GURPS
Fourth Edition

SPACESHIPS 7

DIVERGENT AND PARANORMAL TECH™

Written by **DAVID L. PULVER**

Edited by **ANDY VETROMILE**

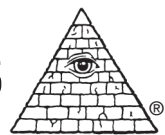Editorial Assistance by **JASON "PK" LEVINE**

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An e23 Sourcebook for **GURPS**®

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INTRODUCTION

Space travel doesn't just mean rocket ships and warp drives. **GURPS Spaceships 7: Divergent and Paranormal Tech** expands the **GURPS Spaceships** design rules with weird-and-wonderful systems, features, and switches. The seventh book in the series introduces magic, psi-tech, steam-tech, weird science, and giant space monsters!

PUBLICATION HISTORY

Rules for some shipboard systems are adapted from the **GURPS Vehicles Expansion** volumes, some of which drew on material that originated in **GURPS Steampunk, GURPS Ultra-Tech,** and **GURPS Warehouse 23**. Rules for zombie vehicles first appeared in **GURPS Undead.** Certain game mechanics for hulls and systems came from **Vorkosigan Saga Sourcebook and Roleplaying Game.**

About the Series

GURPS Spaceships 7: Divergent and Paranormal Tech is one of several books in the **GURPS Spaceships** series. This line supports **GURPS Space** campaigns by providing ready-to-use spacecraft descriptions and rules for space travel, combat, and operations. GMs need the core book, **GURPS Spaceships**, to use this book.

About *GURPS*

Steve Jackson Games is committed to full support of **GURPS** players. Our address is SJ Games, P. O. Box 18957, Austin, TX 78760. Please include a self-addressed, stamped envelope (SASE) any time you write us! We can also be reached by e-mail: **info@sjgames.com**. Resources include:

New supplements and adventures. **GURPS** continues to grow – see what's new at **www. sjgames.com/gurps**.

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Internet. Visit us on the World Wide Web at **www.sjgames.com** for errata, updates, Q&A, and much more. To discuss **GURPS** with our staff and your fellow gamers, visit our forums at **forums.sjgames.com**. The web page for **GURPS Spaceships 7: Divergent and Paranormal Tech** is at **www.sjgames.com/gurps/books/spaceships/spaceships7**.

Bibliographies. Many of our books have extensive bibliographies, and we're putting them online – with links to let you buy the resources that interest you! Go to each book's web page and look for the "Bibliography" link.

Errata. Everyone makes mistakes, including us – but we do our best to fix our errors. Up-to-date errata pages for all **GURPS** releases, including this book, are available on our website – see above.

Rules and statistics in this book are specifically for the **GURPS Basic Set,** *Fourth Edition.* Page references that begin with B refer to that book, not this one.

ABOUT THE AUTHOR

David L. Pulver is a freelance writer and game designer based in Victoria, British Columbia. He is the co-author of the **GURPS Basic Set** *Fourth Edition,* and author of **Transhuman Space, GURPS Spaceships,** and numerous other gaming products.

I'll soon be leaving for the planet Mongo, in a rocket-ship of my own design.
– Dr. Zarkoff, **Flash Gordon: Rocketship**

Power: Smaller power plants *do not* provide sufficient power for normal-size systems, but they *can* power another scaled-down system sharing the same location.

In addition, some systems can be *half-size* at half cost:

- Cargo holds (halve capacity).
- Factories (halve output).
- Fuel tanks (halve delta-V reserve, count as a half-tank for delta-V increase).
- Habitats (halve cabin-equivalents).
- Mining and refinery systems (halve output).
- Open spaces (halve areas).
- Passenger seating (halve seats).
- Power plants (fusion and antimatter only – halve Power Points).

LARGER SYSTEMS

While it's more common to cram in smaller systems, sometimes a *small* ship needs a *big* gun – or a device that isn't normally available at its size. A system that's one SM larger occupies *three times* its usual number of locations, and has the statistics of a system for a larger ship. (Three high-energy systems used to make up a larger system require three Power Points.)

One class of systems requires special treatment:

Defenses: Use *twice* the dDR or reflected damage dice of the original system.

Other components that *might* have additional effects are better handled by using three normal-size components, since scaling has already been determined.

SYSTEM DESCRIPTIONS

These are additional systems that can be built into spacecraft, as detailed in **GURPS Spaceships** (p. 9). The cost and other statistics vary according to the spacecraft's hull SM, as indicated in the tables in this section.

the more exotic organic armor in **GURPS Spaceships**). Wood dDR is treated as semi-ablative vs. burning or corrosion damage.

ARMOR, WOODEN (TL0) [HULL]

Wood is a natural composite material with a high strength-to-weight ratio. This represents ordinary wood (in contrast to

The core of our defense is the faith we have in the institutions we defend.
– Franklin D. Roosevelt

Wooden Armor Table

SM	+5	+6	+7	+8	+9	+10*	+11*	+12*	+13*	+14*	+15*
US dDR	1	1	2	2	3	4	5	6	7	10	15
SL dDR	0	1	1	1	2	3	3	4	5	7	10
Cost ($)	2K	6K	20K	60K	200K	600K	2M	6M	20M	60M	200M

* Structural limitations mean that ordinary wood cannot be used on vessels larger than SM +9.

Repair Skill: Carpentry.

ARMOR, ETHERWOOD (TL1^) [HULL]

Etherwood is a tough wood that has innate contragravity properties. It may be hard to find. Perhaps it grows in the sky forests of Venus or Jupiter's atmosphere, or can be found only in great trees that sprout from comets in the outer solar system! Maybe it has a mystical origin, springing from seeds of the primal world-tree that supports the heavens, or is imported from the aerial forests of the sky elves in the elemental plane of air.

Wherever it came from, it has special capabilities. In addition to serving as armor, every etherwood system provides the vessel with 1/3G of lift. If the lift of etherwood exceeds the planetary gravity, the vessel flies as if it had contragravity lifters (save for the lower lift and lack of power consumption).

Etherwood dDR is treated as semi-ablative vs. burning or corrosion damage. Due to the vast size that etherwood trees can grow and the innate antigravity properties, it does not have the structural limitations of ordinary wood. Etherwood vessels can have any hull size.

Etherwood Armor Table

SM	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15
US dDR	1	1	2	2	3	4	5	6	7	10	15
SL dDR	0	1	1	1	2	3	3	4	5	7	10
Cost ($)	10K	30K	100K	300K	1M	3M	10M	30M	100M	300M	1B

Repair Skill: Carpentry.

CHAPTER TWO
TRAVEL AND COMBAT

Spacecraft with boost and pseudo-atmospheric drives have special rules for travel and combat. This chapter explains how to use these drives and provides mechanics for the weaponry presented in Chapter 1.

Divergent and paranormal vessels may exist in a cosmos very different from our own. The bizarre features of such a universe affect how space travel works, as described in the *Fantastic Cosmology* section.

FANTASTIC COSMOLOGY

In some fantasy and science-fiction settings, space itself behaves differently.

THE CRYSTAL SPHERES

In early models of geocentric cosmology, the sun and planets rotated around Earth, attached to invisible crystal spheres powered by divine movers, with the "fixed stars" on the outermost non-rotating shell. The universe's boundaries may be somewhat circumscribed: For example, in Ptolemy's cosmos (a standard model in the Middle Ages) the moon was the correct distance from Earth, but other planets were much nearer, and the fixed stars a mere 80,000,000 miles (0.86AU) away. Complicated sub-motions, called epicycles, were invented to ensure they matched the observed motions of the sun and planets, but a fantasy world could avoid this with heavenly bodies in circular orbits.

If the crystal spheres are themselves ethereal in nature (as was often believed), it's possible a vessel simply passes through them to visit other solar systems (if these exist). Outer spheres might form a barrier to travel, in which case a stardrive engine is required to "break through" them. What lies beyond may be some form of astral space or hyperspace – perhaps best treated as if it *were* hyperspace, with the normal rules for travel in place.

THE EDGE OF THE WORLD

A flat or gently curving world can have a literal edge! If so, there may be no such thing as a planetary orbit. Perhaps air and gravity terminate as soon as this limit is crossed and a vessel pushed or sailed off finds itself drifting in space.

HYPERDYNAMIC COSMOS

In this universe, hyperspace has *friction*, and spaceships extend special fields or wings into it to maneuver much like flying in the air. This is a justification for having spaceships maneuver in cinematic fashion.

The GM must set the *hyper-factor* of hyperspace. A factor of 100 (constant at all TLs) is the default, but it can be less or more. It's possible various "levels" of hyperspace exist, with other factors accessible to higher-TL fields, or the value can go up with increasing distance from a stellar or planetary mass. The hyper-factor could vary by region of space. Hyperspace might even have currents, winds, or calms that locally modify the hyper-factor or the vessel's speed.

A spacecraft in a hyperdynamic field maneuvers exactly like an aircraft, flying in a pseudo-atmosphere in zero gravity. Thus, it has no stall speed but is still affected normally by the gravity of planets and stars.

With this option, spacecraft benefit from streamlined hulls even if they never enter atmosphere.

Handling: Use the Air Performance Hnd/SR modifiers.

Hyperdynamic Top Speed: Use the top air speed except the acceleration performance is based on those engines that function in vacuum (that is, jet engines and rotors don't count). Then multiply the top speed by the hyper-factor, representing the reduced drag of hyperspace compared to normal air.

AIR-FILLED COSMOS

What if the universe was full of air and the motions of the planets and stars were driven by aetherial winds? In game terms this works just like a hyperdynamic cosmos, except there's no need for a doubletalk hyperdynamic field generator and top speed is not multiplied by a hyper-factor. If the medium is breathable the vessel doesn't require air, and habitats get by with no life support even without magic. If so, the bonus doubles the effective number of cabins, as for *Magical Life Support* (p. 9). These qualities might only exist in or near planetary- and solar system-scale megastructures.

Interstellar voyages are possible in an air-filled cosmos. The GM may determine the stars are a lot closer or allow vessels to sail into natural wormholes ("aether vortices"), or the eye of a celestial storm could emerge in another star system!

STEAMPUNK AND WEIRD-SCIENCE SHIPS

What if Victorian inventors had developed spaceships? They're just the thing for extending the Earthman's Burden to Mars or Venus, don't you know. Or perhaps these ether iron-clads are the answer to Mr. Wells' Martians if they get uppity!

Other divergent technological and superscience assumptions lead to different sorts of spacecraft. The psi-jammer (detailed below) comes from a universe advanced in both psionic research and psi-technology ("psychotronics").

ETHER STEAMSHIP (TL5+2^)

An elegant spaceship from a Victorian age that never was, it may be the pioneering creation of a brilliant inventor, or a space yacht carrying bureaucrats and adventurers to the farthest corners of Her Majesty's Solar Empire. This 300-ton vessel (SM +7) uses an unstreamlined, ironclad etherwood hull to reach high altitude, then ether screws powered by a closed-cycle solar steam engine for interplanetary travel. Despite the limited space aboard, the interior is luxuriously fitted out with fine woods, paintings, and furnishings. There are cabins for the captain and passengers and bunks for the crew, as well as a small library and science lab. There are no weapons aboard aside from any small arms carried by the crew.

Front Hull	System
[1]	Iron Armor (dDR 2).
[2]	Etherwood Armor (dDR 2).
[3-4]	Habitats (one luxury cabin each).*
[5]	Habitat (cabin and office [as library]).*
[6]	Habitat (cabin and bunkroom).*
[core]	Control Room (three control stations, comm/sensor 3, no computer).*

Central Hull	System
[1]	Iron Armor (dDR 2).
[2]	Etherwood Armor (dDR 2).
[3]	Habitat (lab).*
[4]	Habitat (two-bed sickbay).*
[5]	Habitat (two bunkrooms).*
[6]	Cargo Hold (15 tons capacity).

Rear Hull	System
[1]	Iron Armor (dDR 2).
[2]	Etherwood Armor (dDR 2).
[3]	Solar Mirror (powers solar boiler).*
[4!]	Ether Screw (0.2G acceleration).*
[5-6]	Cargo Holds (30 tons total capacity).
[core]	Solar Boiler (one Power Point with solar mirror).*

* One workspace per system.

It has artificial gravity and lacks automation. Crew consists of three control room officers, a surgeon, a purser, and 11 technicians.

TL	Spacecraft	dST/HP	Hnd/SR	HT	Move	LWt.	Load	SM	Occ	dDR	Range	Cost
PILOTING/TL(5+2) (HIGH-PERFORMANCE SPACECRAFT)												
5+2^	Ether Steamship	50	-3/4	13	0.2G/c	300	47	+7	20ASV	3	–	$4.92M

In atmosphere, air speed is 100 mph and Hnd/SR is -1/4.

ETHER IRONCLAD (TL5+2^)

The naval cousin of the ether steamship, this 10,000-ton ironclad space battleship shows the flag and projects imperial power to distant parts of an interplanetary empire. It has an unstreamlined hull 300 feet long (SM +10).

It is heavily armed with two batteries of six-inch turret-mounted rifled guns, a battery of two-inch mechanical rotary cannons, an experimental heat-ray (based on a recovered Martian artifact), and a magnetic tractor beam.

The ironclad carries a complement of marines for colonial operations; to that end, it is capable of deep space flight and serves as an aerial battleship. It is waterproof and lands on the ocean where a space port is not available. However, its two etherwood systems provide 2/3G of lift – sufficient for levitation on Mars, the Moon, or Mercury, but not to overcome Mother Earth's embrace. Thus, it was probably built in space or at a colonial navy yard.

Front Hull	System
[1-2]	Iron Armor (total dDR 14).
[3]	Etherwood Armor (dDR 4).
[4]	Habitat (5 cabins, 25 bunkrooms and 150 tons cargo).*
[5]	Medium Battery (three turrets with 20cm TL5 guns).*
[6]	Solar Mirror (for one solar boiler).*
[core]	Control Room (10 control stations, comm/sensor 6, no computer).*

Central Hull	System
[1-2]	Iron Armor (total dDR 14).
[3!]	Medium Battery (two turrets with 1 GJ heat rays and one turret with 1 GJ magnetic tractor beam).*
[4]	Solar Boiler (one Power Point).*
[5]	Solar Mirror (for one solar boiler).*

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