skill of 95%. 95 divided by 2 equals 47 (rounded down). The Enterprise is a size level 8 vehicle. Hiro can thus repair 348 HP per 8 hours spent on repairing the Enterprise Mk. II (47 \times 4 = 348)

In the event that none of the characters happen to Engineers nor have the Repair skill, they will have to depend on NPC engineers to handle the repairs for the ship. How this is handled is up to the gamemaster. For instance, the players could be crewmembers of an airship, such as Hiro's Enterprise Mk. II, and one of the crewmembers could be the head of Engineering who is responsible for repairing the airship. The cost in that case will be the same as if one of the characters were in charge of the repairs. As far as their skill rating, it's up to the gamemaster to determine. One idea might be to have the engineer's skill rating start low and replace him or her over time with better NPC engineers. The previous engineers then work under the new head of engineering.

Example: Hiro picks up a young but bright mechanic named Chett to be his chief engineer for the Enterprise Mk. II. Chett has only 50% in the Repair skill, but later down the road he picks up Orville who is a teenager closer to Hiro's age that has a 100% Repair skill and makes Chett his 2nd Engineer. Later down the road they pick up Randolph who has 150% Repair skill and near the end of the campaign Grandpa Cid joins the crew with a whopping 200% Repair skill.

In the event the characters must deal with a mercenary engineer (an engineer with no connection to the players), the cost of the repairs go up based on the skill of the engineer.

Skill Rating	Cost Multiplier
100%	x1.5
125%	x2
150%	x2.5
200%	x3

Restoring Energy Points

In order to keep a vehicle running, you'll need to keep the vehicle stocked with fuel- AKA Energy Points. Since a vehicle's HP is much higher than its EP, restoring lost Energy Points tend to cost more on a point-to-point basis. Each Energy Point restored costs 10 gil. Thus if a vehicle has lost 55 EP, it will cost 550 Gil to restore the lost fuel.

Vehicle HP by Location

Normally, it is assumed that any damage sustained by the vehicle is done to the main body of the vehicle. For those that want an alternative to this more abstract approach we offer this system as a way to determine the Vehicle's HP by different locations such as it arm, head, control center, or weapon systems. There are three steps to applying this rule: 1. Determine Locations, 2. Determine Location HP, and 3. Determine Location Chart.

Remember, this rule is optional. It is not required in order to use the Vehicle Manual: It is an alternative to gamemasters and player that desire more detail in their campaigns.

1. Determine Locations

First, it will be necessary to determine what locations the vehicle has. Each weapon the vehicle has counts as one location. Thus an airship loaded with six cannons would start with six locations. Then comes the "of the vehicle itself. What locations there are depend on the type of vehicle it is-bipedal or regular vehicle. A bipedal vehicle is human-like and has at least a head, body, a right arm (R. Arm), left armor (L. Arm), and legs. In some cases there may be some bipedal vehicles that have more than two arms. A regular vehicle is just that- a regular vehicle. In most vehicles, there should be at least two main locations: the body and the movement system that would vary based on how the vehicle moves. On a car, for instance, the movement system would be the wheels while on a submarine the movement system might be the propellers or wings on a fighter jet. More "vehicle such as starships should also have a control system that supplies the vehicle's pilot with the ability to detect the activities of what is going on outside such as radar, communications, and so on. Lastly, if the vehicle is equipped with any systems, defects, or accessories listed with a (*) by their name, they also count as a location.

Example: The Enterprise is a Size 5 Airship. It has three cannons and one missle giving it four locations off the bat. It also has its Body and Propellers as its movement system. That makes six locations so far. Lastly Hiro recently equipped a Special Cannon (+2) System, which makes for seven locations total.

2. Determine Location HP

The Body is always equal to the Hp value of the vehicle. For each location, its HP value is 1/3 of the Body.

Example: The Enterprise has an HP of 600. Thus the Body location has 600 HP. Each individual location thus has 200 HP each (600/3 = 200).

3. Determine Location Chart

Now for the fun part....

Take the number of locations and add one to it. Take this number and divide it by 100, which should be rounded down. The result is the percentage chance to hit the location. Once this is done, multiply the result by the number of locations and subtract the new result by 100. Add any remaining points to the

body, which is counted twice in terms of location% (thus the reason why the extra location added in the formula above).

Example: The Enterprise has seven locations total. With the extra location in the formula, that makes 8 total. Divided by 100 (100/8), the result is 12.5, which is rounded down to 12. $12 \times 8 = 96$. The 4 point remainder will be added to the body's location%.

Now all that is left is to figure the location chart itself. Each time the vehicle is damaged, this chart is rolled to determine what location(s) were damaged. Start with the body, which counts for two locations and then wrap around main body parts (R. Arm, L. Arm, Legs/movement systems, in that order) then weapons, systems, and accessories with the Head/Control Center at the lowest.

Example: Okay. Rob grits his teeth and hopes he doesn't screw up as he determines the Location Chart for the Enterprise. 12 x 2 + the 4 remainder gives the Enterprise a 28% chance for the Body location to be hit. He then write up the rest of the chart on a separate piece of scratch paper.

Cannon 3	12%
Cannon 1	12%
Propeller	12%
Body	28%
Special Cannon	12%
Cannon 2	12%
Missle	12%

Now I'll change these into a chart that goes from 1-100.

Location	Roll
Cannon 3	1-12
Cannon 1	13-24
Propellers	25-36
Body	37-64
Special Cannon	65-76
Cannon 2	77-88
Missle	89-100
Missle	89-100

Vehicle Status Conditions

The following are a set of status conditions that affect the operation of vehicles only. The Status Condition Attack System can be used to create cannons that inflict any of the vehicle status conditions.

The following status conditions still apply to

vehicles in the same way: Haste, Slow, and Stop. The use of these status conditions require a mana amplifier in order to use the spells against any vehicle with a Size value higher than 2.

Acid

Cure: Acid Away (tm)

Effect: The vehicle is hit with a powerful industrial acid that causes it to lose 10% of its current HP each round.

Camera Damage

Cure: Reboot Disk

Effect: The vehicle's camera system is knocked offline by the attack. Until the condition is fixed, the pilot is considered to be effected with the regular status conditions Blind & Confusion since the pilot no longer can tell what in the world he may be shooting at.

Communications Damaged

Cure: Reboot Disk

Effect: The vehicle's audio support is knocked offline by the attack. Pending on the type of vehicle the character(s) use and the environment the game takes place in, this can be crippling since it negates the ability for the characters to communicate in any fashion.

Power Outage

Cure: Fuel Patch

Effect: The vehicle's main power line is severed, forcing the vehicle to use auxiliary power. Until fixed, any weapon, system, or accessory that requires EP to function is disabled until fixed.

Fuel Leak

Cure: Fuel Patch

Effect: The vehicle's power supply is breeched, causing it to leak. For each round that passes, the vehicle loses 10% of its EP.

Pilot KO

Cure: 2d6 rounds

Effect: The pilot is knocked unconscious from the attack for 2d6 rounds.

Pilot Stun

Cure: 1d6 rounds

Effect: The pilot is stunned from the attack for 1d6 rounds.

Smoke

Cure: Smoke Eater

Effect: The attack unleashes a smoke bomb that interferes with the pilot's ability to see enemy targets. Until the Smoke clears after 2d6 rounds, the pilot is

considered to be Blind, reducing character's vehicle related skills by 50%.

Super Acid

Cure: Acid Away

Effect: The vehicle is hit with a powerful industrial acid that can quickly eat away at the vehicle unless cleaned off or countered with an Acid Away. This status condition eats away 20% of the vehicle's current HP each round.

System Hack

Cure: Anti-Pirate Software

Effect: The enemy vehicle(s) have hijacked control of the vehicle from the pilot. The vehicle will now take orders only from the enemy until control can be restored. This condition otherwise acts much like the condition Charm.

System Malfunction

Cure: Anti-Pirate Software

Effect: The vehicle suddenly starts doing everything that it shouldn't be doing. Cannons fire at friendly units, spells go off wrong, and steering is totally unresponsive. This condition is much like the regular condition Confusion.

Chapter Six:

THEENEMY

Having established how to go about creating and customizing vehicles in the previous chapters, Chapter Six: The Enemy supplies the gamemaster with the rules needed in order to design the opposition for your player character's vehicles. Those familiar with monster creation rules of Appendix I: Monsters in the FFRPG2 will find an old friend in this chapter as we try to stick with the same approach.

Allow me to repeat what I said earlier: system was designed for vehicle-to-vehicle combat". The Enemy Vehicle Construction System (EVCS) is not created to be used to create vehicles to be used against player characters! A vehicle made with this system would easily splatter most characters even if they were of superior level. For character-to-vehicle battles (ie, the battle against the Anti-Weapon Mecha in Final Fantasy VII), use the Monster Construction System found in Appendix I: Monsters instead.

1. Concept

Like designing the vehicle for player character, you will want to consider the design concept behind the enemy vehicle such as for what role it was made for (close-range combat, long range support, etc) and who created it. By the end of this step, you should have a picture in your head of what the vehicle should look like.

You will also want to consider the vehicle's power level. There are three power levels: normal, boss, and super boss. A normal vehicle is just that-normal. A boss vehicle is often found at the end of an adventure and is much tougher to beat than a normal vehicle. Their vehicle level should be five levels higher than that of the player's vehicle and should 50% more Hit Points. A Super Boss is a particularly awesome enemy vehicle that is by custom found at the conclusion of a major sub-plot or chapter. A Super Boss vehicle should be ten levels higher than that of the player's vehicle and should have double the normal amount of HP. The HP bonuses for Boss and Super Boss vehicles are done so that they will take a large number of rounds in order to destroy.

The Red Wing (Pt. 1)

Rob needs to do the stats for a Red Wing airship. It's a regular airship a little bit smaller than

Hiro's Enterprise II. It's about 30 to 40 feet long with the helicopter type design used in most of the older Final Fantasy games. Its hull is red, hence the name.

2. Threat Level

For those who were diligent enough to read all through way through to step 8. Final Touches may have an idea what the Threat Level stat is. For the less diligent, the Threat Level is the sum of all the Part levels a vehicle has. For player character vehicles, this is done last while for an enemy vehicle this is the reverse. An enemy vehicle's Threat Level is used to determine the part levels of the vehicle in question. Thus an enemy vehicle with a Threat level of 30 could have up to five different level six parts or any other combination that totals up to 30. The only restriction is that no single part can have a part level two points higher than the vehicle's other parts. For instance a vehicle with four level five parts could not have a level 8 chassis. Also all vehicles have a minimum part level equal to the Threat Level divided by 10. This restriction is done so to keep munchkinous player characters from having a vehicle with one or two really stellar parts and leaving the rest in the dust. If any part is lower than the minimum, no part can be upgraded until the weaker part is improved first.

Remember that all enemy vehicles must have at least a level one part for each type: Chassis, Control System, Engine, Movement, and Motor.

The Red Wing (Part 2)

To make things even with the Enterprise Mk. II, Rob gives the Red Wing a Threat Level of 7. A little bit higher than the Enterprise Mk. II which has the minimum Threat Level of 5. Since enemy vehicles have lower stats, it makes up for itself in the end. Rob gives it the follow part levels:

Chassis: 2 Control: 1 Engine: 2 Motor: 1 Movement: 1

3. Size & Movement Systems

This step is the exact duplicate of step two found in Chapter Two: Creation. The only exception is that the size chart is different for enemy vehicles so that regular they have a lower HP than a player character controlled vehicle.

Example: The Red Wing is smaller than the Enterprise II, so Rob gives the vehicle a size level of 5. Also he jots down the Air movement system in case somebody forgets the Red Wing is an airship.

	Table 5-1: Size Level Chart				
Size	HP	Armor	Weapon	DC+	Size
	Base	Base	Slots		(M/Y)
1	15	3	0	0	1
2	30	6	1	0	2
3	45	9	1	+1	4
4	60	12	2	+2	8
5	75	15	3	+3	16
6	90	18	4	+4	32
7	105	21	5	+5	64
8	120	24	6	+6	128
9	135	27	7	+7	256
10	150	30	8	+8	512

Base HP: The amount of HP the enemy vehicle starts out with prior to its Vitality attribute and upgrades to the Chassis part. This reflects the fact that a large vehicle is capable of soaking up more damage than a smaller vehicle would be able to.

Base Armor: The amount of Armor the enemy vehicle starts out with prior to its Vitality attribute and upgrades to the Chassis part.

Weapons: The maximum amount of weapons that can be equipped on the vehicle. A size 1 vehicle cannot use vehicle weapons and a size 2 vehicle can only use the light cannon type weapon.

DC+: A Damage Capacity bonus that is applied to all attacks performed by any enemy pilot or gunner that is in control of one the vehicle's weapons. Thus a character with a Damage Capacity of x5 that fires a Cannon from a vehicle of DC Bonus of +5 would have a Damage Capacity of x10 instead of x5. This bonus is used to reflect the size differences between vehicles. Obviously a cannon fired from a gigantic mecha the size of the moon is going inflict more damage that a small tank.

Size: The enemy vehicle's relative height or length pending on the vehicle's form (see 3. Movement Type and Form). Mecha have a height equal to the size, width equal to ½ the size, and

length equal to the 3/4th the size. Other vehicles have a height equal to ½ the size, a width equal 3/4th the size, and length equal to the size. The player character may change the exact measurements if they care to modify them by up to 25%.

In order to better give you an idea of how the different size levels compare to each other, the following are examples of enemy vehicles based on their sizes.

Air Vehicles

<u>Size</u>	<u>Examples</u>
1	Remote Control Plane
2	Hang Glider
3	Small Fighter Jet
4	Regular Fighter Jet
5	Large Fighter Jet
6	Convoy/Bomber/Jumbo Jet
7	Small Airship
8	Regular Airship
9	Large Airship
10	Aerial Battle Station

Ground Vehicles

<u>Size</u>	<u>Examples</u>
1	Bike
2	Car
3	Van
4	Small Tank
5	Regular Tank
6	Large Tank
7	Giant Tank
3 4 5 6	Van Small Tank Regular Tanl Large Tank

Sea Vehicles

<u>Size</u>	<u>Examples</u>
1	Canoe, jet ski, or small raft
2	Small Sailboat
3	Large Sailboat or Long boat
4	Three Masted Sailboat, or Destroyer
5	Galleons or Cruiser
6	Smaller Battleship
7	Battle cruiser, or large Cruise Ship
8	Dreadnought
9	Aircraft carrier

Walker Vehicles

<u>Size</u>	<u>Examples</u>
1	Power Armor
2	Small M-tek Armor
3	Regular M-tek Armor
4	Small Mecha
5	Regular Mecha

6 Large mecha
7 Huge Mecha
8 Colossal Mecha

Movement Type

There are eight Movement Types or MTs: Walker, Air, Ground, Sea (Wind), Sea (Powered), Space, and Submersible. A vehicle can be built to have multiple movement types by taking the Extra Movement Type System. This System is, in fact, required for the Space and Space movement types.

The Movement Types that the vehicle is equipped with have three important effects on vehicles. The most obvious one is that they determine where the vehicle can move and how. For instance a vehicle with the Sea MT cannot fly through the air nor can a vehicle with the ground MT fly through space. The 2nd effect is that it determines how fast the vehicle can move (the Movement Rate stat, which is explained in Step 4. Combat Stats). The MR Multiplier increases the total and maximum MR that a vehicle can travel at. Lastly, it determines how fast the vehicle can accelerate at. Some MTs accelerate quickly while others are much slower at it.

Table 5-2: Movement Rate Table				
Movement Type	Acceleration Rate	MR Multiplier		
Walker	X 1	X 0.75		
Air	X 2	X 3		
Hover	X 1	X 1.5		
Ground	X 1	X 1		
Sea (Wind)	X 0.5	X 1		
Sea (Powered)	X 1	X 2		
Space	X 5	X 10		
Submersible	X 2	X 3		

Example: The Enterprise has a speed of 10, giving it a Safe MR stat of 30 and Maximum MR of 60. Because it uses the Air MT (it's a freaking Airship), these two stats increase to 90 and 180 because the Air MT has a MR Multiplier of x3. It also grants the Enterprise a x2 acceleration rate, thus each turn spent accelerating increases the MR by 20 (2 x 10 = 20).

Air

The air movement type grants the vehicle the ability to fly through the air. Some examples include the wide variety of different airships used throughout the Final Fantasy series and similar console RPGs.

Hover

Similar to the Air movement type, the Hover movement type allows the vehicle to float over obstacles. It does not, however, allow for full flight as the air movement type does. It also does not permit the vehicle to manuever over large bodies of water. Examples of this movement type include the hovercraft from Final Fantasy IV.

Ground

The vehicle is designed to move over the ground. This is the most common movement type for vehicles and examples include any number of different cars, trucks, bikes, and similar vehicles.

Sea (Wind)

This ship, boat, or similar vessel lacks the engines found in more "modern" ships and must rely on oars or sails in order to move. Taking this MT requires the vehicle to take the Unpowered Defect.

Sea (Powered)

The vehicle is designed for traveling across water such as a battleship or boat and has an engine in which to do so.

Space

The vehicle is capable through a set of powerful jets to move through outer space. Unlike other movement types, the space movement type requires the Air MT in order for the vehicle to travel through space. The movement rate multiplier for Space is only applied once the vehicle is out of the planet's atmosphere. The Space MT is rare in most FFRPG campaigns.

Submersible

This MT allows the vehicle to travel underwater like a submarine at a faster rate than a normal sea going vessel would. The Submersible MT requires the Sea movement type since the vehicle can also travel above the sea if necessary. The movement rate multiplier is only applied when the vehicle is underwater.

Walker

The vehicle is designed to walk on two or more legs. This grants the vehicle exceptional maneuverability when moving through rough terrain. Some examples of Walker type vehicles include the Magitek armor from Final Fantasy VI as well as the mecha found in today's most popular anime series such as Gundam Wing. Since the vehicle walks, Walker types are slightly slower than regular ground vehicles.

The Red Wing (Part Three)

Choosing a size won't be too hard, since it'll be slightly smaller than the Enterprise- Size 7 rather

than 8. Also it'll be an airship too, so the Air MT is a must. That gives it a MR Multiplier of x3 and an Acceleration rate of x2.

4. Enemy Pilot Stats & Skills

Obviously, you will need to develop the stats & skills of the pilot or gunners who operate the enemy vehicle. For the most part, consider the experience level of the enemy pilot/gunner to be equal to that of the characters. That said, each enemy pilot/gunner gets two skills: Weapons Systems & Piloting. If the vehicle in question is a mecha, the Mecha Weapon skill should be added as well. Each skill starts at 60 + (level x 3). If the gamemaster feels like giving the enemy pilot/gunner a particular skill that he does better in, the ratings can be moved around by upwards of 50%. For determining the pilot/gunner's DC and MDC, these two stats are generated at a +1 every eight and +1 every ten levels rate.

The Red Wing (Part 4)

The Red Wing needs a pilot and three gunners to man each of the vehicle's cannons. Hiro & company are around level 20, so he makes pilot & gunners on par with them. $20 \times 3 = 60$, giving each gunner & the pilot 120% for each skill. Rob decides to make the pilot a better pilot than a gunner and vice verse with the gunners. Thus the pilot has Piloting 140% & Weapon Systems 100% and the Gunners have Weapon Systems 140% & Piloting 100%. The Red Wing crew, since they are level 20, has a DC of 3 (8+8+1 = 19). If they were at level twenty-one instead of twenty, they would have an MDC of 3 (10+10+1 = 21), but since they don't they have a MDC of 2.

5. Attributes

All enemy vehicles have five attributes: Strength, Vitality, Handling, Speed, and Power and 40 points to distribute between the five. In addition, each attribute is linked to a specific vehicle part-Chassis (Vitality), Control (Handling), Engine (Power), Motion (Speed), and Motor (Strength). Each part is rated from one to ten and all enemy vehicles start with at least one in each part. If their Threat Level is high enough to warrant a higher part level, the linked attribute gets a +2 bonus for each level over level one. Thus a vehicle with a base Strength rating of 10 with a Motor 8 would have a Strength of $24 (8-1=7.7 \times 2=14.14+10=24)$.

Strength: For a vehicle, strength has two effects. The first is that it determines how much

damage is done with Mecha Weapons in the case of mecha just as the strength of a character does. The second effect is that it determines the vehicle's towing power. A vehicle can safely tow ((strength + size) x 100) pounds. Thus a size 4 vehicle with a Strength rating of 13 can tow 1700 pounds $(13 + 4 \times 100 = 1700)$.

Vitality: As the character attribute of the same name, Vitality determines how durable and damage resistant the vehicle is. The Vitality rating is added to the vehicle's Base HP rating from its size level and increases the mount of HP the vehicle gains with each Chassis upgrade.

Handling: The vehicle's overall ability to react to the pilot's input. Thus, a vehicle with superior handling can dodge attacks, manuever tightly, and perform various tricks. The rating of this attribute is calculated differently than other attributes. Normally, all attributes begin at zero and go up based on the attribute points used by the player or gamemaster to increase the attribute. The Handling attribute, on the other hand, can start off as a negative value equal to the vehicle's size level. Thus a size level 5 vehicle starts with a –5 Handling. Any points placed into the Handling attribute help bring the attribute into positive territory. This is done to reflect that larger vehicles are harder to manuever than smaller ones.

Speed: The vehicle's ability to move swiftly. Speed determines the vehicle's movement rate (MR), which determines how fast a vehicle, can move. Thus the higher the vehicle's speed, the faster it can move.

Power: The output level of the vehicle's engine. Thus with a higher Power attribute, the vehicle's engine can sustain a higher amount of energy. In game terms, they determine how many Energy Points the vehicle has. Thus by having a high Power attribute, the vehicle will be able to power more lethal weapons and accessories.

The Red Wing (Part 5)

Hmm. We have 40 points to work with and five attributes. That gives us roughly 8 points for each attribute, but that would be boring. I'll make the airship a bit faster (Speed) at the cost of engine power (Power). I'll keep the rest of the stats the same.

Strength: 8 Vitality: 8 Handling: 1 (8) Speed: 10 Power: 6

Since the Red Wing has a Chassis level 2 and an Engine level 2 part, Vitality and Power increased by 2 points to 10 and 8 respectively.

6. Combat Stats

Just like a player character and player controlled vehicles, enemy vehicles have their own set of combat stats.

Hit Points: The amount of damage the vehicle can absorb without being blown to pieces or forced out of action. The HP formula for Vehicles is (Base HP x Chassis level) + (Vitality x Chassis level).

Energy Points (EP): The vehicle's energy source. Energy Points can be spent to power beam weapons, special accessories, and the vehicle itself for long periods of times. For each hour in use, the vehicle requires a number of EP equal to its Size level. Thus a Size 3 vehicle uses up 3 EP per hour. The EP formula is (((Size + Power) x 2) x Engine level).

Handling Modifier: This is included as a stat since it is so frequently used. The Handling Modifier is equal to the vehicle's Handling attribute x 3. Thus a vehicle with a Handling of 5 would have a Handling Modifier of +15%. If the Handling attribute is a positive (1 or higher), the Handling Modifier is a bonus. On the other hand, if the Handling Modifier is a negative (-1 or lower), the Handling Modifier is a penalty. The Handling Modifier is applied to ALL piloting skill rolls made while using the vehicle including the vehicle's Defense stat.

Defense: Vehicles do not have a defense stat, per se. When vehicle is attacked, assume that the vehicle's defense is equal to the pilot's Piloting skill divided by 2 plus or minus the vehicle's Handling Modifier (Pilot/2 + H. Mod).

Example: Hiro has a Piloting skill of 110% and the Enterprise Mk. II has a Handling Modifier of +12 (Handling 4). As a result, the Enterprise Mk. II has a Defense of 55 + 12 = 67.

Armor: All vehicles are designed to withstand damage be they from drunk drivers or beam cannons. All vehicles have an armor rating each to its (Base Armor + Vitality x Chassis level). Because Vehicles are not normally created with magic in mind, there is no Magic Armor stat for vehicles.

Damage Capacity: Vehicles, because they have a much higher HP amount than players can ever dream of, have a higher Damage Capacity range. For every Size over 2, the vehicle gains a +1 Damage Capacity bonus up to +8 for a Size 10 vehicle.

Magic Damage Capacity: Normally, magic is not used in vehicle-to-vehicle combat. Gamemasters may, if they desire, to employ "Mana Cannons" that allows the character to focus their magic through the mecha and at their opponent(s).

The mana cannon is a special weapon and is listed under the Vehicle Weapons section of the VCS. It essentially grants a MDC bonus.

Movement Rate (MR): This stat determines how many meters, yards, hexes, or squares the vehicle can travel in one combat round. The FFRPG assumes that one meter is equal to one yard, square, or hex, pending on whether or not the gamemaster is using the map combat rules from Chapter Six: Combat in the FFRPG Rulebook. This stat comes in two forms: Safe MR and Maximum MR. The Safe MR is the speed at which the vehicle may manuever safely without incurring any penalties. Once the Safe MR is surpassed, any Piloting Skill tests incur a -20% penalty until the vehicle decelerates. The Safe MR is equal to the (Speed attribute x 3) x movement system modifier). The Maximum MR is the absolute fastest that the vehicle can travel at in one turn and is equal to the (Speed attribute x 6) x movement system modifier). While going at the maximum MR has many benefits (such as going very fast), it has many disadvantages such as doubling the skill penalties for any Piloting skill test and halving the vehicle's Defense rating.

The Red Wing (Part 6)

With the above in mind....

HP: 250 EP: 60

Handling Modifier: +3%

Defense: 73% Armor: 62 DC: +5 MDC: +0 MR: 90/180

7. Weapons

Each enemy vehicle gets at least the one weapon for each slot they have available based on their size. These weapon slots can be filled with whichever type the gamemaster desires- cannon, beam cannon, mecha weapon, missle, or mana amplifier. Each weapon starts the lowest damage rating based on the type.

Light Cannon: 3d8 Heavy Cannon 3d10 Light Beam Cannon: 4d8 Heavy Beam Cannon: 4d10

Missle: 5d12

In the case of an enemy vehicle with a high Threat Level, the damage increases by one die for every five levels over Threat Level 5 (10, 15, 20, etc.). Thus a Threat Level 45 vehicle with a heavy cannon would do 12d10 damage (45/5 = 9.9+3 = 12).

The Red Wing (Part 7)

Since the Red Wing is a size 7 vehicle, we have five weapon slots to play with. We'll keep things simple by leaving it as three heavy cannons (3d10 damage each), one light cannon (3d8 damage), and a missle launcher for extra fun (5d12 damage).

8. Systems & Defects

For the sake of diversity, it is possible to modify the basic stats and abilities of a vehicle by taking Systems (advantages) and Defects (disadvantages). Each System & Defect is rated as a bonus (+) or negative (-) and buying Defects, the gamemaster may purchase systems for the vehicle. Enemy vehicles also gain a (Size/2) points of Systems for free. This rule is meant to imply that large vehicles have more room for the sophisticated machinery required for systems.

A full list of Systems & Defects can be found in Chapter Four.

More Powerful Enemies (Optional)

If the gamemaster is looking for a way to make enemy vehicles more vicious, one way is to add a +1 system point for every five threat levels the enemy vehicle has. Thus a threat level 40 vehicle would have 8 free system points.

The Red Wing (Part 8)

Finally, the finish line is almost there... Time to decide which Systems & Defects to use for the Red Wing. Fast Acceleration sound like a good idea (+1) and a level in Sturdy for some extra HP (-1). In exchange for the systems, the Red Wing is given Gas Hog (-1) and a weakness to Ice elemental attacks (-1).

9. Final Values

Ah, sweet success. By this point, you're almost ready to terrorize your player characters with your new creation. The final step is to determine what rewards the players get for defeating the enemy in combat-XP, Gil, AP (if used), and salvaged items.

XP Value

The amount of experience point the characters gain for their victory. A regular enemy vehicle is worth the vehicle's threat level x 200 while boss or

super boss vehicles are worth the threat level x 400.

Normally, this XP must be separated by the number of characters involved in the battle. For instance, if Hiro's party included 5 people total (including himself) and defeat a Threat Level 15 vehicle, they would earn XP each (200 x 15 = 10000. 10000 divided by 5 = 2000).

In the event that the characters are in charge of a large vehicle (ie. an airship where each character is a gunner or pilot or has some other station), where the party often fights in single combat, the gamemaster may want to consider waiving the normal splitting done when determining the amount of XP each character gains.

Gil Value

Alternately known as the "Booty Value", this is the amount of money the characters earn by looting the enemy vehicle. Regular vehicles are worth TL x 100 gil and boss vehicles TL x 200 gil.

AP Value

If the gamemaster uses any optional system that requires the use of AP, each character get 1/5th the XP value in AP. Thus Hiro, in the XP value example above, would receive 400 AP (2000/5 = 400)

Salvaged Items

During the firefights and scuffles between player and enemy vehicles, it's possible that a destroyed or disabled enemy vehicle may produce a part or weapon that is still serviceable. There are two methods for determining how "salvageable" a defeated vehicle is: simple & complex.

The simple method is a flat 20% chance on a 1d100 roll of the vehicle having something that still works. This method works well for a true console RPG style feel.

The complex method is, for lack of better words, more complex. The chance of salvaging a working part starts at 10% but increases by each percent the vehicle has remaining in HP (divide the total by 100 and divide the remaining HP by the result. This is the percent of HP left). This method makes the idea of forcing the opponent to surrender or trying to disable a vehicle more preferable to a flat-out offensive barrage and emphasizes tactics. This could even lead into the possibility of taking hostages or recruiting enemies to the player's side. Regardless of the method used, if the dice roll comes within range of the value needed to have a salvageable item from the vehicle, make another 1d100 roll to determine which type of item is gained from the defeated vehicle.

All excess salvaged parts, weapons, and so on can be sold at a rate of 1/2 the normal worth in Gil.

Thus a Lv. 8 Chassis which is worth 20,000 Gil would sell for 10,000 Gil. Any Gil earned through selling salvaged parts can ONLY be applied to the party or character's vehicle pot. It CANNOT be transferred, as usual, to the character's normal Gil account to buy normal character equipment.

Table ?-?: Main Salvage Chart	
Roll	Salvaged Item
01-10	Support Item
11-30	Recovery Item
31-50	Attack Item
51-70	Weapon
71-90	Part
91-95	System
96-00	Roll twice!

Items: For these, it should be the gamemaster's decision on exactly what type of item is gained based on the threat level of the vehicle and the XP level of the player characters. Obviously green player characters (lv. 1 or so) should not be picking up items like Complete Kits or Infinity Bombs. Such high powered items should be reserved for only high level characters or vehicles.

Weapons: The gamemaster should select a weapon based on what the enemy vehicle was equipped with during its creation. The weapon's rating directly translates between the damage ratings of the enemy vehicles and the weapon list available in Chapter Three: The Big Guns.

Example: The Raptor has (or had) a threat level of 20, which gives its weapons a rating of 4. Its Heavy Cannon, for instance, would do 7d6 damage which is the same as a? heavy cannon.

Parts: One of the harder items that can be salvaged, a functional part is always of the same level as it was on the previous vehicle. Ie, a lv. 5 Motor is still a lv. 5 Motor. Gamemasters may want to be careful on giving improved parts too frequently to their players. Otherwise, the characters' vehicle(s) may wind up becoming too power, too quickly. It may be best to save part upgrades for defeating boss vehicles.

Table ?-?: Salvaged Parts Table	
Roll	Salvaged Part
01-20	Chassis
21-40	Control
41-60	Motor
61-80	Movement
81-00	Engine

Systems: The rarest of the potential items that can be salvaged, Systems should be rare and exclusive to boss or (better yet) super boss class vehicles as Parts.

The Red Wing (Part 9)

As explained before, the Red Wing has a Threat Level of 7. If defeated in combat, the player characters gain 1400 XP (7 x 500) and 700 gil (7 x 100 = 700). In the event that the gamemaster uses any optional game mechanic that require the use Ability Points (AP), each character gets 280 AP

The Red Wing (Complete Stats)

Vehicle Type: Airship

Threat Level: 7

Size Level: 7 Base HP: 105 Base Armor: 21 Weapon Slots: 5

Movement Type

Air (Primary)
Acceleration: x2
MR Multiplier: x3

Parts

Chassis: 2 Control: 1 Engine: 2 Motor: 1 Movement: 1

Attributes

Strength: 8 Vitality: 10 Handling: 1 (8) Speed: 10 Power: 8

Stats

HP: 250 EP: 60

Handling Modifier: +3%

Defense: 73% Armor: 62 DC: +5 MDC: +0 MR: 90/180

Weapons

Heavy Cannon (x3, 3d10 damage, rating 1) Missle (x2, 5d12, -5% Hit%, rating 1)

Systems

Fast Acceleration (+1) Sturdy (+1)

Defects

Weakness: Ice (-1) Gas Hog (-1)