



VEHICLES

A SOURCEBOOK FOR THE TRUE20 GAME SYSTEM
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REQUIRES TRUE20 ADVENTURE ROLEPLAYING
BY GREEN RONIN PUBLISHING FOR USE





CHAPTER THREE: FANTASY AND LOW-TECH VEHICLES

Karrigos' chariot rolled on to the plains surrounding Karganost Peak, home of Zaraha, the dragon-purge of Hexia. The drake's foul smell permeated the lifeless landscape. Bleached bones and rusted armor littered the area, fallen champions of Hexia all. Karrigos' horses shimmered with the aura the wizard Niflong placed on them to protect them from Zaraha's melting breath. Karrigos' chariot was a target that Zaraha could not ignore.

The chariot was made from the skin of Zaraha's spawn, Nestor. Karrigos slew that dragon last summer, hiding in the waterfalls of the Kundor Mountains. Zaraha was going to be his greatest triumph or his greatest defeat. Karrigos would have it no other way. He unlimbered his massive lance as the brass shod wheels of his great chariot ground another bone into the dust of the hellish wasteland.

Optional Rule (Special bonus to Drive skill): Animals power most low-tech land vehicles, thus their strength is a combination of animal tow power and construction quality of the vehicle. Vehicle operators that have at least 5 ranks in Handle Animal skill enjoy a +2 bonus to any Drive skill checks made when operating an animal powered vehicle.

Optional Rule (Sailing): Using prevailing weather patterns or by determining them randomly, the Narrator sets wind direction and speed. Wind speeds can add up to +3 to a sailing vessel's SR, but the vessel can also be slowed if sailing against the wind. Sailing directly into wind is not possible, but tacking may be possible within a 30-degree angle of the wind's direction. Drive checks determine how effective a tack is at capturing the additional speed from high winds. Drive checks to maintain stability can suffer up to a -5 penalty in severe storms.

Sailors in the rigging of sail ships do not gain cover bonuses to defense.

VEHICLE WEAPONS

Arbalest: A very heavy vehicle mounted crossbow. Some cultures use "quadralests" that can fire four bolts at the same time.

Ballista: Siege weapon that fires heavy spear like missiles. This weapon requires a crew of two.

Catapult: Siege weapon that fires stones in a high arcing cast. The weapon requires a crew of four.

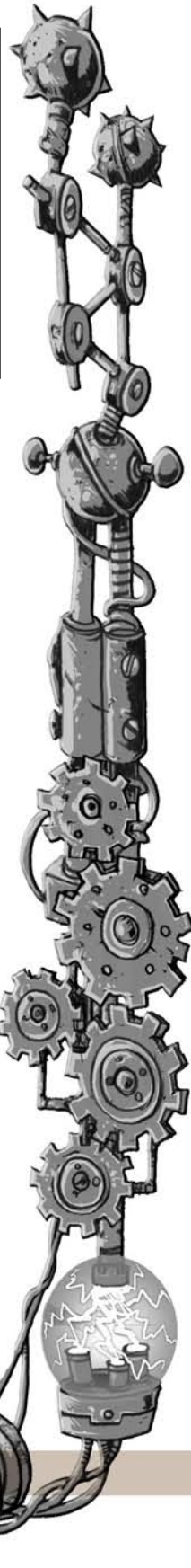
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Light Chariot: Lightly built and prone to crashing, breaking apart or tipping over, light chariots harass enemy formations with hit and run tactics, using their superior speed to dash into missile range while its crew fires bolts, throws javelins or tosses burning oil pots into enemy ranks. Pulled by one horse, light chariots have crews of two, one driver and one archer, both of whom stand in the body of the vehicle. Light chariots have a basket inside for additional missile weapons or spears. The crew has no cover from rear attacks.

Charioteers can target enemies with the blades (+5 damage) sometimes built into the wheel hubs. The charioteer steers his vehicle into the area of his target and makes a Drive check to attack the target's defense.

Heavy Chariot: Heavy chariots are designed to break through enemy ranks like heavy cavalry. Pulled by two horses, heavy chariots have three to four crew members armed with long spears, heavy crossbows and buckets of javelins.

Heavy chariots can also be used to attack enemies by running them over or tearing into them with the wheel mounted blades (+6 damage), at a -2 Drive penalty for the attack roll due to their lack of maneuverability compared to the light



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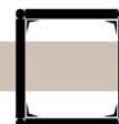
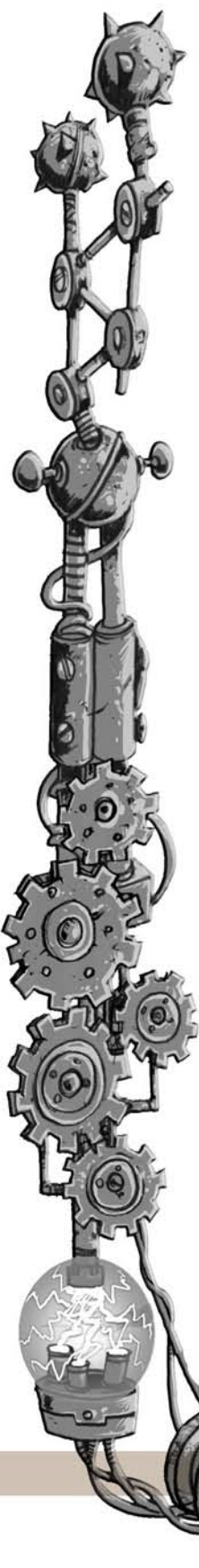
TABLE 3.1 FANTASY AND LOW-TECH VEHICLES

Vehicle	STR	ACC	Top (SR)	Speed	Stability	Defense	Toughness	Size	Cost
Light Chariot	+0	3	7		5	10	3	Med	18
Heavy Chariot	+5	2	6		7	9	5	Large	20
Dragonslayer Chariot	+6	2	5		7	9	9	Large	38
Horse & Buggy	+5	2	6		8	10	4	Large	14
Light Carriage	+5	1	5		10	9	5	Large	16
Heavy Carriage	+10	0	4		12	8	7	Huge	18
Carriage of the Gothic Lord	+6	2	6		13	8	8	Huge	34
Wagon	+5	-1	1		15	9	6	Large	5
War Wagon*	+12	-2	1		12	8	9	Huge	35
Dungeoneer's Utility Cart	+0	--	1		7	10	2	Small	4
Siege Steamer*	+10	-2	1		12	8	8	Huge	40
Canoe	+0	1	1		2	10	2	Med	5
Small Rowboat	+0	1	1		3	10	3	Med	6
Rowboat	+5	1	1		4	9	5	Large	7
Wicker Boat	+3	1	1		2	10	0	Med	4
Cave barge	+0	1	1		5	10	4	Med	7
Auxiliary Boat	+5	1	2		4	9	5	Large	8
Fishing Boat	+10	2	3		5	8	7	Huge	14
River Barge	+10	1	2		6	8	7	Huge	12
Royal Galley	+25	1	3		10	-2	13	Awesome	44
Coastal Barge	+10	1	2		10	8	7	Huge	14
Small Merchant ship	+15	2	4		7	6	11	Gargant.	26
Merchant Ship	+15	2	4		8	6	11	Gargant.	28
Large Merchant Ship	+20	1	5		10	2	13	Colossal	38
Longship	+15	3	6		6	7	11	Gargant.	30
Expedition Longship	+17	2	6		6	7	11	Gargant	32
Small War galley	+11	4	7		5	9	9	Huge	26
Galleon	+20	1	4		10	2	13	Colossal	32
Galley	+25	1	4		10	-2	15	Awesome	35
Man o' War	+22	2	5		12	-2	16	Awesome	40

*Vehicle is armored and crew cannot be targeted until vehicle is "dying". The crews of unarmored vehicles have cover unless specified otherwise in the vehicle's description.

TABLE 3.2 ADDITIONAL LOW-TECH AND FANTASY VEHICLE WEAPONS

Weapon	Dam	Critical	Descriptor	Range	Size	Price
Arbalest (exotic)	+4	19-20/+3	Piercing	30 ft.	Large	14
Ballista (exotic)	+6	20/+4	Piercing	50 ft.	Large	18
Catapult (exotic)	+8	19-20/+4	Bludgeoning	70 ft.	Large	18



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chariot. The crew has no cover from rear attacks.

Dragon-slayer Chariot: This heavy chariot is enclosed with dragonscale armor, granting DR 2/supernatural. It is enclosed with high walls of reinforced dragon scales except in the back, giving its crew of three cover from all directions. Reinforced weapon mounts on the sides and front allow the use of lances and/or the fire of high draw weight crossbows that can punch through the heavy scale hide of dragons.

Horse and Buggy: One horse pulling a light two-wheeled open carriage or buggy. Capable of carrying two people and a few hundred pounds of cargo, no one in a buggy receives cover.

Light Carriage: Enclosed wooden vehicles with four wheels, drawn by two horses or mules. Light carriages can carry up to four passengers and their personal effects. The carriage crew is one or two teamsters riding on top.

Heavy Carriage: Drawn by four or six horses, heavy carriages can carry up to 8 passengers and their personal luggage. Two teamsters riding on top of the carriage operate the vehicle.

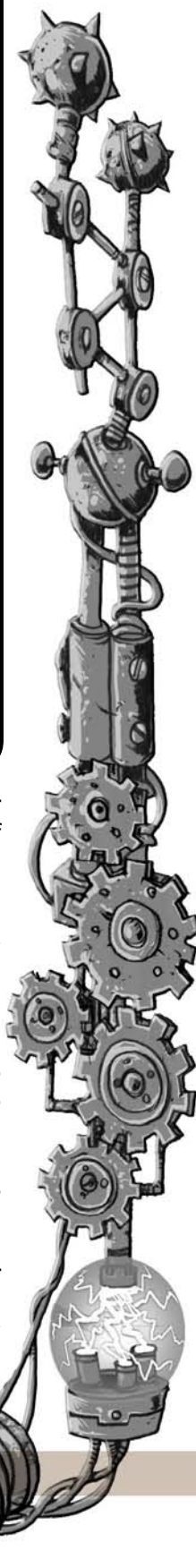
Carriage of the Gothic Lord: *Sleek, black and ominous, it appears from the mists, drawn by a single black stallion with fiery eyes and foggy breath, moving without fail and with little sound. The carriage man on top sits silently, his face invisible under the hooded cloak, the bridle in his hand never moving.* Crafted of light woods polished black as night, this is a typical dark carriage of legendary undead villains. Imbued with supernatural powers, it is lighter and quieter than is possible with normal craftsmen. It can carry six passengers in elegant comfort on plush purple velvet benches. Advising the carriage driver of your destination is futile, for he already knows where he is taking you.

War Wagon: Six strong oxen are required to draw these huge mobile castles due to their weight and bulk. Armored on all sides, including the driver's position, war wagons are metal clad boxes crewed by six soldiers bristling with an array of weapons. Heavy crossbows, light ballistae, stone casters and all types of thrown weapons lurk behind the



sliding firing ports of the dreaded war wagon. These wagons establish lines of dominance on the battlefield, lined up next to each other around key battlefield features. Light infantry frequently stand along side the wagons to support the crew and to keep enemy troops from overrunning or burning the wagons.

Dungeoneer's Utility Cart: Man always builds vehicles and tools to make difficult tasks easier, and in cultures where adventurous spelunking is common, the dungeoneer's utility cart helps haul supplies in and loot out of dark, dangerous and difficult places. One medium sized creature hauls this cart. Its rugged small wheels and narrow frame allow it to enter areas too small for most other vehicles. Three people can take it apart within a few minutes and carry it away. It can haul up



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Great Eastern: The largest original steamship ever built, the massive Great Eastern could carry up to 4,000 passengers. Crewed by 300, the vessel was not very stable in rough seas and a commercial failure. It was eventually scrapped but not after it laid trans-oceanic telegraph cables all over the world. It was built in 1858 and scrapped 30 years later.

Ironclad: Armed with breech-loading cannon, the ironclad warships of the American Civil War and later were terrors of the sea, but hampered by their poor seaworthiness.

Hot Air Balloon: Early models were used from the late 1700's on to observe battlefields and guide artillery, moored to the ground with ropes and lifted into the air with coke gas (gas produced from coal). Sometimes snipers were lifted into the air, but the unstable platform made their fire erratic. Hot air balloons can carry up to 1000 lbs.

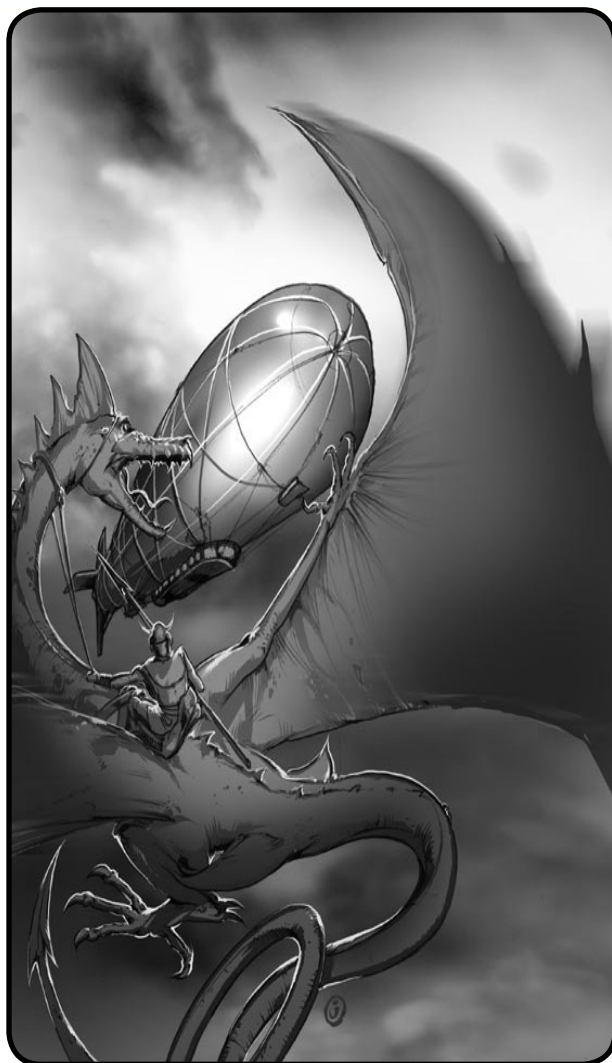
Blimp: Helium filled and smaller than their rigid hydrogen filled cousins, the Zeppelins, the archetypical blimp carried a crew of six aloft, powered by early internal combustion propeller engines.

Zeppelin: Hydrogen filled and made with a rigid hull, Zeppelins carried dozens of passengers in fine style across the oceans. Zeppelins had auxiliary biplanes and a crew of two dozen, dressed to the hilt, thoroughly trained and professionally polite. A "dying" Zeppelin explodes in a huge ball of flame, dealing +10 damage to everyone within 200 feet.

Spirit of St. Louis: Durable long range single engine monoplane famous for its first transatlantic crossing by Charles Lindbergh in 1927. When not engaged in breaking records, this type of aircraft carried six people and/or 2000 lbs of cargo at ranges up to 800 miles.

Biplane: These early airplanes were armed with Maxim guns and carried a crew of one or two. Flimsily built and with short range, they rekindled the romantic image of knights in the air for many people in the early 20th century.

Biplane Bombers: Twin engined and crewed by four, these contraptions carried



a few light bombs and Maxim guns with which to harass the enemy and cause terror among civilians. The bomber did not come into its full potential until the later modern age.

Autogyro: this two passenger aircraft uses a radial engine to provide forward thrust. Lift is provided by two blades that rotate due to the action of the air being forced over them, similar to a glider. Autogyros are often mistaken for early helicopters.

STORY/SCENARIO IDEAS

The heroes are knights of the air, World War I fighter pilots who fought the huns during the day and partied at night. They engage in rescue missions, help local civilians and go on dangerous night flights to recon enemy airfields and positions. Sometimes shot down, the heroes evade enemy patrols as they make their way back to friendly lines,



charming Mademoiselles along the way, as they are ever suave.

The heroes are Victorian era explorers of the Dark Continent making their way up unknown tributaries of the Upper Nile in their converted paddle steamer. They search for lost cities, battle unknown monsters and make peace treaties with local tribes as they draw ever nearer to their goal of creating a complete map of the area.

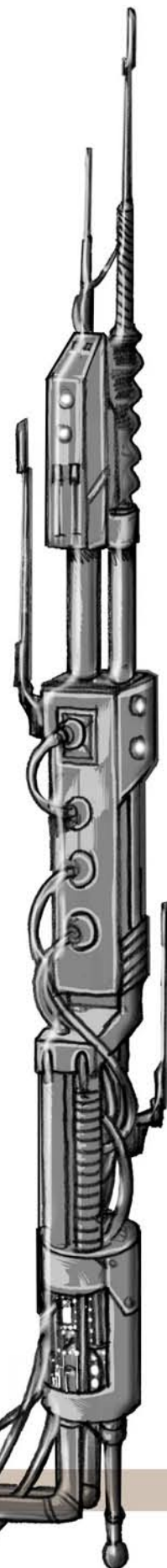
The heroes are American civil war blockade-runners, using their partially steam-powered sail ship to run rum and other cargo in and out of Charleston, South Carolina. Along the way, they battle not only the Union warships seeking to keep them out, but also corrupt officials, evil press gangs and rival smugglers who seek to undo the competition.

THE GOLDEN AGE

Sean O'Bannon, patrolman, sat astride his police horse, surveying the Chicago street before him. About a hundred yards away, the Gatling Gang was pulling another jewelry heist, their Packard Deluxe 8 idling with a lookout up front. O'Bannon waited, but not for long. With the high pitched scream from the saleswoman inside rising in volume as the front door opened, the Gatling brothers and their mother Maybelle ran out, Gavin Gatling firing one more shot into the store from his Tommy gun. He laughed when he saw O'Bannon on his horse and tilted his hat to Sean with a smug smile. O'Bannon reached down for the callbox on his saddle. The voice on the other end was hoarse with anticipation.

"They're done," O'Bannon said as the Packard sped away down the street. O'Bannon smiled himself as he heard the roar of dozens of motorcycle engines fill the nearby alleys and he even thought he could hear the sound of the shotguns being chambered over the engines.

"The Gatling Gang will get theirs tonight," O'Bannon said, his stirrup lightly bringing his horse forward as the screaming saleswoman finally burst on to the street, proclaiming the robbery between her sobs and frantic wails.



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great opportunity presented itself. Crewed by six to eight, a Catalina could carry about 10 passengers or a ton of cargo.

Pan Am Clipper: A long-range flying boat dedicated to trans-oceanic passenger transport, such as the Boeing 314. Pan Am Airlines, famous for its clipper aircraft, helped make the world a smaller place by connecting Far Asia and Europe to the Americas using their super luxurious and expensive clipper aircraft. A clipper aircraft could carry up to about 20 passengers and a crew of 10 to 12, including a chef and steward who saw to the passengers' desires.

FW-200 Condor: Long range bomber, long range naval scout or marine attack plane, the four engined Focke Wulf 200 Condor is representative of similar models. Capable of carrying 25 passengers or 4 tons of bombs, the Condor was the first aircraft to make a non-stop flight between Berlin and New York, making the trip in just over 24 hours.

Douglas DC-3: Twin engined cargo plane capable of carrying almost 4 tons of cargo or up to 32 passengers, the DC-3 was a military aircraft and civilian airliner. The stats presented here function also be used for other, similar aircraft of the era, such as the Ju-52.

B-17 Bomber: The most famous strategic bomber ever built, the tough and heavily armed B-17 had multiple heavy machine gun mounts, including belly turrets and blisters of guns pointing in all directions. Crewed by nine, it usually carried about 6-7 tons of bombs.

Mitsubishi G4M Betty Bomber: Twin engined medium bombers fall into this category and it also includes the B26 Marauder and He-111. Crewed by five to seven, these bombers carried 2-3 tons of bombs.

Late Model Biplane: The last generation of biplanes saw use as early fighters in World War II. They came into use in the late 1920's, armed with two light machineguns and two 200 lb. bombs. Some models were used as naval attack aircraft late into the war, such as the British Swordfish, which



carried one anti-ship torpedo slung under its belly.

Very Fast Fighter: First generation jet fighters fall into this category, including the famous Messerschmitt 262 "Schwalbe," which scored over 500 kills to 100 losses during the last few months of World War II. Typically armed with light cannon and two heavy machineguns, the very fast fighter had one pilot.

Fast Fighter: This vehicle category describes propeller driven fighter planes built for speed, such as the P-51 Mustang. Armed with six heavy machineguns firing in unison, the fast fighter was a scourge of the skies.

Escort Fighter: Many fighters in World War II did double duty, such as the P-51 Mustang, which was an exemplary escort fighter. However, for this supplement it is a fast fighter. The escort fighter described here is P-47 Thunderbolt. Armed with two light cannon and four heavy machineguns, the escort fighter roamed World War II skies.

Light Fighter: The Japanese Zero exemplified light, agile and dangerous fighters of World War II, armed with four light machineguns and one light cannon.

Heavy Fighter: Twin engined fighters are in this category, such as the P-38 Lightning and Me-110. Armed with a single light cannon and up to six heavy machineguns, the heavy fighter was also used as a night fighter later in the war, equipped with rudimentary radar sets.

Torpedo Bombers: Heavy single engine carrier borne aircraft that carried one torpedo for ship attack and had a crew of two to three. One rear gunner used a light machinegun to



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fend off enemy fighters, usually with little success.

Assault Glider: Unpowered and towed to their release point by cargo aircraft, the assault glider delivered 10-20 soldiers and a light vehicle or artillery piece to a predesignated landing zone. Assault gliders were fragile and difficult to handle and the tactic of glider assaults became obsolete with the end of World War II and the advent of the helicopter.

Air Limousine: Sir Frank Whittle developed the first production jet engine for the Royal Air Force's "Meteor" in the early 1940's. Whittle was approached by a conglomerate of wealthy Europeans living in Britain in exile during World War II. Bored and wealthy, these exiles financed Whittle's designs by commissioning jet powered air limousines. Developed in secret, these six passenger luxury jet aircraft preceded even the "Meteor" in operational status. The wealthy "jet set" delighted in the add-on of a twin 20mm cupola gun to defend their latest toy against the odd roaming German fighter. Pilots were dressed as chauffeurs and took their wealthy charges on delightful jet powered romps around the British countryside until a series of alcohol fueled human error crashes brought the end of the air limousine era until the Lear jet and other business jets were developed.

STORY/SCENARIO IDEAS

The heroes are bootleggers or tax agents during America's prohibition, using their powerful motor cars in great escapes or to chase down their foes. Set in the dark alleys of crime-ridden streets, stained by the Great Depression, the heroes follow their prey through smoky speakeasies, degenerate crime dens and City Hall itself. Whether corrupt or on the side of Elliot Ness, the heroes are never far from their cars and motorcycles.

The heroes serve on board a U.S. navy gunboat plying the rivers of China enforcing trade agreements and protecting U.S. interests in the 1920's. The Chinese Communists actively battle the foreign invaders and try to harass and destroy U.S. missions and trade stations all along the Yangtze and other rivers. The heroes go on a series of missions to free American prisoners and protect U.S.

facilities. Optionally the heroes are Chinese nationalists seeking to destroy the American and European invaders.

The heroes are prisoners of war in a German World War II prison camp. The heroes have made spare keys to a pair of German Army trucks. Can they escape over the back roads of Germany? Can they make it to the Swiss border dozens of miles away, chased by the guards, the police, and even a scout plane armed an MP-40 submachine gun wielding colonel? Once in Switzerland, they help construct a base for further POW freeing operations in Germany, which violates neutrality and must be kept hidden from the Swiss authorities.



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CHAPTER FIVE: SCIENCE FICTION AND FUTURE VEHICLES

Conklin stared down at the controls of his flyer in disbelief. Stick control was gone. Fuel cell #4 was leaking hydrogen and the alert status board on his heads up display was lit up like a Christmas tree. The automated safety alert transponder was chirping in his ear, the pilot assist dispatcher yapping in his ear in rapid fire English with a heavy Japanese accent. Conklin pulled his helmet off in frustration as his flyer began to spiral out of control. Ashavan's forces were down there somewhere, covered by the thick haze of the sprawling city's filth, and Conklin had just lost his final chance to catch them. Conklin hit the auto-ejector and the cabin roof disintegrated one second before he was rocketed to safety.

"Ejection detected, dispatching emergency crews to your location, Mr. Greer," the safety dispatcher's voice droned from the ejection seat's speaker.

"My name's not Greer," Conklin said, his voice drowned by the wind. The parachute deployed. Conklin started scanning below his feet, spotting a motorcycle dealership just shutting down for the night. "Maybe Ashavan won't escape just yet," Conklin thought with grim satisfaction as he steered his parachute towards the dealership's parking lot. The caseless heavy pistol he had taken off Ashavan's last assassin rode in his cargo pocket, with at least forty flechette rounds left.

Some of the vehicles of this era are already developed somewhere or experimental models are already in use (such as fuel cell buses). The vehicles in this section are useful for Narrators running stories set in a future where mankind is still trapped within the Solar system. Faster than light propulsion has not been discovered yet and old technology mingles with new as the people of Earth struggle to live with dwindling natural resources. This high tech Dark Age scenario is painted in many popular works of fiction and movies. No matter what their vision of the near future is, Narrators can use and modify these vehicles for their story style and flavor.

Electric propulsion, hybrid technology and fuel cells have come into maturity in the near future, allowing efficient and fast transportation with the convenience of fossil fuels. Fossil fuels and internal combustion engines are monstrously expensive to operate and found mostly in collector's vehicles. Stability and handling of cars has improved with advanced safety features such as collision avoidance warning systems and technological breakthroughs in braking and suspension construction. Mass transit systems are prevalent worldwide, including North America. In the 20th century and early 21st century, even the poor could afford a

car of some sort. Not any longer. Of course, this is optional for any Narrator, who can choose to freely commingle the technology presented here with earlier fossil fuel burning vehicles.

Most vehicles are connected to global positioning satellites which constantly track their movements to help the driver navigate but also to assist authorities investigate collisions, track stolen vehicles and gather data that threaten privacy. Disabling these devices is a serious law violation in most countries.

Hybrid Vehicles: Even hybrid vehicles are fading out in the near future, as they still use fossil fuels to help charge their electric batteries. Hybrid vehicles have the same statistics as the ground, sea vehicles, helicopters and propeller aircraft presented in Chapter Four, with the following adjustments:

- Decrease Strength by five
- Acceleration is unchanged
- SR is reduced by one
- Stability, defense, toughness and size are unchanged
- Cost is increased by +2



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Hybrid jet craft remained experimental and were never developed to production models.

Fuel Cell Vehicles: Hydrogen fuel cell vehicles are the most common personal vehicles in the near future. Fuel cell technology for ground vehicles matured quickly. Fuel cell aircraft use a Proton Exchange Membrane to power a propeller during flight. Lightweight lithium ion batteries provide the take off power. There are no fuel cell jet aircraft. Jet aircraft are limited to military aircraft only and even those fly rarely due to the prohibitive fuel costs of aviation gas. Commercial airliners were retrofitted with fuel cell auxiliary power unit to save about 40% of their fuel costs, but the use of commercial jet airliners faded out rapidly as well. Any ground or sea vehicle from Chapter Four can be converted to a fuel cell powered vehicle with no statistical adjustments except that the cost is increased by +4. Presented below are Fuel cell aircraft. Fuel cell powered buses and electric subways are the most common means of inner city transportation.

Near Future Hovercraft: Before the development of anti-gravity mated to microfusion reactors became a reality, developers squeezed the maximum power out of tiny internal combustion engines and fuel cells to develop personal hovercraft.

Passenger Vehicle Safety Systems: Every passenger vehicle includes advanced airbags on all sides that allow passengers and crew to re-roll failed Toughness saves to avoid

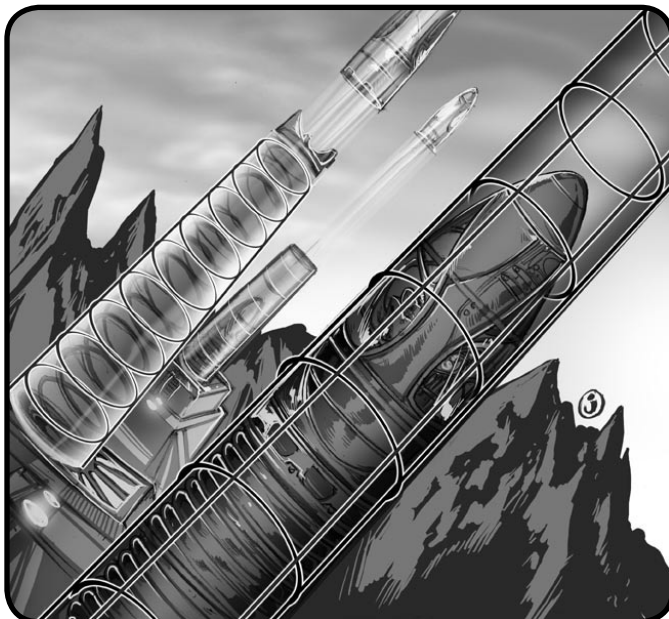
personal injury. GPS systems report airbag deployment and automatically summon emergency crews to the scene. Built in vehicle sensors help drivers avoid collisions by flashing visual and audible alarms when obstacles loom, or cars are in the vehicle's "blind spot." Light aircraft include automated parachute systems that allow the entire aircraft to descend at a safe speed, dangling on a parachute, if the system detects that an aircraft has spun out of control.

Military vehicles include advanced fire extinguishing systems and internal layers of ceramic armor, ablative external armor and advanced body armor systems for crews. The lethality of near future military weapons has kept pace, however, and thus the crews receive no benefit to their toughness saves. Narrators may rule that a near future military vehicle that fails a toughness save when attacked by older technology weapon may allow its crew a +2 to +4 bonus to their own toughness or reflex saves to avoid damage.

Magnetic Levitation: Maglev trains are the standard mass transit system of the near future, connecting communities, countries, continents and even the suburbs to the mega sprawl cities of the near future. Fast and quiet, riding electromagnetic force, maglev trains achieve speeds of 300 mph and have allowed for the phasing out of mass airline transportation without greatly affecting the amount of travel by the general public and business travelers.

Electric Trains: Established conventional electric train networks around the world were expanded to accommodate commuter traffic. Fuel cell powered locomotives transport rail cargo on long established rail networks where overhead electrical wires have not yet been built. However, most old railroad networks built in the 20th century now have overhead wires to accommodate electric locomotives.

Coil Gun Orbital Launch System: Spacecraft and satellites are built in orbit and not launched from Earth any more. Raw material, supplies and replacement personnel are launched into orbit from massive coil gun launchers that use electromagnetic force to propel payloads into orbit.



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Space Elevators: Most industrialized worlds have built space elevators that extend from the highest mountaintops into low orbit, allowing inexpensive and rapid delivery of even the heaviest cargos into orbit.

Wormholes and Teleportation: Narrators may decide that such means of instantaneous space travel may be possible. The Narrator may decide that wormholes are the only means of faster-than-light travel possible, creating interesting choke points for stellar battles, space stations, conflict and intrigue.

Anti-gravity: The most advanced form of planet side transportation are anti-gravity vehicles powered by micro fusion reactors. Most urban areas do not allow autonomous operation of any personally owned vehicle. Vehicles entering traffic zones of cities must disengage their manual pilot and allow the system's computer system to take over to avoid collisions and traffic jams. These automated traffic systems work reasonably well, routing all traffic into multiple elevation aerial traffic "lanes." Bypassing such a system to re-establish manual control is a Difficulty 15 Computers skill check and punishable by a severe fine, and up to a month in jail.

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Firearms of this era are caseless. The propellant is stored in a separate cartridge and the bullets do not need brass cases or chemical powders. Thus, magazine capacities are doubled and range increments are increased by 20%.

Disruptor Cannons: Energy weapons that vaporize their targets with plasma particles, these are the staple of almost all science fiction writing.

Plasma Gun: Short range but extremely destructive, the plasma gun can be compared to a space combat flame thrower that torches targets with high intensity plasma beams.

Slug Thrower: This magnetic rail gun fires a stream of metal slugs with rapid rate at close range, usually used as a point defense weapon against enemy fighters and torpedoes.

FTL Torpedo: Faster than light torpedo that pulses in and out of hyperspace to target even distant enemy ships.

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Vacuum Train: The safest and most rapid



forms of mass transit of the far future are underground trains that travel in hermetically sealed tunnels without an atmosphere, elevated by magnetic levitation and propelled by fusion reactors. These trains achieve speeds of over 1000 mph and connect the major cities of the world. Robotic tunnel diggers continue to create dozens of additional miles of tunnel each day. Trains carry hundreds



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of people in moderate luxury. Sleeping cars are rarely necessary since most planetary locations can be reached in less than one day. Vacuum trains connect to space elevator sites as well, to deliver cargo and raw material for elevation into low orbit.

Anti-grav Board: Possibly the most dangerous form of personal transportation ever invented, the anti-gravity board is a fast microfusion powered skateboard capable of carrying a 300 pound passenger to any altitude.

Anti-grav Car: Personal transportation powered by micro fusion reactors and using anti-gravity drive. Can carry up to four passengers and/or 1000 lbs of cargo, the anti-grav car is still unaffordable for most people. Reliable and easy to operate, the anti-grav car can only reach altitudes of about 200 feet.

Anti-grav Truck: Light cargo vehicle that carries two people and can carry about 3000 lbs at altitudes up to 250 feet.

Anti-grav Sports Car: Status symbol still, the sport scar carries two people and 400 lbs of cargo in style. The anti-grav sport scar is capable of 500 feet of altitude.



Anti-grav Scooter: Providing no cover, this anti-gravity vehicle resembles a large long motorcycle without wheels. Two people and/or 400 lbs of cargo may ride. It is the cheapest form of personal transportation, capable of altitudes of 100 feet, yet fast and maneuverable.

Anti-grav Pallet Truck: A heavy lift cargo vehicle, this one crew tug pulls strings of multiple anti-gravity "pallets" in a long line, at altitudes of 600 feet, the highest altitude for managed traffic systems and the vehicle's engine capability. Each pallet can hold up to 10 tons and the pallet truck can pull up to 10 pallets at a time, making it a very expensive "sky train." Vacuum train delivers most heavy planet side cargo in this era, but the anti-grav pallet truck takes it from the stations to the final destination and helps supply remote areas with heavy cargoes of food, supplies and tools.

Anti-grav Police Car: Capable of reaching 1000 feet, the anti-grav police car is independent of traffic management systems and can carry four officers and several hundred pounds of gear. Advanced detection systems are built in, including heat seeking gear, radar, sonar, and advanced optical sensors. Riot gas dispensers and electro-magnetic pulse weapons to disable vehicles being chased are available, along with advanced communication gear and police computer systems.

Anti-grav APC*: Armed with light disruptor cannon or a slug thrower, the anti-grav APC can soar at altitudes up to 1000 feet above the surface and carry a squad of 10 soldiers into battle.

Anti-grav Intercontinental: This cargo and passenger vessel comes in many configurations, as it is the standard long-range anti-gravity transportation vessel. Capable of soaring at 100 feet, it can carry up to 100 tons of cargo and/or 2000 passengers. This vessel has variants such as hospital ships, cruise ships and floating command posts for military applications. There is also a carrier variant that carries 30 fighter aircraft for planetary defense use.

Light Space Fighter: Single seat space fighter armed with a light disruptor cannon and two light laser cannon.

Heavy Space Fighter: Double seat space

