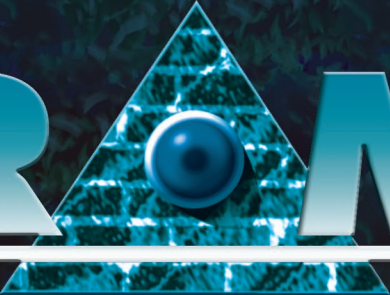


# PYRAMID



Issue 3/77 March '15

# COMBAT



## COMBAT WRIT LARGE

by Sean Punch

**LOW-TECH ARMOR LOADOUTS  
FOR THE NEW WORLD**

by Dan Howard

**ANCIENT EGYPTIAN  
AND ROMAN ARMIES**

by David L. Pulver

**ON TARGET**

by Douglas H. Cole

**IT'S A THREAT!**

by Christopher R. Rice

**STEVE JACKSON GAMES**

Stock #37-2677

# CONTENTS

**FROM THE EDITOR** . . . . . **3**

**COMBAT WRIT LARGE** . . . . . **4**  
by Sean Punch

**LOW-TECH ARMOR LOADOUTS FOR THE NEW WORLD** . . . . . **12**  
by Dan Howard

**EIDETIC MEMORY: ANCIENT EGYPTIAN AND ROMAN ARMIES** . . . . . **18**  
by David L. Pulver

**ON TARGET** . . . . . **24**  
by Douglas H. Cole

**IT'S A THREAT!** . . . . . **29**  
by Christopher R. Rice

**RANDOM THOUGHT TABLE: FASTER, COMBATANTS! KILL! KILL! . . . . . 36**  
by Steven Marsh, *Pyramid* Editor

**ODDS AND ENDS** . . . . . **38**  
featuring *Murphy's Rules*

**ABOUT GURPS** . . . . . **39**

# IN THIS ISSUE

For many games, combat is somewhere around Plan A, Plan B, or . . . well, the only plan. Fortunately, this issue of *Pyramid* is here to help you rally the troops, hone your aim, and get into battle. Whatever era or genre you play in, there's something sure to be of interest here.

When you're facing an ogre, killer robot, or alien face-worms, you're ready for *Combat Writ Large*. **GURPS** giant Sean Punch collects, unifies, and expands the rules for fighting larger things. The effects of size on attack, defense, grappling, and more are all here in one place – along with a few new rules to cover edge cases! (And remember that when you fight smaller things, *you* are the “giant” . . .)

If you like historical accuracy and ready-to-use equipment, you'll love *Low-Tech Armor Loadouts for the New World*. Dan Howard – author of **GURPS Loadouts: Low-Tech Armor** – offers some insight into the hard work that went into forging that supplement, as well as seven new sets of armor loadouts for Spanish conquistadors, Aztec war leaders, Shoshone warriors, and more.

Perhaps conflicts a bit larger than a melee skirmish are on your mind. If so, get ready to go to battle with *Ancient Egyptian and Roman Armies*. These two armies for **GURPS Mass Combat** are presented by that supplement's author, David L. Pulver, in this month's Eidetic Memory offering. Pit these two armies against each other, or use either one in your own massive conflicts!

For more possibilities for the Aim maneuver in **GURPS**, we have some optional rules that are *On Target*. Crafted by Douglas H. Cole (scribe of **GURPS Martial Arts: Technical Grappling**), these rules will let you use an All-Out Aim, learn the Quick Aim technique, or experience critical successes and critical failures like never before.

Are you trying to craft effective dangers for **GURPS Dungeon Fantasy** heroes? Now you can make sure *It's a Threat!* Prolific *Pyramid* penman Christopher R. Rice codifies how threatening all **Dungeon Fantasy** monsters are (up through *Pyramid* #376: *Dungeon Fantasy IV*) by describing each one's Offensive Rating, Protective Rating, and Combat Effectiveness Rating . . . and providing the rules to calculate your own!

This month's *Pyramid* also features a Random Thought Table for those who want to fight faster, plus Odds and Ends that encourage you to take a breath and enjoy a new *Murphy's Rules* that's given its best shots. Unleash your combative nature with this issue of *Pyramid!*

## ARTICLE COLORS

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

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

**COVER ART**  
Eric Wilkerson

**INTERIOR ART**  
Greg Hyland

Editor-in-Chief ■ STEVE JACKSON  
**GURPS** Line Editor ■ SEAN PUNCH  
Assistant **GURPS** Line Editor ■ JASON “PK” LEVINE

Managing Editor ■ MIRANDA HORNER  
**GURPS** Project Manager ■ STEVEN MARSH  
Production Artist & Prepress Checker ■ NIKOLA VRTIS  
Page Design ■ PHIL REED & JUSTIN DE WITT

Chief Executive Officer ■ PHILIP REED  
Chief Operating Officer ■ SAMUEL MITSCHKE  
Marketing Director ■ BRIAN ENGARD  
Director of Sales ■ ROSS JEPSON



# FROM THE EDITOR

## RATS? RATS!

My favorite combat ever as a player was one I didn't even participate in.

It was a fantasy game at a convention. We'd progressed through the dungeon crawl without much incident, and the players (who didn't know each other beforehand) were getting along well.

In one room, I decided to take up guard duty outside while the rest of the heroes investigated inside. (It made sense in character.) Once inside, the heroes were attacked by rats. Thinking it was no big deal, the PCs attacked and were counterattacked by the rodents. The rats inflicted heavy damage on the heroes, while the heroes were having a hard time dispatching the vermin.

Guarding outside – hearing the turmoil both in and out of character – I ask, “How big are these rats, anyway?”

The GM says, “Oh, they're normal-sized rats,” and holds out two hands about 3' apart.

We all start exclaiming about how “normal sized” these 3' rats were, and understanding more clearly why they were

mopping the floor with us. I (in character) expressed relief that I was safe outside bravely guarding the others' backs.

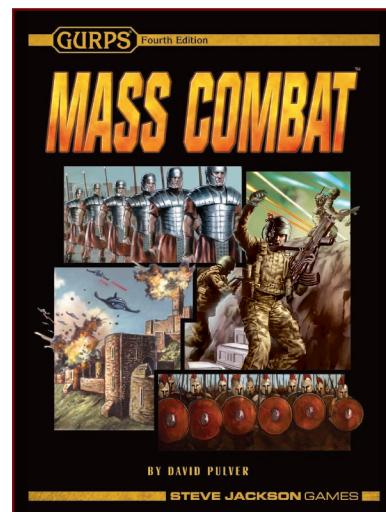
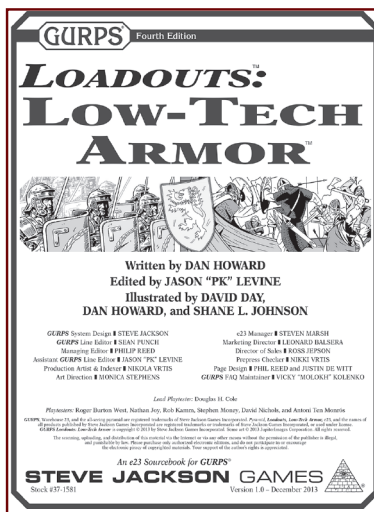
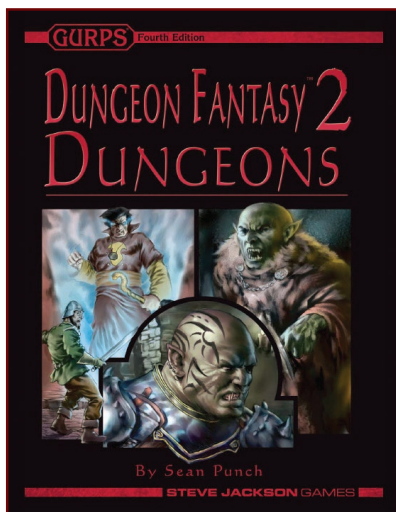
We eventually dispatched the rats (my cowardly self is using the royal “we” there) and healed up, all the while laughing and reveling in how we hadn't noticed that these “normal-sized rats” were larger than trained attack dogs.

It was an amazingly fun, lively combat, and certainly one that doesn't just stick in my mind solely because the GM – who I'd only met at that convention for the first time – ended up becoming my wife.

Regardless of the exact mayhem, mishaps, and merriment, we hope that you have beloved melee memories of your own . . . and we especially hope that this *Pyramid* continues to be a wonderful part of your own gaming memories.

## WRITE HERE, WRITE NOW

Your comments help us improve our publication. How are you using this material in your campaign? What do you wish we'd write about? Let us know via private feedback at [pyramid@sjgames.com](mailto:pyramid@sjgames.com), or join the public discussion online at [forums.sjgames.com](http://forums.sjgames.com).



Special Thanks: Douglas H. Cole and Christopher R. Rice

*Pyramid*, *GURPS*, Warehouse 23, the all-seeing pyramid, and the names of all products published by Steve Jackson Games Incorporated are trademarks or registered trademarks of Steve Jackson Games Incorporated, or used under license. *Pyramid* is copyright © 2015 by Steve Jackson Games Incorporated. All rights reserved. All rights reserved. Version 1.1 (July 2015).

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.

# COMBAT WRIT LARGE

BY SEAN PUNCH

A recurring theme in dungeon crawls, off-world bug-hunts, and monster horror – not to mention *GURPS Q&A* – is combat between human-sized heroes and larger creatures. The *GURPS Basic Set* and its supplements offer many scattered rules for this. Now it's time to unify those and fill the gaps.

These rules often use “monster” to refer to the fighter with the higher Size Modifier (SM). Remember that when adventurers fight smaller creatures, *they* are the monsters!

## SIZE REFINED

Size Modifier is important but not the whole story. Height and width, area occupied, and reach also matter. These dimensions depend on not only SM but also morphology – particularly on whether the figure has Horizontal (p. B139) or No Legs (p. B145).

### Size in Hexes

Per *Multi-Hex Figures* (p. B392), practically all SM +1 and larger creatures fill more than one hex. Hex count isn't a strict function of SM – a towering giant could have a modest “footprint,” while an impossibly flat slime might engulf acres. For a quick-and-dirty estimate, however, consult the “Longest Dimension” column of the *Size Modifier Table* (p. B19), read “yards” as “hexes,” round down (but never to less than one hex!), and then follow these guidelines:

- A sleek (horse-like) or snaky (dragon-like) Horizontal figure uses *full SM* to work out length in hexes, but is a mere one hex wide – though it might bulge an extra hex or two near the limbs.
- A boxy Horizontal figure (boar, elephant, muscular predator, etc.) uses *one SM smaller* to determine length in hexes and *two SM smaller* to find width in hexes.
- An upright being (like a giant) has a footprint found by using *three SM smaller* for front-to-back thickness in hexes and *two SM smaller* for side-to-side width.

Semi-Upright (p. B153) figures fight as if upright, but the GM may treat them as boxy when they drop to run. The question of sleek vs. boxy for Horizontal creatures is entirely a feature. Sleek monsters are more likely to shove smaller figures when turning (*Didn't See You There*, p. 6) while boxy ones are harder to dodge in head-on slams (*Defense vs. Slams*, p. 9).

The *SM-to-Hexes Table* (below) summarizes the ranges these rules imply for SM 0 (human size) to +6 (10 times human size).

### SM-to-Hexes Table

Sizes in hexes are ordered (hexes front-to-back) × (hexes side-to-side).

SM	Sleek	Boxy	Upright
0	2 × 1	1 × 1	1 × 1
+1	3 × 1	2 × 1	1 × 1
+2	4-5 × 1	3 × 2	1 × 2
+3	6-7 × 1	4-5 × 3	2 × 3
+4	8-10 × 1	6-7 × 4-5	3 × 4-5
+5	11-15 × 1	8-10 × 6-7	4-5 × 6-7
+6	16-20 × 1	11-15 × 8-10	6-7 × 8-10

### Reach

Huge fighters enjoy superior reach in melee combat. Add the bonus described in *Size Modifier and Reach* (p. B402) to the upper end of reach for melee weapons and unarmed attacks with limbs or Strikers. Always mark reach from the counter's edge. Treat bites as reach C or use this more complex option:

*What a Long Neck You Have!* For a Horizontal figure, add bonus reach to bites, too, but measure total reach from the center of the figure toward its head. Since bites start at reach C, they remain limited to close combat unless the bonus exceeds half the figure's length (rounded up). For upright monsters, bites are *always* close-combat attacks.

For instance, a snaky SM +6 dragon that is 16 hexes long but has a mere +7 reach can only bite foes in close combat; much of its counter *is* neck, so attacking with teeth means moving its head hex into its victim's hex. A boxy SM +6 predator that's 11 hexes long could exploit +7 reach to snap at foes within a yard of its head on the battle map. And a SM +6 giant might punch at reach 7, but bending over to chomp is an awkward close-combat move.

### Height Effects

There's also the issue of *what* each combatant can reach. Use *Combat at Different Levels* (pp. B402-403) with the following refinements:

1. Assess each fighter's *effective SM*. This is full SM for upright figures. Horizontal ones have -1 to SM, plus an *extra* -1 if they lack legs and travel by slithering, rolling, or similar. *Examples:* A SM +1 lion has effective SM 0, a SM +1 serpent has effective SM -1, a SM -1 rattlesnake has effective SM -3, and a SM -3 housecat has effective SM -4.

# SPANISH CONQUISTADOR

*An arrow, where it finds no armor, pierces as deeply as a crossbow . . . For the most part when they strike upon mail, they break at the place where they are bound together. Those of cane split and pierce a coat of mail, causing more injury than the other.*

– “The Gentleman of Elvas”

In 1492 the *Reconquista* concluded with the fall of Granada. This campaign against the Moslems in Spain lasted for seven centuries. By the end of it, the nation was impoverished, with few assets except for a large army of cynical, battle-hardened soldiers. The discovery of the New World came at just the right time for Spain’s rulers – many ex-soldiers, who might have turned to brigandage at home, instead sailed for the Americas to seek their fortune.

Every fighter owned his own equipment and weapons but, with no uniform or centralized arms manufacture, no two men carried the same gear. Only the wealthiest could afford custom-made armor. The majority of adventurers cobbled together equipment from wherever they could. Most of the armor taken to the New World would have been considered obsolete in 16th-century Europe.

Plate cuirasses (*corazo*) were made of good quality Spanish steel but usually only worn by cavalry officers. Full plate harnesses were very rare – only worn by a few commanders. The majority of metal armor was mail (*malla*) – either a short sleeveless vest (*acqueta de malla*) that only covered the chest, or a longer sleeveless variant (*cota de malla*) that covered the entire torso. A few cavalymen also wore mail on their legs.

Most conquistadors just had a layered cloth vest (*escaupil*) or a leather jacket (*cuerra*). The notable aspect of their armor is the lack of protection on the arms and legs – especially on the infantry. The only armor most infantry wore below the waist was a single knee cop (*guarda o rodillera*) on the leading leg. Under the armor was worn a linen or woolen shirt (*camisa*)

or a doublet (*doblete*) – with or without sleeves – and trousers. Leather boots and gloves were worn by cavalymen, but the rest made do with cheap shoes. Once in the New World, they replaced worn-out footwear with yucca-fiber sandals.

Pretty much everyone wore a helmet (*casco*) – usually a brimmed *cabasset*, *morion*, or *burgonet* (*borgonata*) style. Cortez found his men short of head protection, and so he had additional helmets manufactured once he was secure in Cuba. In addition to the helmet, many wore a gorget (*gorjal*) – a guard that protected the neck and chin. Some had segmented plate *munnions* that extended out from the gorget to protect the shoulders.

## Shields

Shields (*rodela*) were medium circular bucklers. Some had a spike instead of a central boss and a strap to sling it over the shoulder when not in use.

*Rodela*: DR 2, \$60, 14 lbs., DR 4, HP 20, Cover DR 9.

## Mexican Strike Force

Occasionally, the Spanish were more uniformly protected. When Cortez was preparing to attack Mexico, he ordered that every man in the initial strike force of 300 men be equipped in “very good armor, well padded, and a gorget, helmet, leggings, and a shield.” By this time, many of the Spanish had adopted the quilted cotton armor of the natives, which they called *escaupil* (see *Aztec Warrior*, pp. 14-15). Treat this as medium layered cloth armor (**Low-Tech**, p. 103). The gorget probably included munnions as well. The word “leggings” (*antipara*) refers to some sort of padded pants, probably a little lighter and more flexible than the *escaupil*; treat as light layered cloth (**Low-Tech**, p. 103).

## 16th-Century Spanish Conquistador – Infantry Loadout

Some wealthier members of the infantry wore a light brigandine (*bergandina*) over their mail. It covered the chest and abdomen: DR 3, cost \$900, weight 10 lbs., don 30 secs. Add this to the loadout below and penalize DX by -1 because of armor layering.

Common Name	Ethnic Name	Location	DR	Cost	Weight	Don	Notes
Shirt	<i>Camisa</i>	torso, arms	0	\$72	2.4	23	
Pants	<i>Pantalones</i>	legs	0	\$48	1.6	15	
Mail Shirt	<i>Cota de Malla</i>	torso	3*	\$500	12	15	[1]
Gorget	<i>Gorjal</i>	neck, jaw	3	\$80	0.7	4	[2, 3]
–	<i>Munnions</i>	shoulders	3	\$60	1.6	5	
Knee Guard	<i>Guarda o Rodillera</i>	knee	4	\$125	0.2	3	[4]
Shoes	<i>Zapatos</i>	feet	1	\$40	2	6	
Helmet	<i>Casco</i>	head	7	\$529	4.8	12	[5]
<b>TOTAL</b>	–	–	–	<b>\$1,454</b>	<b>25.3</b>	<b>83</b>	

## Notes

[1] -2 DR vs. *crushing*.

[2] Protects the face on a roll of 1 on 1d.

[3] -1 to combat (see *Restrictive Neck Armor*, **Loadouts: Low-Tech Armor**, p. 4).

[4] Covers one knee only.

[5] Protects the face on a roll of 6 on 1d (2-6 from above).

## ROMAN ARMY ROSTER

This roster details the troop strength of one legion (11 cohorts, three of them veteran), an ala of equites alares, a cohort of regular auxiliary infantry, a cohort of Syrian archers, and an ala of Numidian cavalry.

*Elements:* 742. *Cost:* \$80,044,000 to raise, \$10,763,200 to maintain.

<i>Elements</i>	<i>Total TS</i>	<i>Classes</i>	<i>Mobility</i>	<i>Features</i>
144 Veteran Legionary (heavy infantry)	1,440	–	Foot	–
384 Legionary (heavy infantry)	2,688	–	Foot	–
48 Regular Auxiliary Infantry	384	–	Foot	–
12 Equites Legionis (light cavalry)	60	Cv, Rec	Mounted	–
48 Equites Alares (light cavalry)	240	Cv, Rec	Mounted	–
48 Equites Numidarum (light cavalry)	96	Cv, Rec	Mounted	Mercenary
48 Sagittarii (bowmen)	144	F	Foot	Mercenary
10 Legion Artillery	(20)	Art	Foot	–
<i>Artillery TS</i>	(20)*			
<i>Cavalry TS</i>	396			
<i>Fire TS</i>	144			
<i>Recon TS</i>	396			
<b><i>Force TS</i></b>	<b>5,054</b>			

\* Counts as only 2 TS for Force TS

To represent the legion's integral engineering talent, the GM may wish to allow up to 10% of the heavy infantry to convert to an equivalent number and quality of miner elements in any siege situation.

### Equites Numidarum (Numidian Cavalry)

#### Light Cavalry

Much of Rome's light cavalry were "Numidians" from the regions now referred to as Algeria and Morocco. They were called *equites Maurorum* or *equites Numidarum* (Moorish or Numidian cavalry). They were irregular forces that rode bareback and had no body armor and only a light shield. They carried quivers of multiple javelins. Being mercenaries rather than regular auxiliaries, they did not always serve for the same length of time in the army, but some experienced Numidian forces would be Good rather than Average.

*TS:* 2. *WT:* 2.

*Classes:* Cv, Rec. *Mobility:* Mounted.

*Quality:* Basic equipment; Average troops.

*Features:* Mercenary.

*Cost:* \$100K to raise; \$20K to maintain.

An ala of 480 Numidians consists of 48 elements with TS 96.

### Sagittarii (Auxiliary Archers)

#### Bowmen

In the Republican period, most auxiliary archers were Cretans. By the Imperial period, bowmen from Syria and Thrace were in the majority. Syrians wore a scale cuirass and conical helmets, and used a powerful composite bow. (In addition to bowmen, slingers from the Balearic Isles off Spain – light infantry – were widely used in the Republican period, but seem to have been less common during the early Imperial era.)

*TS:* 3. *WT:* 1.

*Classes:* F. *Mobility:* Foot.

*Quality:* Good equipment; Average troops.

*Features:* Mercenary.

*Cost:* \$60K to raise; \$12K to maintain

A cohort of 480 men consists of 48 elements with TS 1,440.

### Legion Artillery

#### Light Artillery

A mix of stone-throwing ballistae or onager (one per cohort) and very light bolt-throwing carroballistae (one per century).

*TS:* (2). *WT:* 1.

*Classes:* Art. *Mobility:* Foot.

*Quality:* Good equipment; Good troops.

*Features:* None.

*Cost:* \$100K to raise; \$13.6K to maintain.

Ten elements have TS (20).

## ABOUT THE COLUMNIST

David L. Pulver is a Canadian freelance author. An avid science-fiction fan, he began roleplaying in junior high with the newly released *Basic Dungeons & Dragons*. Upon graduating from university, he decided to become a game designer. Since then, David has written over 70 roleplaying game books, and he has worked as a staff writer, editor, and line developer for Steve Jackson Games and Guardians of Order. He is best known for creating *Transhuman Space*, co-authoring the *Big Eyes, Small Mouth* anime RPG, and writing countless *GURPS* books, including the *GURPS Basic Set, Fourth Edition*, *GURPS Ultra-Tech*, and the *GURPS Spaceships* series.



## 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 email: [info@sjgames.com](mailto:info@sjgames.com). Resources include:

*New supplements and adventures.* *GURPS* continues to grow – see what’s new at [gurps.sjgames.com](http://gurps.sjgames.com).

*Warehouse 23.* Our online store offers *GURPS* adventures, play aids, and support in PDF form . . . digital copies of our books, plus exclusive material available only on Warehouse 23! Just head over to [warehouse23.com](http://warehouse23.com).

*Internet.* Visit us on the World Wide Web at [sjgames.com](http://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](http://forums.sjgames.com). The Pyramid web page is [pyramid.sjgames.com](http://pyramid.sjgames.com).

*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.

# STUCK FOR AN ADVENTURE? NO PROBLEM.

**Warehouse 23 sells high-quality  
game adventures and supplements  
in print and PDF formats.**

- Free downloadable adventures for *GURPS*, *In Nomine*, and *Traveller*!
- Fun gaming accessories – shot glasses, shirts, specialty six-siders, and more!
- PDFs from Atlas Games, Amarillo Design Bureau, Pelgrane Press, Goodman Games, and many others – plus gems from the up-and-comers.
- Original material for *Transhuman Space* and new *GURPS* supplements from Kenneth Hite, Phil Masters, David Pulver, Sean Punch, and William Stoddard!
- Fully searchable files of *GURPS Fourth Edition* supplements.
- Digital editions of out-of-print classics, from *Orcslayer* and the complete run of *ADQ* to *GURPS China* and *GURPS Ice Age*.
- Buy board games and roleplaying PDFs in the same order! Download digital purchases again whenever you need to.



**STEVE JACKSON GAMES**  
**warehouse23.com**