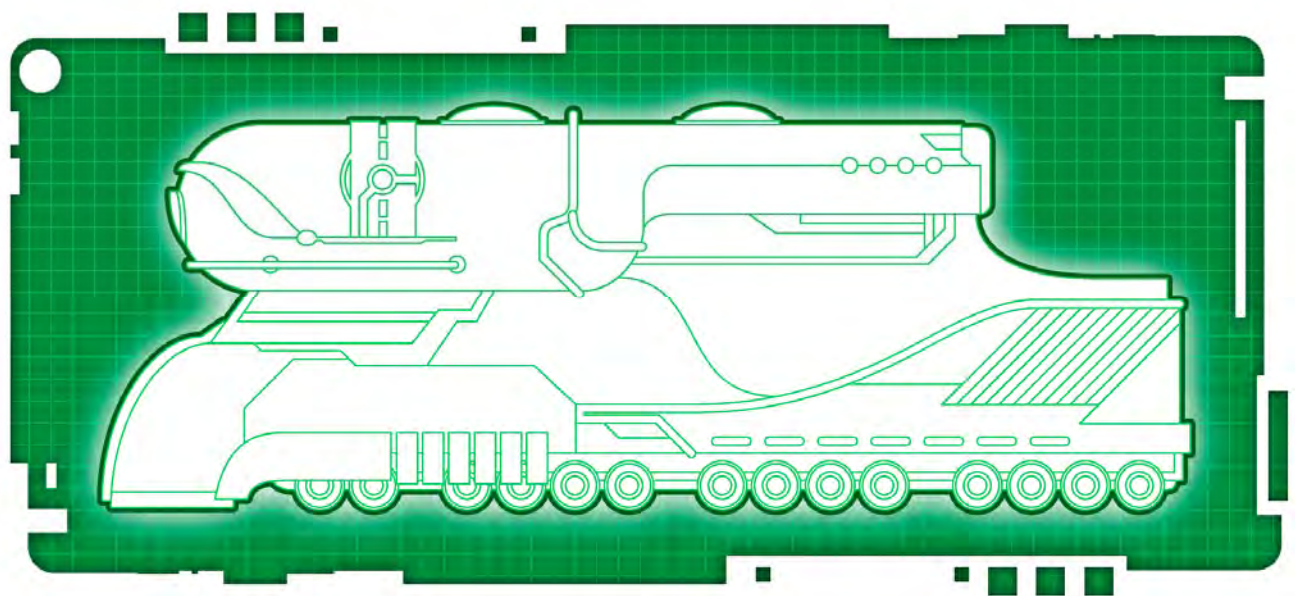


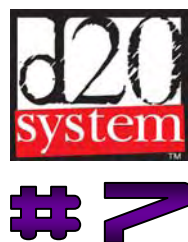
# TERRAFORMER

## SHAPE YOUR WORLD



# TRAINS OF EOS

BY LEE HAMMOCK



Requires the use of the d20 Modern Roleplaying Game, published by Wizards of the Coast, Inc.

# TRAINS OF EOS

With the limited manufacturing capabilities of the humans on Eos, the use of trains has increased due to their ability to move large amounts of cargo with a minimal number of complex parts. While the tracks used by trains require significant resources to construct, these resources (primarily iron) are readily available on Eos, and the tracks are far easier to construct than a nuclear power plant or a vectored-thrust engine. Thus, train tracks have begun their slow march across Eos, connecting major settlements with a quick and reliable mode of transportation.

The trains used on Eos come in two major forms: high-speed mag-lev trains that rely on powerful electromagnets to hover above their tracks, and wheel-driven trains that use grooved metal wheels on rail tracks. Mag-lev trains are faster but are also more expensive to build and harder to maintain. The Dawning Star Republic presently uses them only for heavily traveled routes. The faction-camps that have constructed train lines have all used wheeled trains due to the lack of energy and parts necessary to build mag-lev trains. Most trains currently rely on fusion reactors for power, though some use combustion engines. The streetcars now used in Roger's Point tie draw energy from the city's power grid.

The train tracks laid thus far follow the terrain of least resistance, bypassing canyons and mountains where possible in order to avoid unnecessary construction. The need for a relatively straight track and minimal inclines has required the building of some tunnels and bridges. In this arena, the Republic's ability far outstrips the faction-camps'. Faction-camp trains regularly operate under speed restrictions due to the sharp

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## ⚙ ABOUT DAWNING STAR

Dawning Star was the first full-scale science fiction campaign setting built on d20 Modern and powered by the Future ruleset from Wizards of the Coast. The critically-acclaimed setting was nominated for an ENnie for Best d20 Game. You can learn more and download free material by visiting [www.dawningstar.com](http://www.dawningstar.com).

## ⚙ ABOUT TERRAFORMER

The Terraformer line of products from Blue Devil Games presents new material designed for Dawning Star but usable in most science-fiction campaigns. Each entry will offer a new prestige class, xenomorph, talent tree, feat, weapon, etc. and advice on using it into your campaign and using it to "shape your world."

## ⚙ ABOUT BLUE DEVIL GAMES

"Fiendishly Clever." Blue Devil Games is one of the highest-quality small-press publishers on the market today. BDG product lines include Dawning Star, AEvolutions in support of *Monte Cook's Arcana Evolved*, and the upcoming Passages. Visit our website for more information: [www.bluedevilgames.com](http://www.bluedevilgames.com).

## ⚙ ABOUT LEE HAMMOCK

Lead writer and game designer on the Dawning Star line, Lee has been affectionately called the "Hemmingway of RPGs" for the quality of his writing and prolific body of work. Lee has worked for numerous publishers, and is the writer on the main story in the HALO Graphic Novel from Marvel Comics.

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turns in their tracks necessitated by avoiding changes in elevation. Riding a faction-camp train can be more like riding a rollercoaster of Old Earth, and one had best keep their balance and their wits about them.

Most of the train tracks on Eos have been laid in the plains region of central Dawnhome, though tracks can be found in all settled regions of the continent. On the other continents train tracks are much less common, and trains generally only serve the regions directly around the settlement that built the tracks. These tracks are usually built on a raised section of earth covered in gravel, or in more settled areas on concrete structures. Concrete bridges are common at most river crossings or unavoidable gorges, many of which also have additional space to accompany ground vehicles on either side of the train to maximize the utility of the bridge. Indeed, train tracks are usually built near existing roads and trade routes, making it easier to reach the train if it breaks down.

The train tracks on Eos have been damaged on occasion by various xenomorphs, such as Iron Scar scrappers digging at the tracks out of mere curiosity. For this reason, the Republic and the faction-camps have begun electrifying their tracks, hoping that a shock will dissuade curious animals and would-be vandals. Electrified tracks inflict 1d6 points of electricity damage per round on anything that touches them, Fortitude save (DC 13) for half damage. Creatures failing the save are also stunned for 1 round. These measures are suppressed at crossings. A few humans and velin have been killed by these tracks after stepping on them and being unable to extricate themselves. In one unfortunate incident, a faction-camp train near Steel Edge was derailed after striking a massive xenomorph corpse that lay on the track. Some claimed the corpse was a darkling, but after the collision and resulting explosion there was little remaining to inspect.

Currently no Republic lines link up with those of the faction-camps. Even if such a scenario could be brokered, Republic train wheels use a different track gauge than faction-camp wheels. The Republic has no plans to connect its growing train network with any of those built by the faction-camps, even those with which it has a tenuous alliance. Despite this, there are a few locations where Republic trains pass within a short distance (sometimes as little as a few hundred yards) of a faction-camp rail. These areas are becoming increasingly vital trade spots. Small boomtowns have sprung up in these areas, the busiest being Loose Change located between Roger's Point and Red Hill. There have been some attacks on Republic tracks by what are assumed to be EFL saboteurs, but thus far no conclusive evidence has been found of their involvement. Tracks damaged in these attacks have come dangerously close to causing a serious derailment, but so far such a catastrophe has been averted by quick-thinking conductors. The EDF has begun intermittent patrols of the more important tracks, and many of the more important trains are now escorted by vectored-thrust aircraft that keep an eye ahead of the train for track damage or ambush.

Both the EDF and the EFL have been working on developing military transport trains to carry their troops and personnel into battle quickly and in large numbers, but neither group has had much success. The EDF has

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two prototype combat transport trains that are still in initial testing. The current prize of the EFL military train project has been a large set of flatbed cars that can be used as a launching and landing platform for VTOL and other light aircraft, including a control tower and some basic defensive positions. Considering their increasing importance of trains, if a conflict does break out between the faction-camps and the Republic, the tracks of both sides are sure to become some of the first targets.

## Common Characteristics of Trains

Trains operate like other vehicles described in d20 Modern with a few modifications. Trains cannot travel any course at will. They must travel on a track, changing lines only at a switching station. Most trains on Eos can remotely operate switching stations on the tracks they regularly use. Trains cannot perform any simple maneuvers except for Ram, and even then only if the target is on the tracks. Trains cannot use any stunts except for Dash or Hard Brake; both of these abilities require one round to perform, and they do not take effect for one minute. For example, it takes the trains operator three rounds to set the train to reach top speed, and it takes the train three minutes to actually reach top speed. Trains require at least 2,000 feet of track to make a right-angle turn.

Trains are made up of a number of cars as limited by the pull of the engine. Each train has at least one engine car, though most have several in case of emergency or to alternate between refueling. Only one engine can be active at a time. Many trains have an engine at both ends facing different directions so the train can travel in both directions without having to use a turnaround track. Most engines used on Eos contain all the fuel they need, but some less efficient trains require a tanker truck behind the engine to carry fuel. The rest of the cars of the train are generally flat topped cargo cars, boxcars for carrying cargo that needs shielding from the elements, or passenger cars.

The joints holding together train cars can be released as a full round action, but most require a key or a pass code to do so. Unlinking such a joint without the code requires a Disable Device check (DC 20).

Standard trains require the Surface Vehicle Operation (Trains) feat; mag-lev trains require the Surface Vehicle Operation (Mag-Lev Trains) feat. Operating a train without the appropriate feat incurs a -4 penalty to all Drive skill checks.

## Factions and Federations

### Free Tracks Alliance

The organizational body of the faction-camps that deals with issues regarding trains, the Free Tracks Alliance is a sub-department of the EFL, though it has little interaction with the more military operations that organization undertakes. Instead, the Free Tracks Alliance is concerned with commercial and civilian matters, particularly building new train lines to make travel easier between the faction-camps. Most of the faction-camps are divided by ocean, leaving the Free Tracks Alliance little to do to bring

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the camps closer together. However, the faction-camps on Dawnhome are working hard to try and unite their disparate territories with train lines. This is made the more difficult by the presence of the Republic, since it has claimed most of the level, open terrain on the continent. As a result, the Free Tracks Alliance is forced to build in less-than-ideal locations such as mountain ranges or jungles.

The Free Tracks Alliance is organized by Peter Kaze of Sunder Ridge, though his power over the efforts of individual camps is limited. He acts as more of a group planner than a real leader, having no power to force the faction-camps to do anything. Luckily, enlightened self-interest has encouraged most of the faction-camps to work together, though most faction-camp-owned train lines are little more than local efforts within each settlement's territory. Only Sunder Ridge has made a major effort to link up the faction-camps with its Mountain Train line, but its progress has been limited due to poor terrain. Because of this lack of organization there is little standardization in the faction-camp trains beyond track gauge. Each camp sets its own train schedules.

The trains used by the Free Tracks Alliance all have EFL security agents assigned to them, though rarely in large number. Since there are few restrictions on what can be shipped on board a Free Tracks Alliance train, these security agents are more concerned with keeping the trains undamaged and stopping fights on the train and less concerned with customs duties. The trains of the Free Tracks Alliance are also an efficient way of moving troops through EFL territory; soldiers are a common sight on the trains.

Other than train lines supported by Roger's Point and Sunder Ridge, no faction-camps have train lines that extend more than 20 miles from their main settlement. Most are working on developing their train lines, especially Lanner's Crossing and Delhi, but they have made little progress thus far. Like most things among the faction-camps, the wealthier camps have made more progress while the poorer faction-camps lag behind.

## **Movement Systems Incorporated**

Commonly referred to as MSI, this relatively young corporation is based in the Dawning Star Republic, though it has offices in several of the faction-camps. Founded and owned by Lia Qian, reputed to be the second wealthiest person in the Republic, it has the stated goal of bringing privately owned train lines to all major settlements on Dawnhome. For now MSI runs its limited fleet of trains on RTA and faction-camp tracks, paying nominal rental fees for use. MSI primarily runs cargo trains on some of the lesser used tracks and has no mag-lev trains in its small fleet of vehicles, but it has quickly become the leading privately owned rail transportation company.

MSI's primary office is located in Dawning Star City. At any given time, MSI has four trains running. Their most common routes travel the old Iron Scar tracks and to Crosstrack. MSI currently does not offer passenger service, but it is hoping to do so in the next year. MSI has no interest in mag-lev trains for now due to their expense and high-maintenance requirements. Most of the company's clients are small-time miners and

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farmers who can't afford to arrange transit on an RTA train. MSI charges 15% less on average than the RTA for most services. This reduction in cost does mean that MSI does not offer some services that the RTA does, such as rail agents, but most customers don't seem to mind. None of the MSI trains go directly between faction-camp and Republic territory, instead stopping in a major settlement and requiring all goods be inspected before being carried to one of the border towns like Loose Change.

Recently MSI has begun development of a new series of trains for commercial uses besides transportation, such as portable factories or smelters that can go wherever the tracks lead. This enables MSI to move around production facilities as needed, and their specially built trains can be highly customized according to the needs of different clients. Their factory train can make anything from farming tools to simple firearms, though it is legally restricted from building weapons outside direct EDF supervision. Through these trains MSI hopes to be able to bring a bit of civilization and convenience to some of the smaller settlements in the Republic that do not possess such facilities of their own, and so far their services are much in demand.

## Republic Transit Authority

The civilian trains of the Dawning Star Republic are overseen by the Republic Transit Authority, which is part of the Department of Trade. The Republic Transit Authority, or RTA, is in charge of making sure all the trains, buses, ferries, and other modes of civilian transportation operated by the Republic run properly. The RTA is also responsible for mail delivery, making it one of the largest parts of the Department of Trade. The RTA has officers in nearly every Republic settlement and is a ubiquitous part of the population. Much like the postmen of the United States of old Earth, they have a strong belief that their services must never be interrupted regardless of weather, violence, or xenomorph activity. Because of this the RTA is reasonably well thought of by most citizens of the Republic. However, despite their adherence to duty and earnest attempts to keep everything running properly, the RTA has a reputation for being late. Their trains are particularly notorious for this shortcoming.

The RTA is headquartered in Dawning Star City and has major branches in Iron Scar, Greenville, Harvest Town, and Red Hill. While the RTA relies on the EDF and local police forces for security, it has its own security officers, often called rail marshals. These officers are trained in detecting forgeries, conducting searches, vehicle operation, and dealing with troublemakers with minimal force. Most major trains used by the Republic have a rail officer on board and they can be found in all major installations of the RTA. Other than the rail officers, RTA personnel include drivers, pilots, mechanics, traffic control officers, and customer service representatives.

The RTA currently operates five major train lines: The Iron Scar Express, the Red Hill Run, the Greenville Spur, the Harvest Town Spur, and the Southeast Line. Passage on an RTA train is relatively

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inexpensive. Purchase DCs run from 4-8 for a single passenger and 6-10 per ton of cargo. Weapons are not permitted as carry-on items on RTA trains, although they may be stored in baggage. The baggage compartments of an RTA train are usually under constant guard.

## Major Train Lines of the Republic

### Dawning Star City Metro-Line

While Dawning Star City was built in ramshackle fashion from whatever parts were available, the engineers involved in doing so were some of the finest urban planners the human race had to offer. While building Dawning Star City they made sure to leave room for additional construction. This included leaving sufficient space to build a series of underground and elevated trains in the hopes of providing cheap public transportation for the inhabitants of the city. This idea has recently been put into practice, but so far progress has been limited.

The plan is to have an underground line that rings the city and numerous elevated lines crossing major thoroughfares and connecting at a station at City Center. The elevated lines would provide transportation to all the major areas of Dawning Star City, including the spaceport, the rail yard, and the Terraforming Fields. Currently the only functioning train lines are the northern portions of the underground perimeter, though they do provide easy access to most of the northern part of the city, including the EDF Headquarters and the Terraforming Fields. There are currently two trains operating on parallel tracks, always running in opposite directions. The Republic hopes to have the entire perimeter finished in the next decade, though funding issues may make this difficult.

The trains used in the underground tunnels are built in the style of old Earth subways and are all fully enclosed passenger cars that draw power from a third rail running parallel to the main train tracks. This system draws off the city's power grid, and the trains have no backup power course. Travel on these lines is free, and they are commonly used by those who commute to work at the EDF Headquarters and the Terraforming Fields from their homes in the city.

### Greenville Spur

Reaching from Crosstrack to Greenville, the Greenville spur is a small length of track that sees an increasing amount of use. As the pectar fruit and rubber tree orchards of the Green Sea increase in productivity, more and more of their products are brought to Dawning Star City. Initially Greenville relied on dirt roads and old ground vehicles to get their goods to market, but two years ago the Greenville Spur was finished, making the lives of the locals much easier. This has allowed the town to drastically expand as supplies and tools are much easier to get into town. Unfortunately, this physical and economic expansion has had little effect on the seedier parts of the town.

The Greenville Spur is a single track that has a single scheduled run each day between Crosstrack and Greenville and back. The trip takes

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ten hours each way. This tight schedule leaves little room for delay, and the cargo loaders in Greenville are renowned among the RTA for their short tempers. There are no stops on the Greenville Spur, and the train runs at high speed almost the entire time to discourage attacks by the EFL out of Sunder Ridge. The specter of a hijacking is considerable since the track is closely beset by the jungle. Attempts have been made to cut the jungle growth back from the tracks, but the Green Sea grows so quickly these efforts seem fruitless. Because of this security concern the RTA usually stations extra rail marshals on the Greenville Spur, though they have not been needed yet.

## Harvest Town Spur

One of the busiest tracks in the Republic, the Harvest Town Spur was recently expanded to include a second set of tracks to make it easier to get the food grown in Harvest Town to market. The Harvest Town Spur is a twelve-hour trip and runs twice each day. The trains go into Harvest Town with tools, vehicles, and other manufactured goods and return with container cars full of food. This food is rushed to Dawning Star City and then distributed throughout the Republic. Due to the efficiency of this operation most of the food grown in Harvest Town is in the grocery stores of Dawning Star city within four days of being picked.

The level of rail activity in Harvest Town has had little effect on the sleepy nature of Harvest Town outside the bustling rail depot. Still, the presence of the trains has been felt, and many farmers use the whistles of the inbound and outbound trains to schedule their work day. Despite all the activity there have been no major accidents on the Harvest Town spur, and its distance from any faction-camp makes the RTA think it is an unlikely target. Much like the town it serves, the Harvest Town Spur is not an exciting assignment, but it is a vital source of food for the Republic.

## Iron Scar Express

The first of the mag-lev train lines on Eos, the Iron Scar Express is quickly becoming the most heavily used line in the Republic. It links the Central Railyard in Dawning Star City to the Rail Depot in Iron Scar, a journey that takes just over 26 hours. The Iron Scar express is primarily used for hauling ore and other raw materials from Iron Scar to the rest of Eos, though a regular stream of people and manufactured goods also travel the line. All the trains and tracks on this line are brand new and use the latest technology, including a number of non-lethal weapon systems to keep creatures off the tracks. The completion of the Iron Scar Express has done much to bring Iron Scar closer to Dawning Star City and make it feel like less of a frontier settlement, a change that not everyone in Iron Scar appreciates. Already the influx of new citizens in the town has caused some resentment among longtime residents. The Iron Scar Express carries tools, food, and people on its trips to Iron Scar and carries primarily ore on its return trips to Dawning Star City.

A set of standard tracks for wheeled trains run parallel to the mag-lev tracks. These tracks were never finished before the mag-lev project commenced. A number of small shipping operations including MSI use the





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tracks to make runs to the settlements between Dawning Star City and Iron Scar. The mag-lev tracks also remain within sight of the Iron Scar Highway for almost its entire length. The Iron Scar Express only stops at Iron Scar, Dawning Star City, and the small town of Dirtwell located in the middle of the desert between Iron Scar and Dawning Star City. No other towns near the tracks have the necessary facilities to offload a mag-lev train, though some are being built.

The Republic currently only has two mag-lev trains, the Iron Stallion and Jonah's Runner. Both run continually between Iron Scar and Dawning Star City, though they often suffer from maintenance difficulties. These trains are usually made up of 30 cars, most of which are flatbed or passenger cars.

## Red Hill Run

One of the shorter rail lines on Eos, the Red Hill Run is a small train line used to run supplies from Dawning Star City to Red Hill. The track continues north of Red Hill to settlements in the farthest reaches of the Northern Resource Zone, making half a dozen stops before stopping one thousand miles south of Roger's Point. It was completed four years ago and has become one of the major unofficial trade routes to Roger's Point. The trains that run on the Red Hill Run are almost all cargo trains and most stop at Loose Change, one of the areas where the tracks of the EFL and the Republic are in close proximity. The RTA keeps a stern eye on the Red Hill Run in the hopes of catching the smugglers that use it, but so far their successes have been limited. It is believed a substantial part of the RTA agents on this train line have been bribed, and an official investigation by the Republic Rangers into the matter is underway.

The trains on the Red Hill Run bring all manner of manufactured goods to Red Hill and usually return to Dawning Star City with food and cotton. The trip to Red Hill takes approximately one day, though this can vary due to weather, track damage, and other problems. Of all the train lines in the Republic, the Red Hill Run has the worst reputation for running on time. The tracks running to Red Hill are the standard three-meter gauge used by the Republic, and all standard Republic trains can easily use the tracks. Due to the heavy security concerns in the area the RTA has shut down several switching stations to have better control over the flow of trains, making scheduling difficult since fewer tracks are actually available for use at a given time. Despite all the difficulties with the EFL in the area, there has yet to be any violence on the Red Hill Run.

In the early years of the Red Hill Run most trains passed by Loose Change or stopped only momentarily since it was not considered an official stop on the line. Having little luck shutting Loose Change down, the RTA has instead chosen to make it a stop on the Red Hill Run, charging extra tariffs on goods loaded or unloaded there in addition to having a large number of agents in the area looking for contraband. This has allowed Loose Change to flourish and also curtailed the various smuggling operations that once ran the town.

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## Southeast Line

The main line for points south of Dawning Star City, the Southeast Line heads out of the city to the southeast and officially ends in the town of Crosstrack. Two tracks continue from Crosstrack (the Greenville and Harvest Town Spurs), making Crosstrack a major trade center for the region. It has quickly become one of the major agricultural markets in the Republic, and most of the food consumed in Dawning Star city arrives on the Southeast Line. To safeguard the food supply, the tracks and Crosstrack are patrolled regularly by the EDF.

The Southeast Line runs through the plains of Dawnhome into the Green Sea, ending almost equidistant to Harvest Town and Greenville. It is a wheel train that runs once a day, with each trip between Dawning Star City and Crosstrack taking 22 hours. There are two sets of tracks on the Southeast Line, with separate trains routinely heading in both directions at the same time. It normally carries manufactured goods, fuels, and vehicles to Crosstrack and returns to Dawning Star City brimming with food. The Southeast Line also stops at a number of smaller agricultural towns in the plains of Dawnhome, most of which are no-name towns with only a few dozen inhabitants.

Both the Greenville Spur and the Harvest Town Spur use the same gauge of track as the Southeast Line (three meters), and thus trains can easily cross from one train line to the other. A switching station and roundabout are present in Crosstrack for just such a purpose.

## Major Train Lines of the Faction Camps

### Brass Line

The primary east-west line serving Roger's Point, the Brass Line hugs the coast of the Gray Plain Gulf on which Roger's Point sits. The Brass Line links up a large number of fishing villages, lumber towns, and other small settlements that rely on Roger's Point for most other goods. On the eastern edge of the line the tracks lead into the mountains, connecting four mining towns that produce tin or silver. There are 20 stops on the 400-mile length of the Brass Line, and the Brass Line Express stops at all of them twice a day. Most of the towns that the Brass Line stops at have a population of 500 or less, but they have been increasing in size dramatically in the six months that the line has been in operation. Patricia Rogers hopes to eventually stretch out the Brass Line to such an extent that Roger's Point can survive on the food it brings alone. Travel on has a Purchase DC of 7-9 per person and 9-12 per ton of cargo.

The train that runs the Brass Line usually pulls a configuration of 20 passenger cars, 20 cargo cars, and 40 flatbed cars, though this can be changed to meet specific needs. The train usually has several EFL security officers on board to keep the peace, but they have few actual duties because there are few restrictions as to what can be transported. The only goods that are not allowed on the Brass Line are volatile chemicals or explosives since Patricia Rogers would rather not have one of her very valuable trains blown up.

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## Mountain Train

The largest train line in the faction-camps outside of Roger's Point, the Mountain Train is a massive undertaking by Sunder Ridge. The Mountain Train currently consists of 120 miles of winding mountain track with numerous bridges and tunnels. Most of these features were built with the assistance of the *Steel Wall*, a mecha on loan from Steel End. The Mountain Train will eventually reach all the way from Sunder Ridge to Roger's Point, hugging the mountains unclaimed by the Republic and providing a major transportation artery for the EFL. For now it merely links together half a dozen mining towns which produce iron, copper, and coal, though its presence has made getting the product to market much easier. Like most rail towns these mining towns have grown recently, and Sunder Ridge now sees the path of the Mountain Train as its main source of territorial expansion in the face of the Republic Claims on the Southern and Eastern Resource Zones. Traveling on the Mountain Train has a Purchase DC of 7-8 per person or 9-11 per ton of cargo depending on the destination.

While the engineers and architects of Sunder Ridge are very skilled, riding the Mountain Train is a harrowing experience. For most of its length it travels along cliffs and ledges, usually less than a meter from the edge. Also the Mountain Train has more bridges and tunnels per mile than any other train line on the planet, also making it the most expensive train line to construct. Luckily Sunder Ridge has an abundance of iron with which to do so. It's common for those who ride it to wear blindfolds rather than see the pitfalls right out the window. So far it has an excellent safety record due to the skill and diligence of the conductors. The Mountain Train has been laid out with two tracks side by side, allowing travel in both directions without switching tracks. The two trains that serve the Mountain Train track are both pulled by Hercules Train Engines and normally pull 50 cars, most of which are flatbed or cargo cars. Little passenger travel occurs on the Mountain Train.

## Southern Circuit

One of the more ambitious and audacious projects undertaken by Patricia Rogers, the Southern Circuit is a train line that stretches south from Roger's Point with the primary purpose of claiming territory for the faction-camp and forcing a dispute with the Republic. The Southern Circuit is a two-track line that goes straight from Roger's Point towards Red Hill, stopping 300 miles north of Red Hill in territory that is claimed by the Republic. It serves precious few settlements and has little economic value, instead existing only to create an area of influence for Roger's Point. It is a direct albeit non-military challenge to the Republic. For its part, the Republic has yet to officially answer this challenge, but most experts believe such an effort is underway already. The increased Republic presence in Loose Change is thought to be the first step in whatever strategy the Republic will ultimately employ. Traveling on the Southern Circuit has a Purchase DC of 6-7 per person or 8-10 per ton of cargo, reflecting the lack of demand for the route.

The Southern Circuit stretches almost a thousand miles south of

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Roger's Point through forest, mountains, and plains. It was hastily built and has several lengths in the mountain that are particularly nerve-wracking at high speed, but it is functional over its entire length. The Southern Circuit takes 20 hours to travel, and a train makes the trip one direction each day. There are only half a dozen mining towns along the length of the Southern Circuit, most of which rely on the train to get their ore to market in Roger's Point. A few new towns have sprung up because of the Southern Circuit making it easier to reach previously remote areas, but this growth has been slow coming.

## Street Cars of Roger's Point

Roger's Point is a bustling coast city with thousands of inhabitants always in a hurry to get where they are going. Early in the days of the settlement Patricia Roger's felt a public transportation system would be needed to avoid choking the streets with vehicles (which were expensive to make and maintain) and to provide a valuable service for all of Roger's Point's residents. After considering a subterranean train system, she settled on a street car system with tracks set in the streets of Roger's Points and power lines strung overhead, drawing power from the city power grid. These cars have been in service now for twelve years and have proved a boon to the city, allowing most of its inhabitants to get around with relative ease and without needing to own a vehicle or riding animal. Riders pay for a weekly pass to use the street cars which allows them unlimited use within that week and has a Purchase DC of 6. These cards allow for a minimal amount of cargo, but special cargo cards can also be purchased for a Purchase DC of 12.

The street cars are designed to serve as both passenger and cargo transports, having folding seats that can be stowed to provide more cargo room. The tracks run in all major areas of the city except the newer outlying areas, where the infrastructure does not exist to support them. Using the street cars most areas of Roger's Point can be reached within ten minutes, though during particularly busy days this can increase dramatically. The cars rarely break down due to their stout manufacture, though they are not particularly fast. The street cars are considered so vital to Roger's Point that any tampering with them incurs serious penalties, usually involving corporeal punishment.

## Railway Settlements

The following are settlements in the Republic that are closely tied to the operation of the rail lines.

### Crosstrack

Leader: Mayor Duncan Kee

Population: 1,505

Major Exports/Products: Food

Major Imports: Manufactured goods

Progress Level: 5

Purchase DC Limit: 30

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Black market DC: 20

Item Restriction Limit: Restricted

Located 1,200 miles southeast of Dawning Star City, Crosstrack is a small but growing town that relies on the rail lines for its livelihood. Crosstrack is located where the Southeast Line ends and the Greenville Spur and Harvest Town Spur begin, making it a hub for the transportation of agricultural goods in the Republic. The tracks that have allowed Crosstrack to prosper have only been completed in the last five years, and while the town was settled two decades ago it has quadrupled in size since they were finished. The town has a bustling and growing feel to it, and most of the buildings look very new. For now the town prospers as thousands of tons of produce and other agricultural products move through it every month, but if the train lines ever move or stop running the town will probably die off in short order.

The town is run by Duncan Kee, the democratically elected mayor of the town. Despite its small size, it has a large number of EDF troops in its garrison due to its importance as a transportation hub. The commander of these troops, Captain Lilah Essex, is regularly seen inspecting trains and their cargo for contraband or sabotage when she is not otherwise in the company of the mayor. The two work together closely to ensure the safety of the town, though some say there are more romantic reasons for the time they spend together.

Other than the activity at the rail yard, which sees almost a dozen trains in and out each day, little happens in Crosstrack. It is a quiet farming town with little to draw the attention of outsiders other than the trains that pass through it. The locals like it this way for the most part, and while there is some concern that the town makes a tempting target for the EFL, such threats have yet to bear any fruit.

## Dirtwell

Leader: Jaikia Tane

Population: 830

Major Exports/Products: Relics, copper

Major Imports: Food, manufactured goods

Progress Level: 5

Purchase DC Limit: 30

Black market DC: 15

Item Restriction Limit: Restricted

Located almost halfway between Iron Scar and Dawning Star City, Dirtwell is a little speck of a town that has nearly quadrupled in size since the mag-lev train went through last year. Dirtwell was originally a small mining town that produced copper from several nearby mines. Then a number of ruins were discovered in the area, and Maximillian Dagos became interested in the town. He financed the construction of the mag-lev station that now fuels Dirtwell's growth. Now, Maximillian Dagos has bought up most of the copper mines in the area and is rapidly stepping up production in them, but most locals say he's really interested in the ruins in the area. Two city ruins have been found within 50 miles of Dirtwell, in addition to numerous underground facilities found by the miners.

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Numerous squads of relic hunters have been seen in the town in the six months since Maximillian Dagos took an interest in it, and few people are happy about it.

The small mining town that existed before the new wave of attention still exists at the center of Dirtwell, surrounded by dozens of flimsy shacks, prefab buildings, and other quickly constructed structures. These buildings house the miners and relic hunters brought in by Maximillian Dagos while more permanent housing is under construction. They give Dirtwell the appearance of a shanty town. For now sanitation in the town is severely lacking, and most of Dagos's employees eat in massive open-air kitchens. While these conditions are soon likely to improve drastically, those not in Dagos's employ are unhappy about the entire situation. Their town has effectively been overrun by strangers and turned into a pigsty. The leader of the town is officially the town sheriff, Jaikia Tane, but she has seen her power diminished in the face of Dagos's money and influence. The leader of the Dagos's operations in town, an ex-EDF officer named Silas Preen, has taken to constantly testing sheriff Tane's resolve. In the near future there is likely to be a showdown between the two and it very may well turn violent. In an attempt to head this off sheriff Tane has tried to bring in some Republic Rangers to assist her, while Silas Preen has brought in more of Dagos's personal security forces.

The area around Dirtwell is some of the most barren terrain on Eos. Other than town wells there is no water of any form for dozens of miles in any direction. Few life forms are found in the region, and the town has the highest average daytime temperature of any settlement on the planet. It is not a very pleasant place to live. Only the wealth of the nearby copper mines and ruins keeps the people living in Dirtwell.

## Loose Change

Leader: Republic Ranger Mort Jackson and Sadie Thompkins

Population: 236 (swells to several thousand when the trains are in)

Major Exports/Products: Contraband, food, manufactured goods

Major Imports: Contraband, food, manufactured goods

Progress Level: 6

Purchase DC Limit: 40

Black market DC: 5

Item Restriction Limit: Restricted

Located north of Red Hill, Loose Change is one of the few open and obvious trading posts between the faction camps and the Dawning Star Republic. It is a product of market forces that refuse to die. The town falls directly between the last stretch of the Red Hill Run and the Suburban Track. These tracks do not actually intersect, but do come within a few thousand feet of each other. Because of this proximity it is common for trains on both tracks to stop and unload goods into the small town that has cropped up between the tracks. While Loose Change was originally a smuggler settlement acknowledged by the EFL but opposed by the Dawning Star Republic, it is now tacitly recognized by the Republic as they had little hope of shutting it down without undue expenditure of resources.

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Loose Change exists in an interesting state of equilibrium, located between two powers that are enemies but whose people wish to trade. Loose Change allows an easy outlet for this trade between the two countries, though on completely different terms. Roger's Point and the EFL allow anything and everything into Loose Change, up to and including military weapons. The Republic on the other hand only allows food, medicine, consumer goods, and other non-threatening items to come into Loose Change through official channels, but the means they use to control the flow of goods are imperfect. Smuggling weapons, vehicles, and other contraband into Loose Change from the Republic is a lucrative trade, employing trains, aircraft, and ground vehicles. Getting caught can result in a stiff prison sentence, but many of the RTA and Republic officials operating in Loose Change can be bought off with minimal graft.

The city of Loose Change itself has only a dozen permanent structures, but it has scores of tents, shacks, and other temporary structures, most of which house small-time merchants hawking their wares to the passersby. The permanent buildings are owned by the more successful merchants and the more long-term inhabitants, most of whom are loyal to the EFL. The streets of the city are a chaotic jumble of dirt and gravel, and it is not uncommon for them to change from day to day as people coming into town pitch tents and tear down old shacks as they move on. A number of dirt roads lead into the settlement from both Roger's Point and Red Hill. The only paved roads are found next to the train tracks to better assist in the unloading of the trains.

After years of trying to get rid of Loose Change, six months ago the Republic established a permanent customs station to try and control the goods going through the town instead. Initially the station was led by a bureaucrat named Fen Tikashi, but he was replaced after four months following a corruption scandal. After two months with no replacement due to a number of bureaucratic problems and some well placed bribes, Republic Ranger Mort Jackson has assumed command of the station and brought a new iron rule to the customs operations. He has cracked down drastically on smuggling and in the few weeks he has been in office he has raised a lot of ire among the people of Loose Change who are used to looser interpretations of the law. If something doesn't change soon, the people of Loose Change may send Ranger Jackson out of town in a pine box.

While the Republic attempts to curtail the illegal and illicit activities in Loose Change, the EFL and Roger's Point work to encourage them. The local leader of the EFL, Sadie Thompkins, is the owner of the only permanent bar in town, the Battered Bottle. She works behind the scenes, running interference to keep the Republic on its toes and away from the big shipments coming through. She serves up some small time operators, who have angered her, to the Republic officials, but only enough to keep the Republic thinking they are making headway. Sadie Thompkins is only known to a select few individuals to be the leader of the EFL operations in the area, though many know she served with the EFLSF in years past. Some say she was even a Bladefisher for a few years.

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## The Dawning Star City Rail Depot, a.k.a. the Railyard

Leader: Chief Uli Jones

Population: 3209 (staff)

Major Exports/Products: Trains

Major Imports: Train parts, fuel

Progress Level: 6

Purchase DC Limit: 40

Black market DC: 20

Item Restriction Limit: Licensed

Not a settlement in the traditional sense, the Dawning Star City Rail Depot is the single most important area in the Republic relating to trains. All the trains of the Republic are built there, return there for overhauls, and travel through there at least once a week. The Dawning Star Rail Depot is one of the busiest cargo transfer points on the planet, with all of the food and raw materials consumed by Dawning Star City brought in by train and all the finished goods shipped out in return. Due to its importance, the Dawning Star City Rail Depot (more commonly the "Railyard") is one of the most heavily protected areas of Dawning Star City. The RTA and the EDF both patrol the Railyard regularly, and both the criminal element and the EFL have learned not to try and pass contraband through it. Instead they have to work around Dawning Star, running goods by truck or air around the city to train depots outside the city limits.

The Railyard is located south of Dawning Star City proper, on the other side of the Jonah River. It is surrounded by a ten-foot fence with regular watch towers in addition to regular ground patrols both on foot and in vehicles. Trains enter through specific entrances, and each train's cargo is searched as it enters the city. The entire process is overseen by the RTA and the EDF, with a special detachment of Republic Rangers on permanent assignment to the Railyard to take care of any particularly unusual problems. Inside the compound are a large number of platforms for loading passengers and cargo. Three roundabouts and numerous switching stations are present, allowing trains to be quickly rerouted as needed. The place feels much like an airport of old Earth with a constant bustle of cargo, people, and trains coming and going at all hours of the night and day. In similar fashion all individuals are searched as they enter the Railyard, and no weapons of any sort are allowed to be carried without special government dispensation.

In the passenger portions of the Railyard, a number of shops and services can be found, such as food vendors and bookstores. These areas are filled with people during daylight hours, becoming far less busy at night. The cargo areas of the Railyard are mainly made up of warehouses and loading platforms, including a large number of cranes and forklifts. Most of these machines are relatively new and there are never enough available, meaning Dawson dragons and other domesticated creatures are sometimes pressed into service.



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## Trains of the Republic

The *Dawning Star* arrived on Eos with no trains or tracks to lay, and all the trains currently in service were built from scratch using designs from old Earth. These trains were mainly constructed out of parts of the *Dawning Star* and other vehicles, including salvaged fusion generators from numerous ground transports. The end result is small fleet of engines and train cars, no two of which look exactly alike. While there are certain standards in design, such as wheel width, many of the particulars of individual cars and engines are dependent on what materials were available at the time. This can make repairs hard as there are few standardized parts available.

The *Dawning Star* Republic has a single design it uses for its engines and a number of standard configurations for its trains. These can be altered according to specific needs, but they try to keep the trains in their standard configurations. The mag-lev trains, of which the Republic only has two, are not so limited and are generally reconfigured to maximize the efficiency of each trip.

### DS-HR Engine Unit

The standard train engine of the Republic, the Republic has a dozen of these trains in service, and they hope to add more in the near future. They see almost constant use due to their limited numbers and are only taken out of service for necessary repairs. These engines are all equipped with fusion reactors with a varying lifespan, but all are powerful enough to pull a train 100 cars long if need be. The DS-HR Engine Units, or “Herbies” as they are often called by their operators, have a crew of two with one conductor and one engineer, though most trains carry extra personnel trained in both jobs just in case.

The DS-HR has no weapons of note and does not come standard with any sort of armor. The EDF has experimented with some combat modifications, using special engine designs that are based on the DS-HR but with significantly improved performance.

The DS-HR is ten squares long and four squares wide.

### DS-MR Maglev Train Engine

One of the recent creations of the *Dawning Star* Rail Depot, the Maglev Train Engine is hoped to usher in a new age of improved transportation on Eos. Able to travel upwards of 200 miles an hour, it can make the run between Iron Scar and *Dawning Star* City in 22 hours. The DS-MR is a labor-intensive vehicle which requires constant tune-ups and maintenance, but the costs are thought by the RTA to be worth the ease of travel it allows. The DS-MR runs off of a small fusion reactor with a 30-year lifespan, though fuel is not its primary limitation. The DS-MR requires five hours of maintenance for every 30 hours of operation, meaning each DS-MR spends one day each week out of service while being maintained.

Because mag-lev trains can travel backwards as easily as forwards, only one engine is assigned to each train. Mag-lev trains can accelerate and decelerate like normal vehicles, though particularly quick changes in

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speed may be uncomfortable for passengers. Mag-lev train cars must be specially calibrated and networked with the engine as each car has its own magnet units. Generally mag-lev trains pull 30 cars at a time, but the upper limit is 60. If a mag-lev train loses power or hits an area of track that has suffered significant damage, the train will slowly come to a rest on the tracks via emergency power. Derailing a mag-lev train is difficult without an explosion or massive impact since it can go over any item of Medium size or smaller on the tracks without difficulty.

The Dawning Star Republic has no interest in placing their mag-lev trains in harm's way and so has not experimented with adding any weapons to them. Mag-lev trains do not normally have any armor plating. The DS-MR is ten squares long and four squares wide.

## Cargo Car

Used for hauling goods that cannot be exposed to the elements for whatever reason, cargo cars are essentially boxes on wheels (hence the name boxcars). Some are sealed containers for carrying liquid, but most are simply large rolling crates. The average cargo car has a single sliding door in its middle, on both sides, that is fifteen feet wide. These cars can carry up to fifty tons of cargo, including individual items of up to Large size. Most have locks on the doors, but that is not always the case. Due to the large number of cargo cars needed by the RTA they tend to build them out of whatever materials are on hand, from salvaged metal to wood to plastic sheeting. Few cargo cars are particularly resilient, and those that are tend to be reserved for special cargo.

Liquid cargo cars carry approximately 10,000 gallons of liquid and are better made than standard cargo cars. They are usually all metal or plastic and have numerous safeguards to keep the cargo from leaking, such as double hulls and auto sealant systems--particularly if they are carrying hazardous materials. Inflicting more than twenty points of damage causes the hull of a liquid cargo car to rupture.

Mag-lev cargo cars are better made than the standard variety, usually being made completely out of metal. They cannot move without being attached to an engine and will slowly float to the ground without a suitable power source.

## Flatbed Car

The simplest of the train cars, a flatbed car is simply a flat surface on which cargo can be stacked. It is open to the elements and provides no protection for its cargo. It is usually used to transport raw materials like lumber and ore as opposed to manufactured goods. Chains or rope are used to secure the load, and most flatbed cars have a number of hooks and fastening points for securing the load. In some poorer areas flatbed cars are used to transport people, but doing so is often dangerous as it is quite easy to fall off. Livestock are often transported on flatbed cars that have a barrier erected around their perimeter.

Mag-lev flatbed cars are rare since mag-lev trains are primarily used for less bulky goods. They cannot move without being attached to an engine and will slowly float to the ground without a suitable power source.

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## Passenger Car

While there is no uniform design for passenger cars in the RTA, they do all conform to some basic guidelines such as track gauge and connectors. These cars are generally made of salvaged steel or aluminum, though some have wood parts as well. The seats in passenger cars can be anything from old acceleration couches from the *Dawning Star* itself, to repurposed office chairs, to freshly made bench seats from the factories of Dawning Star City. These chairs are only rarely comfortable, and they are usually packed in tight. Most passenger cars can carry 40 people, though this can vary drastically. Above the seats are storage compartments that are sealed with a latch or hatch of some sort. Most seats also have some storage space under the seats, but any item of Small size or larger must be stowed in the baggage car.

Currently, while some passenger cars have reclining seats that can function as beds, there are no proper sleeper cars among the trains of the RTA. No train lines are currently long enough to warrant such conveniences, and generally space is at a premium. A passenger car has no ability to move on its own; it can only move when attached to a train engine.

Mag-lev passenger train cars are essentially the same as normal passenger train cars, except they are generally entirely metal and have seats made specifically for the train. They cannot move without being attached to an engine and will slowly float to the ground without a suitable power source.

Passenger cars are twelve squares long and four squares wide.

## MSI-43 Mine Processor Train

A recent development from Movement Systems Corporation, this twin-engine, eight-car train is equipped to smelt and cast all manner of ore, taking in chunks of metal and earth and turning out pure metal ingots. Capable of smelting 30 tons of material day, it can carry 200 tons of ore back to market under its own power. Crewed by three engineers, two pilots, and 20 metallurgists to run the smelter, the train has living quarters for all the crew. The normal operating procedure of the train is for it to travel through mining towns convenient to train lines until it fills up on ore, at which point it returns to Dawning Star City to unload. This process usually takes upwards of two months, but is more efficient than carrying all the raw ore back to Dawning Star City and smelting it.

The front and rear car of the Mine Processor Train are engines, both of which are powered by a single fusion reactor. The two cars behind the engine on the front are crew quarters; the third car is used for temporary storage; the fourth car is the smelter; and the final four cars are used for finished cargo. The Mine Processor Train has no weapons or armor as a standard feature, though the crew invariably has a number of personal weapons for repelling thieves and claim jumpers. The vehicle often travels with a contingent of twelve corporate security officers when traveling through less settled areas.

The Mine Processor Train is 100 squares long and 4 squares wide.

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## MSI-67 Mobile Factory Train

The most popular of MSI industrial trains, the MSI-67 is a multi-function portable factory that can make everything from farm tools to weapons to engine parts. Made up of two engines and 20 cars, it carries its own raw materials, spare parts, and work force along with it. The train carries four engineers, three drivers, ten machinists, sixteen corporate security officers, and 20 mechanics to keep the whole thing running. Normally the factory is configured in Dawning Star City to produce a certain good needed by a specific settlement. Once configured, it heads to that settlement to produce that good. The train then travels from town to town producing whatever is needed, with one to ten days needed to reconfigure the factory to produce different items. These excursions last upwards of a month before the Mobile Factory returns to Dawning Star City to re-supply. Only the largest towns can afford to bring the Mobile Factory Train to their town due to the high costs involved, but it is the only mobile manufacturing plant on Eos. The Mobile Factory Train spends most of its days in the Resource Zones, producing goods needed for agriculture and mining operations. The Mobile Factory Train carries upwards of 100 tons of raw materials when leaving Dawning Star City, but it can refill this load from various mining towns, or from the products of the Mine Processor Train, which is often sent out along with the Mobile Factory Train on particularly large jobs. The Republic makes ready use of the Mobile Factory Train when it needs to build settlements or infrastructure in a hurry, making it one of MSI's biggest customers.

The front and rear car of the Mobile Factory Train are engines to allow the train to travel in both directions without need of a turnabout. The first three cars are used for living quarters; the fourth car is used for storage; the fifth through tenth cars serve as cargo space for raw materials or finished goods; and the last five cars hold the actual factory components. The factory takes upwards of eight hours to set up its normal operating mode, which requires several support vehicles such as forklifts that are carried in the storage car. The train cannot move while the factory is in operation. The Mobile Factory Train is not equipped with any weapons or armor, but has a permanent attachment of security personnel to defend it.

The Mobile Factory Train is 150 squares long and 4 squares wide.

## T-56 Air Support Train

One of the two combat train prototypes constructed by the Dawning Star Republic, the T-56 is meant to provide a stable landing surface and repair services for vectored-thrust vehicles, such as the DS AC-18 Myrmidons used by the Republic. The train is 20 cars long. Eight of the cars are oversized flatbed cars used as landing platforms for VTOL vehicles; however, it is rare for more than four to be assigned to the Air Support Train at any given time due to the limited supply of such vehicles. The rest of the cars are used for carrying up to 100 personnel including six engineers, four drivers, 30 gunners, sixteen mechanics, six pilots, and 32 soldiers. The Air Support Train is meant to be a fully functional air base on wheels, complete with refueling and repair facilities, defensive systems,

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and its own security forces. While tactical doctrine involving the Air Support Train is still being developed within the EDF, it will most likely be deployed as a forward airbase during any armed conflict, and kept on the move to keep the enemy from getting a fix on its location. Though it does have some weapon systems, the Air Support Train is not designed to enter combat directly. Rather, it functions something like a land-based aircraft carrier, relying on its air vehicles for defense. The train is powered by two fusion reactors with a ten year lifespan.

The front two cars and rear two cars of the Air Support Trains are engines, and any one of them can pull the entire train if needed, meaning the train can keep moving in either direction even if one engine is taken out of commission. The first four cars serve as living quarters; the fifth through seventh cars serve as storage; the eighth and ninth cars are repair facilities, including cranes large enough to move a vehicle of up to Gargantuan size (if the train is stationary and the stabilizing legs are utilized); cars ten through seventeen serve as rearming stations and landing pads for up to eight VTOL vehicles of up to Gargantuan size; and the last three cars hold spare parts, munitions, and other supplies used for the VTOL vehicles. The Air Support Train is equipped with Duralloy armor, and has a dual mounted EDF-2 machinegun turret (3d12 damage) on each engine and car. The third car carries a Falcon Missile Launcher with 8 missiles, and the train carries at least 24 more missiles in storage. The nineteenth car also has a pod of 20 heavy rockets, with 60 more held in storage.

The Air Support Train is 240 squares long and 4 squares wide.

## T-90 Ground Support Train

Seen as the companion to the T-56 Air Support Train, the T-90 is designed to get troops quickly to the front and provide artillery fire support while doing so. Similar in concept to the massive train guns of old Earth's 20<sup>th</sup>-century wars, the Ground Support Train is effectively a massive artillery and troop transport vehicle. The train has yet to see real combat or any lengthy field testing. Instead it is still undergoing tests at the EDF Headquarters outside Dawning Star City and the Ernie Artillery Range south of the city. The train is expected to be ready for service in six months, though it is unlikely to see any actual combat duty for some time. The EDF sees it more as a deterrent than an actual tool of war. The Ground Support Train has a crew of six engineers, four drivers, 48 gunners, 20 mechanics, twelve vehicle operators, and 200 soldiers. The Ground Support Train is powered by a pair of fusion reactors, each with a lifespan of 10 years.

The Ground Support Train has an engine at both ends, in case one breaks down, and 21 cars in between. The train can be divided, splitting its cars between the two engines, to spread its firepower out over a larger area. The first eight cars are used for living quarters and storage for those assigned to the train; the next three cars are used for storage; the twelfth car holds a pair of Basil APCs and a repair shop for the train; the thirteenth car serves as storage and holds four Ski-Skipper Hoverbikes that are used for scout duty and forward observation; the fourteenth and

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fifteenth car hold the EDF-982 Heavy Rail Cannon, the largest projectile weapon in the EDF armory; the sixteenth car serves as an electronic observation and communication post, linking into the EDF satellite network and communication grid for reports on troop movements and to assist with accurate artillery barrages; and the last five cars each hold two EDF-180 artillery pieces, each of which is a 180mm rail gun. In addition to the above-listed armaments, the Ground Support Train has a dual-mounted EDF-2 machinegun turret (3d12 damage) on each engine and car. This gives the Ground Support Train a massive amount firepower that can easily be brought to bear anywhere there is a train track. Duralloy armor is standard for the Ground Support Train.

The Ground Support Train is 250 squares long and 4 squares wide.

Name	PL	Crew	Pass	Cargo	Init	Man	Top Spd	Def	Hard	HPs	Size	Purch DC	Restrict
DS-HR Engine	6	2	4	1 ton	-6	-8	120	6	10	56	G	36	Lic (+1)
DS-MR Mag-Lev Engine	7	4	4	1 ton	+0	-4	600	6	10	50	G	42	Lic (+1)
Cargo Car*	5	0	0	50t	-12	-12	0	6	5	42	G	26	-
Flatbed Car*	5	0	0	50t	-12	-12	0	6	5	34	G	22	-
Passenger Car*	5	0	40	10t	-12	-12	0	6	5	45	G	28	-
MSI-43 Mine Processor	6	5	20	200t	-12	-14	100	2	10	240	C	48	Lic (+1)
MSI-67 Mobile Factory	6	7	46	200t	-10	-14	90	2	10	262	C	50	Lic (+1)
T-56 Air Support	6	56	48	120t	-10	-18	110	10	15	294	C	52	Mil (+3)
T-90 Ground Support	6	78	240	200t	-10	-20	100	10	20	316	C	54	Mil (+3)

\*Requires a train engine to move.

## Trains of the Faction-Camps

The passenger, cargo, and flatbed cars used by the faction-camps are functionally the same as those used by the Republic, except that the faction-camps have no mag-lev cars. Passenger, cargo, and flatbed cars are all regularly used by the faction-camps, though they are usually of lower quality than those used by the Republic due to lack of parts. Flatbed cars are especially common due to their ease of construction.

## Hercules Train Engine

The main train engine used by the faction-camps, these are diesel-powered engines based on old Earth designs and powered by petroleum brought up from the ocean floor near Roger's Point. Due to the lack of advanced parts among the faction-camps, their trains are not powered by fusion reactors and instead have to rely on other means of power generation. About three of the twelve Hercules Train Engines in service have been retrofitted with fusion reactors, and there are plans to eventually retrofit them all, but for now the faction-camps are stuck with what they have. A large and boxy vehicle, it is not very attractive, but it is extremely solid. It is built to use 2.5 meter gauge track, meaning it cannot use Republic tracks, but can use most faction-camp tracks. Currently

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Roger's point has six of these machines; Steel End has two; Sunder Ridge has two; Lanner's Crossing has one; and Delhi has one. Most of the Hercules Train Engines were built in Steel End or Roger's Point.

Capable of pulling upwards of 100 train cars, the Hercules is a very powerful machine. It is extremely reliable and while not fast, it can operate for hours on end without fear of overheating or suffering mechanical failure. Indeed the dependability of these machines has become legendary among the faction-camps despite the fact they were all built from scavenged parts. "Steady as Hercules," has become a common compliment among faction-campers, who far prefer their slow but solid machines to the faster but more unreliable mag-lev trains of the Republic.

Armor and weapons are not standard features on the Hercules Train Engine, though some faction-camps have added both in order to protect their investments. The Hercules Train Engine is twelve squares long and three squares wide.

## Air Deployment Unit

A recent creation of Roger's Point's weapons development community, the Air Deployment Unit is the first military train constructed by the faction-camps. Meant to be part of a fast response strategy against future Republic incursions similar to the attack on Red Hill, the Air Deployment Unit is intended to get a sizeable amount of troops into position along with air cover and supplies. The Air Deployment Unit is designed not only to quickly deploy a number of light attack aircraft, but also provide direct fire support for its troops. The vehicle has been rushed through its testing phase by Patricia Rogers, and some think it is not ready for field duty. Its crew is already undergoing field training around the area controlled by Roger's Point. The Air Deployment vehicle can only travel on faction-camp rails, and transporting it off Dawnhome would be a major undertaking. The Air Deployment Unit has a crew of four engineers, three drivers, eight mechanics, 40 gunners, twelve pilots, and 80 soldiers. It can carry an additional 80 soldiers if need be.

The Air Deployment Unit uses a single Hercules Train Engine for mobility, though eventually a second engine is planned to be added to the end of the train when one becomes available. Currently the Hercules Engine assigned to the Air Deployment Unit has a fusion reactor. The Air Deployment Unit consists of fifteen cars, though this can be switched around as needed. The first car is a fuel car; the next four usually serve as crew quarters and storage; the fifth car serves as a gunnery and communication station, housing an R-23 Tangier Rocket Battery, a T-180 Tangier Heavy Cannon, an advanced communication and sensor suite including radar and satellite communications; the sixth through twelfth cars are flatbeds that are linked together to serve as a short, makeshift runway for launching slingwings (see below); the thirteenth car is another gunnery car with an R-23 Tangier Rocket Battery and a pair of Daxion Arms D-12 Rail Cannons; and the fourteenth and fifteenth cars serve as storage, repair and rearming bays for the slingwings. All the cars in the train have two turrets with a pair of fire-linked D-1 Longarm Rifles (4d6 damage). The Air Deployment Unit is equipped with Alumisteel armor.

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The slingwing launching platform is equipped with catapults for launching and nets for landing. When these cars are not being used for take off or landing operations, they are used as storage space for the slingwings. The deck must be cleared before any slingwings may be launched, which generally takes less than five minutes. The Air Deployment Unit can carry up to twelve slingwings.

The Air Deployment Unit is 150 squares long and 4 squares wide.

## Roger's Point Street Cars

An impressive product of civilian engineering, the street cars of Roger's Point are surprisingly functional and flexible machines considering they come from a town so oriented toward making tools of war. The street cars are approximately 60 feet long, twelve feet wide, and ten feet tall. The driver of the car stands at the front, while the passengers ride in 60 chairs lining the interior sides of the vehicle. These chairs may be folded up into the ceiling to open up storage space. When so configured, the street car can carry up to ten tons of cargo. The vehicle can be exited through doors on either side at the front, middle, and rear. The street cars are made primarily of wood with steel supports and joints, though all the undercarriage is made of steel.

The street cars run off power lines that stretch above their tracks. The street cars use metal rods to remain in contact with these lines, though they also have internal batteries that allow them to function for up to two hours without an external power source. The street cars can only follow the tracks laid out for them, but otherwise behave like normal vehicles. They have no armor plating as a standard feature.

The Roger's Point street cars are 12 squares long and 3 squares wide.

## The Slingwing

A recent development on the part of the EFL, these devices are similar to the ultralight aircraft of old Earth. Built of little more than metal supports, cloth, and an oversized motor, they are not very fast or resilient but they are cheap and efficient. Powered by gasoline engines, they can be easily constructed out of common materials and repaired just as easily.

Slingwings can even be disassembled in five minutes, collapsing to the size of a Medium-size object; setting the slingwing back up takes ten minutes. These vehicles have only been developed by the EFL within the last year and have not seen much service outside of scouting and survey operations, but the EFL hopes to use them as bombers in any future military actions against infantry and armor units. The EFL realizes that the slingwings would have no hope of shooting down actual combat aircraft, and so instead concentrates on using them against ground targets.

Slingwings are not equipped with any armor to speak of and have little protection for the pilot, granting only one-half cover. Because of their light weight they can take off over very short distances, requiring only 300 feet (100 feet with a catapult). Slingwings are usually equipped with 6 light rockets, 4 Tangier Missile Launchers, or a D-12 Rail Gun Cannon. These weapons are located along the bottom of the pilot's seat and can be



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changed very quickly due to a cleverly designed modular loading system. Theoretically a slingwing that has expended its weapons can land, be refueled rearmed, and get back in the air in less than five minutes. On a full tank of gas, a slingwing has a range of 100 miles, but it is not equipped to travel above an altitude of 5,000 feet.

The slingwing is 3 squares long and 5 squares wide. The slingwing is considered an Ultralight class aircraft for purposes of the Aircraft Operation feat.

Name	PL	Crew	Pass	Cargo	Init	Man	Top Spd	Def	Hard	HPs	Size	Purch DC	Restrict
Hercules Train Engine	5	2	2	1 ton	-7	-8	110	6	10	56	G	32	Lic (+1)
Air Deployment Unit	5	55	92	100t	-10	-18	100	7	15	290	C	48	Mil (+3)
Roger's Point Street Car	5	1	60	10t	-4	-4	70	6	5	48	G	29	Lic (+1)
Slingwing	5	1	0	20 lb.	+2	+2	130	8	5	24	H	23	Lic (+1)

## Vehicular Weapons

### EDF-982 Heavy Rail Cannon

The largest surface vehicle weapon in the EDF arsenal, it was designed and built using parts from rail guns salvaged from the *Dawning Star*. The first EDF-982 has only just recently entered service, and it is unlikely more will be produced due to a lack of vehicles that can mount them and the questionable tactical use of the weapon. While capable of inflicting immense damage over long ranges, the Dawning Star Republic doesn't feel that such weapons are the direction its research should be heading. As much a weapon of intimidation as utility, many fear the EFL will take the development of the EDF-982 as a precursor to an attack on the faction-camps.

The EDF-982 is a massive weapon that can accurately hit large targets miles away, but it does not have pinpoint accuracy for smaller targets. It can fire in both direct and indirect modes. The targeting mechanism adds a +8 bonus to attack rolls if the operator takes a full-round action before firing to aim. The EDF-982 cannot be fired at a target closer than 1,000 ft. since its barrel cannot be depressed to a sufficient angle. The EDF-982 has an automatic loading mechanism so it may fire without pausing to reload. The automatic ammunition feed itself houses 50 rounds; once that is expended a new ammunition feed must be attached, which takes five minutes. The standard shell of the EDF-982 is a solid sabot round that inflicts 10d12 points of damage and ignores 10 points of hardness. An experimental shrapnel-producing rounds has been developed that inflicts 8d6 concussion damage on the target and 6d6 piercing damage on everything within 100 feet of the target, Reflex save (DC 16) for half damage.

# TRAINS OF EOS

## EDF-180 Rail Cannon

A smaller version of the Magna-6 Rail Cannon used on the Armadillo heavy tank, the EDF-180 is an economical version that can be more easily constructed given the limited resources of Eos. Most of the EDF-180s have been built using salvaged parts from the many rail cannons mounted on the *Dawning Star*, but the newer models are made with original parts. The EDF hopes that the EDF-180 will become the standard heavy cannon for its forces within a few years and is currently working on a plan to retrofit it to the Basil APCs still in service. The weapon can already be seen in newer vehicles and installations of the EDF, such as the Ground Support Train and the Fort Westmore near Hapeville.

The EDF-180 is a direct-fire anti-armor weapon. It ignores 5 points of hardness. Loading the weapon requires a move equivalent action.

## R-23 Tangier Rocket Battery

An upgraded version of the technology used in the Tangier Missile Launcher, this weapon system uses Tangier Missiles without guidance systems as direct or indirect fire weapons. This weapon is a new favorite among the EFL due to its ease of construction and relatively low cost. It is becoming an increasingly common sight among the fortifications and vehicles of the EFL, much to the consternation of the EDF since the R-23 is a formidable weapon platform. This is one more forceful step in the EDF's efforts to curtail the operations of the Tangier family.

The rockets can be equipped with either armor-piercing warheads (6d12 damage, ignoring 5 points of hardness) or high explosive warheads (6d6 damage to the target, 4d6 to everything within 30 feet, Reflex save (DC 14) for half damage). The rockets may be fired in salvos using the rules for automatic weapons, allowing the operator to strafe an area with rockets. The Tangier Rocket Battery holds 20 rockets when fully loaded and can be reloaded in five minutes.

## TR-150 Tangier Heavy Cannon

The first entry into the cannon market by the Tangier family, the TR-150 is meant to serve as a main battery weapon for armored vehicles and fortifications. The EFL hopes to eventually field a tank using the Tangier Heavy Cannon, but so far such plans are years off. For now the only vehicle carrying the TR-150 is the Air Deployment Vehicle, though some fortifications around the Southern Circuit have been reinforced with TR-150s. While not as effective as the Magna-6 Rail Cannon used by the Armadillo heavy tank, the TR-150 still packs an impressive punch.

The TR-150 uses a high-explosive round as its standard round. It inflicts 4d6 concussion damage on everything within 15 feet of the target. Reloading the TR-150 requires a move-equivalent action.

Weapon	PL	Damage	Critical	Dmg Type	Increment	RoF	Mag	Size	Weight	Purch	Restrict
EDF-982 Heavy Rail Cannon	7	Varies	19-20	Ballistic	6,000 ft.	S	50	C	12 tons	42	Mil (+3)
EDF-180 Rail Cannon	7	6d12	19-20	Ballistic	500 ft.	S	1	H	1,100 lb.	28	Mil (+3)
R-23 Tangier Rocket Battery	6	Varies	19-20	Concussion	4,000 ft.	A	20	H	1 ton	27	Mil (+3)
TR-150 Tangier Hvy Cannon	6	6d10	19-20	Ballistic	800 ft.	S	1	H	1,500 lb.	27	Mil (+3)

# TRAINS OF EOS

## Margaret Pietov, Rail Marshal

Margaret grew up in one of the small settlements surrounding Dawning Star City. She is first-generation Eotian. In her youth, her small town was only connected to Dawning Star City by a single dirt road. When she turned eight, the train came to town. Almost overnight the town became a thriving farming town. Since that day Margaret has had a fascination with trains.

When she turned eighteen she left home to see those wonders, but found them to be less than she had hoped. Margaret found Dawning Star City to be dirty, noisy, and crowded, nothing like the gleaming towers of steel and science she had expected. The journey on the train though was everything she had expected, so she set her sights on earning her living on the rail lines. To this end she joined the Republic Transit Authority, starting as a lowly baggage handler. When her experience with the militia of her home town came to the attention of her superiors, she was moved to the Rail Marshal division during the days of its infancy and became one of the first Rail Marshals.

Now she has been a Rail Marshal for nearly two decades, and while some of her wonderment is gone, she still loves the trains she protects. Rarely sleeping more than two nights in the same place, she is a modern-day nomad, constantly traveling across the Republic keeping its train lines safe. She has become something of a legend among train engineers, who see her as a good luck charm. Things rarely go bad on the trains she is assigned to, and if they do she's always managed to control the situation.

Margaret Pietov's appearance is described by many as bullish since she retains the rather stout build of her early days on the farm. While not what most would consider attractive, she has a kindness to her face that many people find endearing. She keeps her hair cut short and her uniform clean, always doing her best to look like an agent of the Republic.

**Margaret Pietov (Dedicated Hero 4/Lawman 4):** CR 8; Medium humanoid; HD 8d8+16; hp 56; MAS 14; Init +0; Spd 30 ft.; Defense 19, touch 16, flat-footed 16 (+6 class, +3 armor); BAB +6; Grap +8; Atk +9 melee (1d8+2, whipstick) or +9 melee (1d3 electricity and stun, stun gun), +7 ranged (2d6+2, EDF-9 Auto-Pistol); Full Atk +9/+4 melee (1d8+2, whipstick) or +9/+4 melee (1d3 electricity and stun, stun gun), +7/+2 ranged (2d6+2, EDF-9 Auto-Pistol); FS 5 ft. by 5 ft.; Reach 5 ft.; SQ Force of law, legwork, weapon specialization (EDF-9); AL Dawning Star Republic, RTA; SV Fort +9, Ref +2, Will +6; AP 10; Rep +3; Str 14, Dex 10, Con 14, Int 12, Wis 14, Cha 10.

**Occupation:** Law Enforcement

**Skills:** Drive +6, Gather Information +4, Intimidate +9, Investigate +8, Knowledge (Civics) +6, Listen +11, Read/Write Language (English), Repair +4, Search +7, Sense Motive +15, Speak Language (English), Spot +15, Treat Injury +5.

**Talents:** Empathy, Intuition

**Feats:** Armor Proficiency (Light), Alertness, Attentive, Great Fortitude, Personal Firearms Proficiency, Point Blank Shot, Simple Weapon Proficiency, Surface Vehicle Operation (Trains), Weapon Focus (EDF-9), Vehicle Operation.

**Possessions:** Rough outs, whip stick, stun gun, EDF-9 with 4 clips, universal communicator, sheet of train schedules, pocket watch.

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