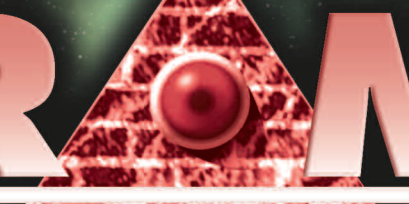


PYRAMID[®]



Issue 3/30 April '11

SPACESHIPS



PRACTICAL ASTROMANCY

by Kenneth Peters



ONE WITH THE SHIP
by W.A. Frick

SKY GALLEYS
by Ken Spencer

MASS COMBAT IN SPACE
by David L. Pulver

HUNTER-GATHERER
by Stephen Dedman

STEVE JACKSON GAMES

Stock #37-2630

CONTENTS

FROM THE EDITOR 3

PRACTICAL ASTROMANCY 4
by Kenneth Peters

ONE WITH THE SHIP 11
by W.A. Frick

EIDETIC MEMORY:
MASS COMBAT IN SPACE 18
by David L. Pulver

SKY GALLEYS 21
by Ken Spencer

HUNTER-GATHERER 27
by Stephen Dedman

RANDOM THOUGHT TABLE:
HOME IS A STARFARING CASTLE 33
by Steven Marsh, Pyramid Editor

ODDS AND ENDS 35
featuring Murphy's Rules

ABOUT GURPS 36

Hoping to survive in space? Don't hold your breath . . . get a spaceship, instead! This issue's theme is interstellar transport, high-tech captains, and things that go bump against the hull.

Our interstellar journey starts close to home as we explore the solar system – with magic! *Practical Astromancy* looks at the high-tech, off-world edge of the *GURPS Technomancer* setting. You can pop over to Kennedy Base on the moon, check out the solar system in a survey ship, or participate in a research and development project on a space station. Kenneth Peters, co-author of *GURPS Ultra-Tech* and author of *Transhuman Space: Spacecraft of the Solar System*, provides ship stats and game mechanics for schlepping people and cargo. Any sufficiently advanced magic is indistinguishable from everyday tech!

Some vessels are so complicated that the only way to operate them is by becoming *One With the Ship*. This meaty *GURPS* article gives a new 150-point template – the interface pilot – plus customization options, new advantages, cybernetic implants, and interface technologies. It also includes a sample pilot suitable for any cinematic TL10 campaign. Plug in and zoom out!

We welcome the return from deep space of David L. Pulver, co-author of the *GURPS Basic Set, Fourth Edition* and mastermind behind *GURPS Spaceships* (among many others). In this month's *Eidetic Memory*, David provides an optional system for how to combine *GURPS Mass Combat* with *GURPS Spaceships*. Now you can re-create epic space battles at the gaming table!

Sky Galleys are an essential component in Rome's ability to keep its empire together in the *Roma Universalis* setting (the first reports of which came to our universe from *Pyramid* #3/20: *Infinite Worlds*). Their vessels are constructed using the provided new optional *GURPS Spaceship* components. The empire would welcome your appreciation of the stats for two of its proud vessels, plus *GURPS* templates for sky crews and additional information about this *Infinite Worlds* timeline.

What will brave explorers find on the *Hunter-Gatherer*? From cutting-edge 1950s to far-future exploratory campaigns, this adventure is suitable for any setting in which the heroes can get into and survive in space. *GURPS Spaceships* stats are provided for the "asteroid," plus game information for the nine different living threats the explorers might face. Will the explorers become heroes – or memories?

What do comic-book heroes and sci-fi adventurers have in common? This month's theme of "spaceships" might give you a clue . . . Steven Marsh, *Pyramid* Editor, reveals the connection in this month's *Random Thought Table*.

Finally, you'll race to catch this month's *Murphy's Rules*, then encounter a few ways to make your ship "interesting" in this month's *Odds and Ends*. The void of space beckons; strap into your favorite FTL flyer and answer the call!

Article Colors

Each article is color-coded to help you find your favorite sections.

- Pale Blue:* In This Issue
- Brown:* In Every Issue (letters, humor, editorial, etc.)
- Dark Blue:* *GURPS* Features
- Purple:* Systemless Features
- Green:* Distinguished Columnists

COVER ART
Jesse DeGraff

INTERIOR ART
Greg Hyland

Editor-in-Chief ■ STEVE JACKSON
Chief Operating Officer ■ PHILIP REED
Art Director ■ WILL SCHOONOVER
e23 Manager ■ STEVEN MARSH

GURPS Line Editor ■ SEAN PUNCH
Editorial Assistant ■ JASON "PK" LEVINE
Production Artist ■ NIKOLA VRTIS
Prepress Checker ■ MONICA STEPHENS

Page Design ■ PHIL REED and
JUSTIN DE WITT
Marketing Director ■ PAUL CHAPMAN
Director of Sales ■ ROSS JEPSON

FROM THE EDITOR

HIGH TO THE SKIES AND FAR TO THE STARS

There's one truism for sci-fi games: If it's a setting that can use spaceships, it can use a darn-near unlimited number of them. Fans of the *Star Wars* or *Star Trek* universes know that there are jillions of ships in each of those galaxies.

This proliferation is great! In the same way that automobile fans can get a charge out of new releases and classic models of their four-wheeled fascinations, so too do new vessels liven up a galactic game. There's always a thrill at seeing some new design, or some "impossible" configuration light the sky.

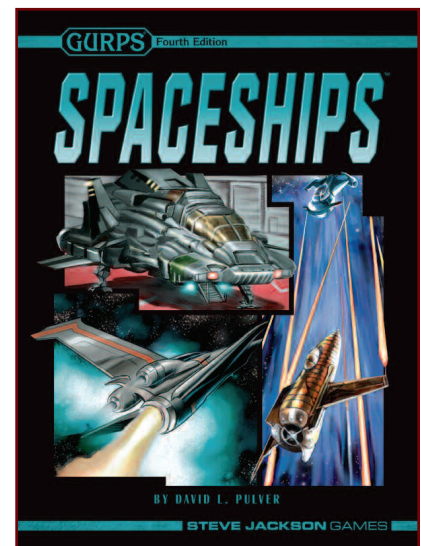
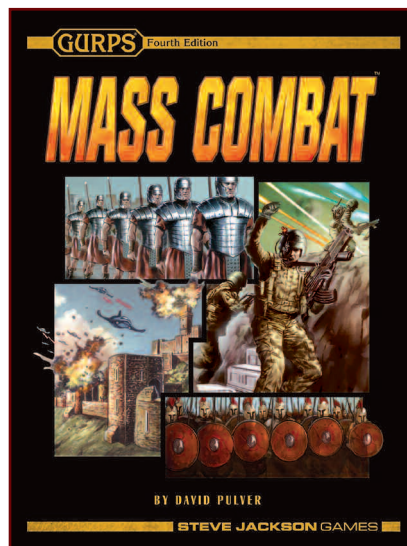
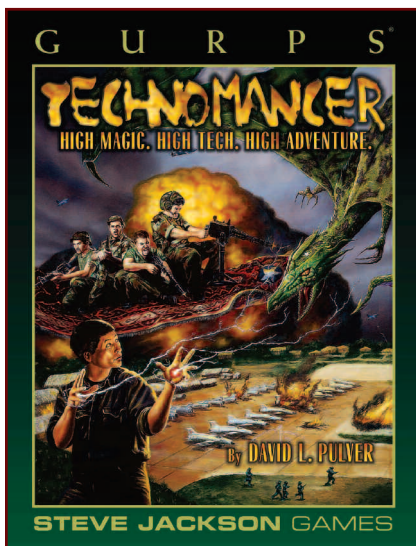
Plus, attention to starships can provide valuable plot devices that extend the setting in new and interesting directions. For example, introducing (or emphasizing) a vessel that's designed to hold a squadron of space marines can open up the possibility of full-scale man-to-man invasion of other worlds.

Finally, I suspect that spaceships are a way to differentiate adventurers in quasi-realistic settings. In worlds where two captains might have similar skills or point totals, it's easy to give them vastly different feels just by assigning each a different ship – say, one gargantuan battleship and one small-crew stealth vessel. (As a bonus, starcraft are perhaps the ultimate money sink in many space games!)

Done right, a spaceship can be as valued an addition of the heroes' party as any sapient with "PC" stamped on their foreheads . . . and they can be at least as interesting. Hopefully this issue will liven up any spacefaring settings.

WRITE HERE, WRITE NOW

Did we reach warp factor 10 with our offerings, or did we badly miscalculate our jump? You can send a private courier shuttle with comments to pyramid@sjgames.com, or deliver a public missive to the council online at forums.sjgames.com.



Special Thanks: Kenneth Peters

Pyramid, *GURPS*, Warehouse 23, and the all-seeing pyramid are registered trademarks of Steve Jackson Games Incorporated. e23 and the names of all products published by Steve Jackson Games Incorporated are registered trademarks or trademarks of Steve Jackson Games Incorporated, or used under license. *Pyramid* is copyright © 2011 by Steve Jackson Games Incorporated. All rights reserved.

Submission of your photos, letters, humor, captions, and marginalia constitutes permission to Steve Jackson Games Incorporated to use them in all media. All such submissions become the property of Steve Jackson Games Incorporated and will not be returned.

The scanning, uploading, and distribution of this material via the Internet or via any other means without the permission of the publisher is illegal, and punishable by law. Please purchase only authorized electronic editions, and do not participate in or encourage the electronic piracy of copyrighted materials. Your support of the authors' rights is appreciated.

However, the increments between mana levels are measured in the millions, or tens of millions, of miles.

Wild Mana: The oz particle flux within the sun's corona is so intense that it is impossible to control, creating a very high mana zone of *wild magic* (*GURPS Thaumatology*, p. 59) that extends several million miles from the photosphere. The core of the sun is theorized to be a ravaging maw of magical energy, a Hellstorm of incalculable power – which fuels the pop-culture beliefs that gods or dimensional gateways exist there.

High Mana (0.5 AU): The mana level rapidly drops off outside the chromosphere, but solar flares and other fluxes may result in high doses of oz energy.

Normal Mana (0.5 – 2 AU): This zone includes Venus, Earth, and Mars. Venus is low mana inside of its atmosphere.

Low Mana (2 – 16 AU): This zone includes the asteroid belt and Saturn. Teleporting into this area is done at a -5 penalty to skill.

Very Low Mana (16 AU – 100 AU?): Only the faintest mana levels remain beyond Saturn. This *very low mana* (*GURPS Thaumatology*, p. 58) area is almost entirely unexplored, as technomagical probes require expensive NEMA reactors to function. Teleporting into or through this area is done at a -10 penalty to skill; teleporting back *out* is almost impossible.

No Mana: Current theory suggests that the space between the stars is devoid of any usable density of oz particles. In the popular imagination, it is a *mana void*, actively suppressing or sucking away magic energy.

Earth orbit has become increasingly crowded as smaller nations and corporations deploy thousands of civilian and military satellites and dozens of manned space stations.

– *GURPS Technomancer*

GROUND CONTROL TO MAJOR GANDALF

Any college-educated mage with a basic grasp of the spell can Teleport himself into orbit if he knows the destination. However, the ceremonial magic (p. B238) needed to teleport dozens of people, or tons of cargo, into space requires substantial quantities of energy and a large staff of trained mages.

A certified teleportation technician must know the Draw Power, Teleport, and Teleport Other spells at skill 15+; Magery 3 is required as well, but specialists often have one or two levels of Magery with the One-College Only limitation. Being certified may be reflected with a License perk (*GURPS Thaumatology: Magical Styles*, p. 27).

The leading mage (“mission controller”) has the Stabilizing Skill (Thaumatology for Gate spells) perk (see *Magical Styles*, p. 24). As NASA discovered in 1986, when seven astromancers died in a horrific miscalculation, the 1.9% chance of critical failure for ceremonial magic is an unacceptable level of risk when dozens, or even hundreds, of teleports a day are required. Note that under the *best* circumstances, there is still

a 4.6% chance of ordinary failure! Individuals don spacesuits before teleporting in case they are temporarily stuck in vacuum, and passenger transports have limited life support in case they miss their destination.

The market rate for teleportation is \$15 per point of energy expended.

Practical Astromancy

Each astromancer involved in the launch ceremony is stationed at a computer terminal that houses a 50-point Powerstone and a NEMA power outlet (100-point Powerstones can be used for special tasks). Video feeds allow the mages to monitor the destination in as close to real time as possible. In older facilities a large auditorium surrounds the astromancer circle for observers to lend energy, but security concerns and public disinterest limits their use to exceptional events. Standard operating procedure requires that the mages not contribute their own energy to the casting of the spell, in case of emergency. Each HT 10, Magery 3 astromancer can provide 176 energy points for the ritual: 126 from the NEMA energy feed and 50 from the Powerstone. A full circle of 13 mages can power a teleport with up to 2,288 energy. Excess power is always traded for skill, but standard policy uses the minimum necessary to ensure a *modified* skill of 15.

Typical Teleport Destinations

The table below provides the base energy cost and penalty to skill for teleporting from the surface of the Earth to various locations in the solar system. See *GURPS Magic*, p. 147, for more detailed descriptions of the Teleport and Teleport Other spells.

Additional Penalties: The mission controller is usually at -2 for viewing the destination over a sensor link, although many take periodic trips so they have current familiarity with the sites. He also suffers an additional -1 to skill for maintaining the Draw Power spell during the ritual.

Destination	Cost	Skill Penalty	Notes
Low-Earth Orbit	10	-7	
Moon	13	-10	[1]
Mars	15	-12	
Saturn	16	-13	[2]
Heliopause	17	-14	[3]
Proxima Centauri	21	-18	[4]

Notes

- [1] LEO to the moon is the same cost and penalty.
- [2] Low mana region; additional -5 to skill.
- [3] Very low mana region; additional -10 to skill.
- [4] Not currently reachable through no mana space.

Typical Teleport Cargo

The table below provides the multiplier to the energy cost for various amounts of cargo.

Weight	Multiplier	Notes
0.5 tons	×11	System for SM +4 spacecraft.
1.5 tons	×31	System for SM +5 spacecraft.
5 tons	×101	System for SM +6 spacecraft. Standard cargo module.
10 tons	×201	Entire SM +4 spacecraft. Maximum safe limit.

Background Skills: Six of Beam Weapons/TL (Pistol), Brawling, Guns (Pistol), or Parachuting/TL, all (E) DX [1]-13; Driving/TL (any) (A) DX-1 [1]-12; Judo or Karate, both (H) DX-2 [1]-11; Computer Operation/TL, Connoisseur (Starfighters, mecha, etc.), First Aid/TL, or Savoir-Faire (Military), all (E) IQ [1]-12; Freight Handling/TL, Leadership, Mechanic/TL (any), or Smuggling, all (A) IQ-1 [1]-11; Carousing (E) HT [1]-11; 1 point in another appropriate background, hobby, or professional skill; or 1 point to raise any background skill by one level. • 10 points spent on the spacer lens (p. 17) or on any unchosen traits from this template.

* Multiplied for self-control number; see p. B120.

† Cybernetics; see *Ultra-Tech* p. 207.

‡ When interfaced, receives an extra +2 from Soul of the Machine.

New Advantages

Enhanced Dodge (Vehicular)

5 or 10 points/level

You have +1 per level to vehicular Dodge (p. B375), up to +3. You may take this for a specific vehicle operation skill (5 points/level) or for all vehicles (10 points/level).

Soul of the Machine

5 points/level

You're a natural at the interface. When you are controlling a suitable vehicle by direct interface, you get a +1 per level to Artillery, Driving, Electronics Operation, Gunner, Navigation, Piloting, Submarine, and any other skills used to operate the vehicle and its systems. If the GM allows *Interfaced Stunts* (p. 15), this includes Acrobatics, Aerobatics, or Aquabatics, as appropriate. For mecha and similar vehicles, it also includes Battlesuit (if required), and any melee or unarmed combat skills that the GM permits mecha to use.

By default, the maximum level of Soul of the Machine is four. The GM may raise or lower this limit, or forbid the advantage altogether, to increase or decrease the effectiveness of direct interface in relation to conventional controls. Raising the available levels give interface pilots a distinct advantage over normal pilots in combat, making the interface an important military technology. If it's totally unavailable, interface pilots still get the other benefits of the interface (see *The Importance of Being Interfaced*, p. 15), but they have a smaller edge over conventional pilots.

New Perk: Vehicle Bond

Some specific system or component of your vehicle is specially suited to you, giving you a +1 to the relevant skill when you use it. This is regardless of the component's actual quality, and stacks with bonuses for high quality, computer assistance, etc. For example, customized targeting software for a mounted 20mm chaingun would be good for a +1 to Gunner (Machine Guns) when attacking with the weapon. This perk must be specialized by *vehicle* and *skill*; it can be taken multiple times for the same vehicle, applied to a different skill each time. At the GM's option, a single 5-point advantage might apply to all systems on a specific vehicle. 1 point/combination of skill and vehicle, or 5 points/vehicle.

Customization Notes

Pilots who must deal with the realistic (or at least semirealistic) hazards of space should spend background skill points on the spacer lens. Planet-based pilots, and those in campaigns where technology or genre convention makes vacuum and zero-G less of a concern, have no need for it.

Perhaps even more important than the type of interface, is the type of ship or vehicle that the pilot interfaces with. The following *pilot types* represent a small sampling of the possibilities – virtually any kind of vehicle could be controlled by direct interface, and each kind of driver, pilot, helmsman, or controller will have his own required skill-set.

Fighter Pilot

You're a combat pilot, and fly a small, fast, probably highly maneuverable, certainly high-performance fighter – optimized for dogfighting, forward assault, or other such roles. You need amazing reflexes, nerves of steel, and maybe just a little bit of *pure crazy*.

Advantages: Anything that boosts your Piloting skill (3D Spatial Sense, Perfect Balance) or your Vehicular Dodge (Combat Reflexes, Enhanced Dodge) – or cyberwear that provides those advantages – will help keep you on top in a dogfight. For the pure crazy, try Daredevil or Fearlessness.

Skills: Piloting specialization will be Aerospace, High-Performance Airplane, High-Performance Spacecraft, or other as appropriate. Pilots of hyperspace-capable fighters may need to expand their Piloting and Navigation skills to that medium. Weapon system skills likely include Artillery (Bombs or Guided Missile) and Gunner (Beams, Machine Gun, or Rockets).

Mecha Pilot

You pilot a giant robotic war machine, probably armored and/or armed to the teeth with an assortment of lethal technologies. Your mecha might be roughly anthropomorphic, centauroid, tracked, or more exotic – but whatever it looks like, it packs a wallop, and can likely take one in turn.

Advantages: 3D Spatial Sense isn't worth much in the relatively 2D world of land-based mecha, and since neither that nor Perfect Balance add to Driving (Mecha), they can be skipped by earth-bound pilots. Otherwise, a mecha driver benefits from most of the same capabilities as a fighter jock: lightning reflexes, cool under pressure (Combat Reflexes, Enhanced Dodge), and not afraid of the many risks involved in giant robot fights (Daredevil, Fearlessness).

Skills: For land-based mecha, Driving (Mecha) replaces Piloting, and Navigation specialty is (Land). Multi-environment or transforming mecha might also require anything from Piloting (High-Performance Spacecraft) to Submarine (Mini-Sub), along with the appropriate Navigation specialties.