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In This Issue

By request, another Traveller issue, this one features a Leviathan article by Traveller designer Marc Miller; a new and more detailed ship-combat system; and an eight-page section (which you can pull out of the magazine if you like) adapting Jack Vance’s planet Tschaï to Traveller. Included are the planetary map, seven alien races, encounter tables, scenario suggestions, and general background information.

On pages 30-31 you'll find an updated index to all game articles that have appeared in TSG since issue 15. This is a handy tool for anyone looking for information about a game... and if you want to write a review, it's a quick guide to games we haven't covered. I'm pleased to note that we haven't missed too many.

And take a look at the winners of the Non-Human Races contest. We got some good ones — and, even if one of the winners is really "inhuman" rather than "non-human," I think you'll agree it deserved to win.

—Steve Jackson

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WHERE WE’RE GOING

I'm glad that this is the Traveller issue. There couldn't be a more appropriate time to make this announcement.

We're going to publish CARDBOARD HEROES for Traveller.

These will be an “approved-for-use-with” product, licensed by Game Designers Workshop. The folks at GDW will check each figure for authenticity. There will be human and alien figures in 15mm scale (half-inch bases, fully compatible with the Traveller deck plans produced by GDW and other companies). We'll also be coming out with some AFVs — futuristic tanks and hovercraft — and possibly some small spacecraft. Like the current sets of Cardboard Heroes, these will be done in full color. Look for them late this year... late fall or early winter.

Car Wars and Vampire

These two are moving a bit slowly. We had wanted to have them out before Origins. It looks as though, for all practical purposes, they'll be an Origins release. If they're ready sooner, we'll ship them sooner, but most people will get their first look at these for Origins. Denis is working on final art for both of them. The vehicle counters for Car Wars are finished, and look great; a few of them are shown (actual size) on this page. This is only the bw art, though; the game counters will be in full color.

Postal Hassles

As you know, postage rates are continuing to spiral. If this keeps up, we will go on sending subscribers their games with no postage fee — but it will have to be third class instead of first class. The games will still get there, but they'll be slower. We'll hold off on this as long as we can.

Mini-Feedback

If you'll look at the inside back cover of your subscriber mailer cover, you'll see a feedback page on this issue's contents, with a few other questions. This is for subscribers only (nobody else gets a copy with the mailer cover on it). We're hoping for some detailed information about the subscribers' likes and dislikes.

Computer Games

There is a very good chance that sometime in 1981 you'll be able to buy computer versions of Raid on Iran and Kung Fu 2100. Look for these as licensed products from a leading computer game company, rather than SJ Games releases. But we'll be doing a lot of the development and playtesting right here.

Therefore, we'd like to hear from computer game fans in the Austin area — preferably people who have their own computers. We could use playtesters and critics, both for these projects and for reviews of other games. Write us at the address on page 1.

New PBM Section

Starting next issue, TSG will have a new column: PBM UPDATE. This space will be open to PBM game companies for news about the companies themselves — and about the course of the games as well. If you want to get the “big picture” on StarMaster, or find out about the current political situation in Crane I, this is the place. Companies can also announce new games, price and rules changes, and anything else they like. We'll welcome material from any legitimate PBM company, though of course we'll edit for length and remove any blatant “puffery.” This will be a news column, not a collection of free ads.

Job Openings

There seems to be a good chance that within the next 12 months we'll have at least two job openings at TSG/SJ Games. This seems like a good time and place to invite applications. Job Description: game development and production and/or...
magazine work—and the qualifications are the same. Salary: Depends on experience. You will neither starve nor grow wealthy. Modest fringe benefits, plus chance to go to a lot of conventions, etc.

Qualifications: Journalistic experience and/or game design background and/or graphics and pasteup skill and/or wide gaming experience (the more, the better) plus ability to work under pressure without going totally crackers. If you’re interested, send a resume.

—Steve Jackson

GAME MASTER

GAME MASTER exists to answer questions on your favorite games. If you have a rules question or play problem, send it in. Questions to be answered will be chosen on the basis of general interest. They will be first referred to the game publisher or designer. If no response is received, GAME MASTER will offer its own interpretation of the rule. Sorry—no individual replies are possible.

Holy War

In the game Holy War, the Field Generator Ship has the second highest crew point cost (9) of any ship in the game, but no special abilities are listed as is the case for other expensive but low-weapon rating ships. There must be some special game use for the FGS, but what is it?

—Tom Kenesson
Bay City, TX

No reply was received from Metagaming. We wrote to Lynn Willis, the game’s designer, and he replied:

“Holy War was originally a tactical game also, with a schematically-arranged tactical map as well. Field Generation capacity in the tactical game determined the physical relation of the opposing fleets, so a fleet with a preponderance of long-range weapons (for instance) could use superior FGS capability to literally put more space between the sides...the revision to a strategic game...left some major glitches...In looking at the game you’ll notice it is hardly overburdened with actual rules...”

Therefore, since the tactical rules did not make it into the final game, the easiest solution is simply to eliminate the FGS entirely.

—SJ

Stellar Conquest

These questions refer to the Perseid War scenario for Stellar Conquest (written by Steve Jackson; published in The Dragon No. 36):

1. Is there any limit to RIU or missile bases that can be present on one world?
2. Does the IU/RIU needed to terraform a planet have to come from that planet?
3. Can you sacrifice ships to block a sunbeam?

Ernest Rowland, Jr.
Raytown, MO

(1) No, there is no limit to either of these.
(2) Yes, all IU or RIU used for terraforming must come from the world being transformed.
Thus, if a world ever reaches habitability zero, it may not be terraformed.
(3) No. A sunbeam cannot be blocked.

—SJ

First there was Universe II. Now, prepare to enter

UNIVERSE III

UNIVERSE II was the most highly rated play-by-mail game in the country last year, according to The Space Gamer’s 1980 Game Survey, ranking above both StarWeb and The Tribes of Crane, and more than 14% ahead of its closest competitor. Unfortunately, entry into UNIVERSE II is limited by the very nature of the game. We are proud to be able to respond to popular demand by offering the same game, through an exclusive licensing agreement with Clemens & Associates, Inc., as...

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As an introductory special, all entries received before July 15, 1981 will be only $5.00. Your starship will be assigned as soon as you send your name, address, and entry fee to:

Central Texas Computing, Inc.
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Aboard the Leviathan

by Marc Miller

When my local group of Traveller players got together again after the Christmas holidays, it fell to me to referee Leviathan (Traveller Adventure 4) for them. That was partly because I had already read it through and knew what it was about, and partly because the other referees had been doing more than their share and wanted to get back into playing for a spell.

The adventure started off ordinarily enough with the group lying on the ground in the Outrim Void. The first world they set upon was Vior — and I was caught up short, not having prepared too much for the night's action. I read over the information in the booklet.

Vior 0805-X500401-1 Non-industrial.
Gas Giant.

In appearance this world is uninhabited (and uninhabitable); however, a detailed survey will indicate geological anomalies in one particular region. Investigation will reveal several airlock chambers giving access to an extensive underground habitat, where the Viorans lead a troglodyte existence. In one of the worst cases of regression yet found, chronic overcrowding has produced a primitive semi-cannibalistic society. Healthy crew members will be greeted primarily as a source of food.

The Viorans produce nothing of value; however, one reason for their overcrowding is longevity. After much detective work, the researchers have not been eaten in the meantime, this longevity may be traced to the inclusion of a particularly repellant rodent scavenger in their diet, with remarkable anagathic properties. The planet itself has a number of extractable deposits of various minerals.

There I was. These paragraphs indicate 100% of what the adventure says about Vior. This is what I did . . .

The adventurers looked over the system casually, and for a few minutes I thought that they would be moving on without really stopping. Then they got to thinking and called for detailed scans of the main world (Vior) after refuelling at the gas giant. That showed that the world was 5000 miles in diameter, airless and waterless. It hid no hint of inhabitants. Their detailed scans showed some geological anomalies and they investigated. What they found was a group of cave mouths; they left the ship that had brought them down to the surface of Vior, but only after Valerie had locked the pinnace and pocketed the keys.

Each of the players selected one cave mouth and checked it out, all the while staying in radio communication in case something cropped up. Several caves showed nothing. One did lead deep into the interior and showed some footprints in the loose soil. Another also had similar footprints, but these led outside . . . to a deposit of crystallized oxygen snow in permanent shadow.

There was evidence of digging in the snow; the footprints around the digging led into one of the caves, and the group investigated. They found that this cave and another joined deep within the mountain. They followed and found a twisted, tortuous passage which led deeper and deeper into the stone of the mountain itself. Finally, they encountered a solid blanket (a quilt) hung across the passage and solidly blocking it. They approached carefully and very gently poked it aside. On the other side was more passage — and another blanket. They checked that one as well, and kept finding more of the same. Thirty-five blankets later, someone checked the atmosphere testers and found that the cave was no longer airless — it was up to 35% of breathable levels. They kept going, less cautiously now, and finally (90 blankets later) found a large room with several crude vac suits, some completely hand-made, and some many-times patched antiques. They also found quite a few buckets.

While checking this stuff out, James asked (jokingly), "What is this stuff made of?"

I replied, "Looks like leather."

"Ha! What kind? Human skin?"

"Yes. Like a large thigh, sewn and reinforced."  
That slowed them down. They checked the room more carefully, and made sure that their weapons were at the ready. I checked what order they would be in as they moved through the only other exit from the room. That passage was long and tortuous, and finally led to a deep shaft with a spiral path cut in its sides; wide enough for only one person.

At this point, they encountered something in the dark. Shining their lights at it gave them a glimpse of a group of scurrying animals. Grasping for a "particularly repellant rodent scavenger" I said they looked like slimy inside-out rats. The several "uhts!" I got from the players showed that I was on the right track. They continued, now more slowly.

The spiral ended as the shaft ended. A passage took them through the shaft wall and into the top of a large (I said two or three kilometre diameter) cavern with a central spike leading to the ceiling; they were at the top of that spike, with a spiral path leading down its face. The cavern itself was aglow with a pale green light, and its floor was covered with a mass of humans. The place was obviously overcrowded. No one below seemed to notice the arrival of the group, and in any case, the adventurers were quite secure with their weapons and the one-person-wide path.

Working their way down, they finally attracted the attention of a few people who met them near the cavern floor. James and Sonny stepped forward and tried to communicate with them; the local language seemed to be an archaic dialect, and it took some work, but they did manage to get talking. After several minutes, three stooped, tubercular-looking locals with bad coughs came forward, and after a bit of tension, they were allowed to pass. The local spokesman explained that they were air gatherers. They went outside and gathered the air snow, carrying it back to sublimate and enhance the atmosphere. From this information, the adventurers conjectured that similarly, parts of the atmosphere that did escape from this cavern system could well condense in the shadow outside, in effect forming a crude recycling system. Although the two sides were getting along well, the travellers still clung to their path, but
kept the conversation going. They discovered that several chambers off the main one grew fungus, and that volcanic vents brought hot water and some plant nutrients to this dismal place. The light, however, continued to be unexplained: it looked artificial.

The conversation turned to ages, and it was revealed that the spokesman was at least 400 years old. The adventurers used private communications channels to discuss this new piece of information while Sonny kept up the outside conversation.

Their consensus was that the strange green light made the locals age so slowly.

About this time, the locals (numbering several thousand) got quite excited and fidgity. Simultaneously, the lights of the cavern got brighter; it almost hurt the eyes, and helmet visors polarized to cut the glare. Suddenly, a cascade of inside-out rats poured down the path from above. It forced everyone to leap out of the way for sheer self-preservation. Fortunately, the locals were making no moves against the travellers; they were too busy grabbing the rats and eating them raw and live. Ugh!

Once this meal was over, everyone returned to talking. The spokesman did finally wipe off his mouth (there was still blood running down his chin from his disgusting meal), and asked, “So, you are air-gatherers, too, I presume.” He acted like he was comfortable with the thought of other caverns with air-gatherers going outside much like was done here.

The adventurers first tried to sidestep the question, but agreed that they did gather air and that they came from far away. The leader moved the conversation on, and after more small talk, offered some obviously pure water (it tested as such) as refreshment. Cindy stepped forward in friendliness and accepted. She had to remove her helmet to drink, and that caused a great deal of excitement among everyone who could see. At first, they thought it was because of her long blonde hair; but that thought was soon dispelled. The spokesman had had a suspicion, and now it was confirmed; in this cavern, only the sick and the old went out to gather air, and the locals had assumed that the travellers were similarly sick or infirm. Now, everyone realized that the group was a healthy, fleshy, potential meal.

By this time, the group was no longer on its well-protected perch, but instead in the midst of a pack of locals. They started closing in and it proved impossible to keep them back. Finally, Marilyn opened fire with her shotgun and felled three of them. Now they stepped back, and when James asked, he found out that the bodies of the slain had disappeared, dragged away by the front ranks. Several locals could be seen fighting over the flesh in the background.

At this point, the travellers tried to strike a deal, but the spokesman’s offer to eat only one of them was unacceptable, especially because they had expressed a preference for Valerie. She very emphatically pointed out that they still had the keys to the pinnace, and wasn’t about to turn them over to anyone else. Instead, they fought their way out, which proved quite easy, since the locals soon fell to fighting over the dead rather than obstructing the group’s exit.

On the route out, Marilyn conjectured aloud that perhaps the inside-out rats might have anagathic properties. The others allowed as how that might be true, and they all looked hard for some rats along the way. The few they did see proved hard to catch, and in fact, only Marilyn succeeded in snaring one. That posed the next problem, as I pointed out that it was vacuum outside, and they had no container for such a sample. Marilyn was forced to stick the slimy thing into a sample bag and poke it down the front of her vac suit. Rolls for the rat’s resistance (and attempts to chew out of the bag) kept Marilyn speeding for the pinnace, only to arrive there and find that Valerie, with the keys, was taking her time.

Once aboard the ship, they all filed their reports, turned the rat over to the lab (where it did indeed have high readings on anagathic properties) and began preparations for their next world survey.

Check this narration against the world description of Vior. The airlocks are tech level 1, taken from an old science-fiction story I read long ago.* The cavern is certainly a tragdylonic setting, and there is some evidence of overcrowding. There is also evidence of cannibalism. It was not initially clear to the locals that the players were healthy specimens, but once evidence of their good health became clear, the locals saw the potential meal that the group presented. The anagathic properties of the rodents became the focus of the entire adventure.

What did I leave out? The mineral deposits, left for the more detailed survey that will follow when the world is investigated in depth. And that leaves me only ten more worlds to elaborate upon and ten more adventures for the crew of the Leviathan.

* Editor’s Note: Marc presumably is referring to “A Pull of Air” by Fritz Leiber.
The space combat system in GDW's Traveller, Book 2, drawing on the classic Triplanetary, has one of the best vector movement systems in use. It is both realistic and surprisingly simple. Unfortunately, the rules tend to be a bit sketchy in places. The following module was designed to make Traveller space combat both more playable and more enjoyable.

**Basic Parameters**

Using the scale given (1 inch = 1,000 miles) means many battles will cover the entire floor of a good-sized room. While this is visually exciting, it is often impractical and always unhandy. A smaller scale can make encounters at extreme range much more manageable.

If the distance scale is reduced, however, the time scale must be expanded. The relationship is given by the equation

\[ D = T^2 \]

where \( D \) is the distance represented by one inch expressed in thousand-mile segments and \( T \) is the length of the turn in ten-minute segments. In a standard Traveller space combat turn, both \( D \) and \( T \) equal 1.

The most useful scales are shown below.

<table>
<thead>
<tr>
<th>( D ) (1,000 miles)</th>
<th>( T ) (10 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4 (4,000 miles)</td>
<td>2 (20 minutes)</td>
</tr>
<tr>
<td>10 (10,000 miles)</td>
<td>3 (30 minutes)</td>
</tr>
<tr>
<td>25 (25,000 miles)</td>
<td>5 (50 minutes)</td>
</tr>
<tr>
<td>100 (100,000 miles)</td>
<td>10 (100 minutes)</td>
</tr>
</tbody>
</table>

Obviously, the 30-minute turns are fudged to fit a 10,000 mile distance scale, but the discrepancy isn't too much for game purposes.

These scales allow ships maneuvering at the edge of sensor range to be kept within four feet of each other, which is within the confines of most gamers' tabletops.

There is nothing wrong with changing scales in the middle of a battle. If ships get too close using a 10/3 scale, switch to 4/2 or 1/1. If they get too far apart, switch to 25/5 or 100/10.

**Turn Sequence**

The "A moves, A fires, B moves, B fires" turn sequence isn't a good one where running battles are concerned. Too often it results in the range changing between the Intruder's fire phase and the Native's fire phase, with the Intruder getting to shoot at closer range than the Native.

To correct this, the sequence should be changed to:

I. Movement Segment
   A. Intruder Movement
   B. Native Movement

II. Shipboard Action Segment
   A. Intruder Laser Fire
   B. Native Laser Return Fire
   C. Intruder Ordnance Launch
   D. Intruder Damage Control
   E. Native Laser Fire
   F. Intruder Return Laser Fire
   G. Native Ordnance Launch
   H. Native Damage Control
   I. Intruder and Native Computer Re-programming

This sequence doesn't take the initiative away from the Intruder, but it does make the turn more fluid.

It's important to remember that a tactical turn is 10 minutes long. Each ship gets to fire energy weapons, launch ordnance (or vehicles), attempt repairs and reprogram its computer once every 10 minutes. If a battle is being fought in a scale other than 1/1, the turn is more than 10 minutes long and all laser fire, laser return fire, ordnance launch, damage control and computer reprogramming phases will be repeated several times per turn; i.e., if the scale is 10/3 each turn will consist of one Movement Segment and three Shipboard Action Segments.

**Movement**

Movement can be simplified by using a hex grid; just substitute hexes for inches. Mayday or Triplanetary would furnish an excellent play aid for hexagonal play.

**Damage**

The weakest part of Traveller's starship combat system is the Ship Damage Table. A starship has a lot more parts than those listed on the table. The expanded tables below cover starship systems in much greater detail.
## Expanded Starship Damage Tables

<table>
<thead>
<tr>
<th>Hit Distribution Table (2d6)</th>
<th>Weaponry Section (2d6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Engineering</td>
<td>2 Fire control</td>
</tr>
<tr>
<td>3 Engineering</td>
<td>3 Fire control</td>
</tr>
<tr>
<td>4 Engineering</td>
<td>4 Turret</td>
</tr>
<tr>
<td>5 Control</td>
<td>5 Turret</td>
</tr>
<tr>
<td>6 Main Section</td>
<td>6 Bay/turret</td>
</tr>
<tr>
<td>7 Main Section</td>
<td>7 Bay/turret</td>
</tr>
<tr>
<td>8 Main Section</td>
<td>8 Bay/turret</td>
</tr>
<tr>
<td>9 Fuel tankage</td>
<td>9 Screen generator</td>
</tr>
<tr>
<td>10 Weaponry</td>
<td>10 Magazine</td>
</tr>
<tr>
<td>11 Weaponry</td>
<td>11 Fire control</td>
</tr>
<tr>
<td>12 Weaponry</td>
<td>12 Critical damage</td>
</tr>
</tbody>
</table>

### Engineering Section (2d6)
- 2 Machine shop/electronics shop/armory
- 3 Gravitics
- 4 M-Drive
- 5 Power Plant
- 6 M-Drive
- 7 J-Drive
- 8 J-Drive
- 9 Life support
- 10 Screen generator
- 11 Fuel purification
- 12 Critical damage

### Engineering Critical Damage (1d6)
- 1 Power plant crippled
- 2 M-Drive crippled
- 3 M-Drive crippled
- 4 J-Drive crippled
- 5 Life support equipment destroyed
- 6 Gravitics destroyed

### Control Section (2d6)
- 2 Computer -1
- 3 Servos
- 4 Sensors
- 5 Computer -1
- 6 Screen generator
- 7 Computer -1
- 8 Computer -1
- 9 Communications
- 10 Communications
- 11 Computer -1
- 12 Critical Damage

### Control Section Critical Damage (1d6)
- 1 Computer -10
- 2 Computer -6
- 3 Running programs wiped
- 4 Commo disabled
- 5 Sensors destroyed
- 6 Fire control destroyed

<table>
<thead>
<tr>
<th>Weaponry Section Critical Damage (1d6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Turret destroyed</td>
</tr>
<tr>
<td>2 All turrets lock</td>
</tr>
<tr>
<td>3 Screen generator destroyed</td>
</tr>
<tr>
<td>4 Magazine explodes</td>
</tr>
<tr>
<td>5 Fire control crippled</td>
</tr>
<tr>
<td>6 Bay crippled</td>
</tr>
</tbody>
</table>

### Main Section (3d6)
- 3 Aux. bridge
- 4 Aux. bridge
- 5 Bridge
- 6 Galley/lounge
- 7 Bridge
- 8 Lunch tube
- 9 Boat/hangar deck
- 10 Cargo hold
- 11 Cargo hold
- 12 Cargo hold
- 13 Stateroom/ship's locker
- 14 Life support equipment
- 15 Sick bay
- 16 Cold sleep berth
- 17 Lab/air lock
- 18 Critical damage

### Main Section Critical Damage (1d6)
- 1 Boat/hangar deck crippled
- 2 Cargo destroyed
- 3 Cargo destroyed
- 4 Streamlining shattered
- 5 Frozen watch destroyed
- 6 Helm disabled

### Bridge Table (1d6)
- 1 Computer -3
- 2 Sensors
- 3 M-Drive controls
- 4 J-Drive controls
- 5 No effect
- 6 No effect

---

The Hit Distribution Table is used to determine which section of a ship has been hit. Roll separately for each hit. The individual section tables are used to determine the specific damage caused by each hit.

If a table indicates a system is hit which doesn’t exist on the target ship, the hit is instead taken in the next listed system toward the center of the table. **EXAMPLE:** A 3 is rolled on the Hit Distribution Table, indicating a hit to the engineering section. Two dice are rolled on the Engineering Section Table, resulting in a 10, “Screen generator.” If the ship does not have a screen generator, the hit would be taken in the next listed system toward the center of the table, which in this case is “Life support.”

The hit does not shift to another system unless the system rolled does not exist on the ship. A destroyed system can be hit, but the hits won’t have any extra effect.

If a hit causes critical damage, roll again on the appropriate critical damage table.

In the damage definitions which follow, a system described as disabled will not function, but may be repaired in space. A crippled system will not function and can be repaired only at a starport, not on board. A destroyed system will not function and cannot be repaired. It must be replaced at a starport.

Some damage descriptions are self-explanatory. Others follow:

**Fuel tankage:** Each fuel hit releases 6d-1 tons of fuel.

**Machine shop/electronics shop/armory:** Machine shop, electronics shop, or armory hit. (If more than one, determine randomly.) GM determines extent of damage.

**Gravitics:** Floor-mounted gravity plates and inertial compensators disabled. If M-Drive is used, anyone not strapped into an acceleration couch or in a cold sleep berth will take damage equal to (g's accelerated)6.

**M-Drive:** As per Traveller Book 2, p. 33.

**Power Plant:** As per Traveller Book 2, p. 33.

**J-Drive:** As per Traveller Book 2, p. 33.

**Life support:** Recycling and purification system disabled, must be repaired within 24 hours or ship's air supply will be exhausted. See Traveller Book 2, p. 17.

**Screen generator:** One screen generator (nuclear damper, meson screen, repulsor, black globe) takes one hit.

**Fuel purification:** Fuel purification plant disabled.

**Computer:** As per Traveller Book 2, p. 33.

**Servos:** One automated servo system (repair, medical, etc.) disabled.
Sensors: Sensors disabled, ship must operate blind until repaired. All maneuvers must be plotted one turn ahead. No weapons may be fired (except manned turrets repelling boarders).

Communications: Each hit imposes DM-1 to establish radio communication with base or ship. (A roll of 3+ will establish communications under normal conditions.)

Computer: Computer takes indicated number of hits. Running programs wiped: All programs currently running in the computer's central processing unit are erased and lost from the computer.

Sensors destroyed: Ship must operate blind until sensors replaced at starport.

Fire control: Each hit imposes DM-1 to hit with ship's weaponry.

Fire control destroyed: Targeting mechanisms destroyed, no weaponry may be fired. Guided and controlled missiles are lost.

Turret: As per Traveller Book 2, p. 33.

Bay/turret: One weapon bay disabled. If no bays on ship treat as turret hit.

Magazine: One bay or turret magazine hit, missiles inside rendered useless.

All turrets lock: Turrets lock in position, will not respond to remote targeting orders. Only turrets with gunners integrated may fire.

Magazine explodes: One bay or turret magazine explodes, ship takes six hits from each of 1-6 exploding missiles.

Aux. bridge: Auxiliary bridge hit, roll on bridge table.

Bridge: Bridge hit, roll on bridge table.

Galley/lounge: Ship's galley or lounge (determine randomly) hit. GM determines extent of damage.

Launch tube: One launch tube disabled.

Boat/hangar deck: Ship's boat or other vehicle damaged. Roll once on Small Craft Table (Traveller Book 2, p. 34) to determine damage.

Cargo hold: Cargo bay penetrated, GM determines extent of damage to cargo.

Stateroom/ship's locker: One stateroom or ship's locker hit. (Determine randomly; if there are 5 staterooms and 1 locker, the chance of hitting the locker is 1-10.) GM determines extent of damage.

Sick bay: Medical equipment damaged, GM determines extent.

Cold sleep berth: One low passage berth disabled, occupant (if any) is killed.

Lab/air lock: Lab penetrated, extent of damage determined by GM. If there is no lab, the airlock is crippled; a second hit causes explosive decompression, if possible.

Boat/hangar deck crippled: All craft on boat/hangar deck may be damaged by exploding equipment. Roll 1d-2 times times on Small Craft Table for each craft on deck. No craft may be launched or docked.

Cargo destroyed: All cargo carried in one hold destroyed.

Streamlining shattered: Ship may not maneuver in atmosphere.

Frozen watch destroyed: Monitoring equipment crippled, all low passengers in one section killed.

Helm disabled: Ship may not maneuver or jump.

M-Drive controls disabled: Ship may not use maneuver drive unless it has aux. bridge or engineer present in engineering section. No defensive pilot DMs allowed if ship operated from engineering section, and maneuvers must be plotted one turn ahead.

J-Drive controls disabled: Ship may not jump unless it has aux. bridge or engineer present in engineering section. Jump must be plotted one turn ahead.

If characters are present in a section when it is hit, there is a chance they will be injured. For each character in the section, roll 2d-7. If the result is greater than 0 it is doubled and the character suffers that number of dice damage. Characters also can be killed by explosive decompression — see Traveller Book 2, p. 34.

The section tables can be changed easily to reflect different ship structures. Scout ships, for example, have more tonnage devoted to control equipment and living quarters than to cargo space, so one or two of the main section cargo hold hits should be treated as bridge or stateroom hits. For non-starships, J-Drive hits should be treated as M-Drive or power plant hits.

These tables were designed for small ships (5,000 tons and less). If larger ships are involved, players should consider using High Guard or some comparable set of rules.
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Nonhuman Races

The contest challenge to "create a non-human race" was easily our most successful one to date. We could literally have filled an entire issue of TSG with the good submissions we received.

Therefore, we've chosen two first-place winners — the two entries that were truly outstanding among a whole stack of good ideas — and eight second-place winners. Obviously, we don't have room for them all in this issue. We are naming the first-place winners in this issue; the second-place winners will appear in the next few issues as a continuing feature.

The first-place winners are Ernest Heramia (East Providence, RI) and Daniel Maxfield (Manhattan, KS). Both receive 12-issue subscriptions to TSG. The second-place winners, each winning six-issue subscriptions, are Randy Chafe (Brunswick, Ont.); Gavin Gossett (Nashville, TN); Trevor Graver (London, England); Stefan Jones (Locust Valley, NY); James H. Kelley (Winston, AR); Alan Pol (Memphis, TN); Ron Shigeta (Salem, OR); and John Vogel (Marlboro, MD).

The Mitsusashi

The Mitsusashi are a race of trilateral, tri-sexual beings that rule the islands of Middori-Taka. The bodies of the Mitsusashi resemble barrels, triangular in cross section, supported by three long muscular legs, and topped by three arms and a long graceful neck supporting a vaguely tear-drop shaped head. The head is made up of three small maxillae, each holding its own brain, ear, nostril, and pair of vertically set eyes. The mouth opens vertically; a Mitsusashi's head would resemble a three-petaled flower if it yawned. This arrangement of the mouth best suits the Mitsusashi's eating habit of picking and swallowing whole fresh fruit right off the tree.

As said before, the Mitsusashi have three brains, (one in each maxilla); one serves solely as memory, one provides special instincts according to the sex of the creature, and the third brain holds the reasoning abilities.

The sexes of the Mitsusashi are: Te, Atama, and Kokoro. The Te are the largest of the three, (3 meters tall), and almost always are warriors. Their attributes according to The Fantasy Trip are ST 20; DX 14; IQ 10; MA 30.

The reproductive system for Te, (and the other sexes), is located under the arm on the same side as the special instinct brain. When forced to stand and fight (engaged), they will stand so that this side of their bodies is away from the foe.

Mentally, Te tend to be choleric. Their color is red, and they dress in short skirts and ponchos of that hue, adorned with martial jewelry.

The Atama are 2½ meters tall, and brunette-furred. They tend to be the scholars of Mitsusashi society, and fill most non-military positions in the government. They can be fighters or magicians, and on occasion (10%) one is both. Their attributes are ST 15; DX 12; IQ 15; MA 30.

They tend to be pensive most of the time. Their favorite colors are "cool" and "earthen," and they like to dress in long flowing robes (fighters often dress like To).

The Kokoro are 2 meters tall, and fair-furred. They are the creative element in Mitsusashi society; artists, writers, and weavers of children. It is also believed that the Kokoro's sanguine nature keeps the Te and Atama from killing themselves. (Statistics show that one out of every three Kokoro-less marriages end in violence). Kokoro are peaceful-loving and can never bring themselves to do any hurt to anything, even in self-defense. This is not to say that they are helpless in a fight; they have the ability to make all creatures within three megahexes (no saving roll) empathic to the pain they inflict on another. (For game purposes, any one that scores a hit in three Megahexes of a Kokoro must automatically take the same damage as the creature he hit.) Their attributes are ST 10; DX 20; IQ 10; MA 25.

Their favorite colors are yellows and whites; they prefer to go about clad only in floral garlands, but for modesty's sake will wear a gauzy skirt and poncho in the city or around aliens.

Mittsuashi move by rolling from one flat triangular foot to another as they spin; this can vary from the dignified shuffling pirouette of the Well-born, to the wild cartwheeling-like run of charging Te and frolicking Kokoro. They are able to reach great speeds moving in this manner. The record at present is held by the late Genji Bunsho Tenki at 274 k.p.h. (Any missile or thrown attack on a Mittsuashi that has moved more than 12 hexes across the path of the attacker will be at-3 adj DX.)

Fighters will charge attack most of the time, using one of the following two techniques: Slash — the fighter will spin past his foe, making FOUR separate attacks (or three attacks and one defend), and if not engaged by a second foe, can move two hexes more. The effect of this attack is as if the foe was hit by a giant buzz saw blade; Throw while running — the fighter moves up to half his MA; on every third hex of that move he may throw one weapon at plus 4 adj DX and 4 extra hits of damage, but only if the target is in the path of the charging fighter.

Because of the Mitsusashi sense of balance, and tripod physique, they make all saving rolls to avoid falling with one less die than called for. Also, they will automatically notice any incline.

The arrangement of the six eyes around the head gives full 360 degree stereoscopic vision horizontally, and nearly the same vertically. Because of this, all hexes are considered FRONT.

The Mitsusashi don't like fighting hand-to-hand, and will never initiate it. Should he be forced into it, he will try two or three times to disengage then go berserk automatically on the next turn, biting 3 times a turn, with 2 dice damage each.

When engaged, a Mitsusashi will stand so that the special instinct side is away from the foe. If he is attacked in any way on this side while engaged, he will seek to disengage and flee to a safer position. (The bottom or rear of the one-hex counter represents this special side. For a figure, place a mark on that side on the base.) While engaged he will use only two of his arms, but with the skill of the "two weapons" talent, regardless of IQ and DX.

Because of the centrifugal force they develop when they spin, and a general dislike for bearing burdens, a Mitsusashi will carry only his weapons and personal items totaling no more than 6 kilograms evenly distributed over his three sides. Any extra equipment and supplies will be carried by a pack animal or slave trained to follow its master.
"Atamataku" refers to the form of archery used by the Atama sex (The Te respect archery, but consider it "An Atama thing"). The bow is the same as a horse bow, and is carried in a holster. Archers depend completely on their marksmanship in battle, and will carry no other weapon. Archers are trained to enter a trance-like state when they nock an arrow. While in this trance, they get a +3 DX adjustment and one extra hit of damage on the foe, and have their MA reduced to 10. To "snap out" of the trance requires a 3 dice saving roll against their IQ.

The Mittusuai have a low regard for the weapons of human-kind such as the battle ax; they view them as crude and excessively violent. They will always prefer a one-handed weapon over a two-hand ed weapon, and never use a weapon heavier than 2 kg.

As mentioned, the Mittusuai are tri-sexual, and can only reproduce with the co-operation of all three sexes. Each parent will choose a child of his sex to raise; the extra ones are put up for adoption by triads whose triad of offspring is incomplete because of death or misconception.

For the first two months of life, each parent will care for its own child; at the end of that period the child becomes sapi ent, is weaned, and entrusted to the care of the Kokoro, while the Te and Atama are at work.

When the children reach the age of 27, they and their parents will go to a seaside temple for the Passage Ritual. The Passage Ritual is a combination birthday and funeral; during it the parents bid farewell to the community, and acknowledge the offspring as heir to all their possessions. The children are then welcomed into the adult community. If a child is judged unfit for adulthood by its parent, the parent will give his possessions (including his last name) to someone else of his sex. A person without a last name will usually go off to a foreign land to "make a name for himself," and only then return to Midori taka to join a triad and mate. Well-borns are those with very old last names. Most Mittusuai met outside of Midoritaka will be status seekers.

Mittusuai government is a democracy, with each sex electing its own officer for each government position, and then these officers join into triads to administer the offices. (So instead of having a Prime Minister, they have a Prime Ministering Triad that must form a unanimous decision on each issue.) Well-borns are elected most often because they would never do anything to bring shame upon their last name.

The Mittusuai believe that once they lived with their god, Watakushi Mittsu Desu, but were seduced by the humans to leave their home with him and go to Cid- ri. It was humans too, who taught them about religions. They rejected all but Christianity, Shintosintuism, and Hinduism, since they were the only faiths that fit their triangular way of thinking. Usually, Christianity is the religion of the Kokoro, Shintosintuism the religion of the Atama, Hinduism the religion of the Te, and Enok is worshipped by status seekers.

The Mittusuai look on humans as a race of cripples at best, and the offspring of disfigured demons at worst, and seldom feel at ease around them. (The exception is the Kokoro. They tend to trust and want to be friends with everything.) In a party of adventurers, a Mittusuai will stay in the background and let the others make the decisions. (The exception here is the Atama, who will want to lead, and will always have an "I-told-you-so" ready if his ever-present advice is not followed.)

All Mittusuai hate evil, but the Te are fanatical about it. They will go out of their way to hunt down the smallest evil being, and will single-mindedly seek to destroy it. When fighting an evil being a Te will go berserk automatically, (when the last evil being is killed, the Te will start mutilating it, instead of attacking his friends, until he makes the 3 dice saving roll to snap out of it.) Te have been known to join parties of evil beings for the sole purpose of destroying them. (To do this they must make a 3 dice saving roll against their IQ every hour of game time to keep from blowing their cover, and they must use some kind of magical disguise, such as Glamor spells, to give them the same appearance as their intended victims.)

The Mittusuai do not use any form of transportation other than their feet (and ships when sailing), because forward motion without centrifugal force pulling on them makes them dizzy. So a Mittusuai will never ride a horse, chariot, or anything else that goes forward without spinning; and any Mittusuai that doesn’t have the Swimming talent will suffer from seasickness while sailing. (Because of their shape they can’t drown, but must learn to swim to overcome their unique form of motion-sickness.)

Mittusuai make interesting non-player characters, and their cities are colorful settings that challenge the GM to think in triads instead of the "Yin and Yang" of humankind. Te make great monsters; the sight of even a small group of Te rolling down a hillside, weapons flashing hypnotically in the sun, is enough to give one an old nightmares. As a player character, the Atama is best, (and the Kokoro if you want to live peacefully in a violent world). Unless you are a Well-born on some noble mission, you will most likely be a status seeker with no family name. When your Mittusuai is rich enough to return home with a ship full of valuables, he may make up his own last name. This name must have three or more syllables, and be registered with the government. (Well-born names have one or two syllables).

So why not roll up one of my three-legged friends, and take him for a "spin?"

— Ernest Heramia

The Men With Heads Beneath Their Shoulders

First mentioned in an explorer’s journal in 1599, the men with heads beneath their shoulders reportedly inhabited “the fastness of the Upper Orinoco.”

Thousands of years ago, an obscure Indian tribe of Venezuela called the “Xac tlapap” stumbled onto a valley that was before unknown. There they found the legendary “tree of life,” nurtured by the equally famous “fountain of youth.” The water itself was poisonous, but the tree filtered out the toxin and bore revitalizing fruit. The spring had outlets all over the valley, and trees abounded. However, the trees had one drawback. Although the fruit stopped the aging process for one hour, and ended any need for food, drink, urination, or sex, it caused sterility and a deterioration of the body. In fact, after 50 years of eating the fruit, the tribesmen were mere shrunken skeletons, and led rather sedentary lives.

The tribe did have a huge advantage, however, as they worshipped a deity that happened to exist, Copollonx, god of life and water, was a powerful god indeed. He had been born somewhere out in space, had journeyed to earth for no particular reason, and he liked very much the tribe’s practice of sacrificing dinosaurs to him. (There were dinosaurs in the valley, little, tiny, shriveled ones, but dinosaurs, none the less.)

Copollonx invented the system of spells
of Spain. (Interesting one, considering no. 4.)
10. They worship Satan. (They will be very angry if you accuse them of this.)

All fruit affected by the water will not rot for hours after picking. Eating one stops the aging process for an hour, but for every ten fruits eaten, each constitution subvalue is reduced one without warning, except physical effect. This process will stop after reaching 1 or 2, depending on a purely random die roll.

For Skull & Crossbones, treat them as being skilled in every weapon and Pirate King in every class (includes gunnery): luck, strength, and agility will range from 20 to 24.

They are very Sly and treacherous, and are likely to play stupid when met by white men, in order to observe their intentions. They will kill anyone attempting to leave the valley, and anyone else who is useless to them. They are fanatically against knowledge of the valley getting out, and only 4 or 5 primitives have ever escaped them in 6,000 years.

Elsewhere, the Baratarian (South Louisiana) and Jamaican colonies are protected to a minor degree by Copollonx, and are occasionally visited by Men-who-Head-Beneath-Their-Shoulders. They may prove helpful in finding the valley, and provide adventure opportunities themselves.

colonies have no such fruit as the valley, but are guarded by zombies.

— Daniel Maxfield

CONTEST

This month we have another Traveller-related contest. Take up to three heroes (or villains) of science fiction literature and cast them in Traveller terms. Include all important characteristics, abilities, and special behavior notes that a referee would need to play him/her as an NPC. Suggestions for a specific adventure, perhaps ty-
ing in with something already published for Traveller, would also be appropriate.

Each entry may include up to three different persons. Please limit the length of each individual description to one typewritten page (if only the character is described) or two typewritten pages (if a description of henchmen, special equipment, or a spaceship is also needed).

Winners will be chosen on the basis of playability, originality, and accuracy of adaptation. All entries become the prop-
erty of TSG. First place will win a 12-issue subscription; second place will win a 6-issue subscription. Some runners-up may also be printed if space allows. We reserve the right to award fewer prizes if no entries of publishable quality are received. Entries must be postmarked no later than June 30, 1981.

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and incantations we know today as “voo-
doo.” The tribesmen would take zombies, (other tribes were directed by the god to the valley), cut off their heads, hollow out their chests, and ride inside. This gave them the “heads beneath their shoulders” appearance recorded by Hulsius. The tribesmen in the valley were all wiped out by smallpox by 1842, although many in Jamaica and Barataria survived to continue their religion after fleeing their disease-ridden country.

In the days of my Skull & Crossbones/Legacy campaign, however, their numbers had been reduced to 75 sickly tribesmen riding in 75 very powerful zombies, and they did not like white men.

For Legacy, treat them as normal men with no constitution subvalue over 2. For intelligence and charisma roll normally, but keep in mind that these people have been alive for thousands of years and have had a chance to accumulate information that could make them appear to be superintelligent. When riding their zombies (99.99999% of the time), they take on the physical abilities of their corpse, i.e., as a normal man gone up two levels of physical efficiency.

The weapon they mainly use is the curare dart, for which no one in the tribe has a skill level less than 25.

The poison of these darts is not made from normal plants, but it is made affected by the fountain of youth, so instead of the normal effect (death), the victim immediately goes into a coma and must check vs. disease resistance or lose a strength point permanently.

Rumors have sprung up during the millennia, many of which may lure the players up the Orinoco River:
1. The men with heads beneath their shoulders have the Fountain of Youth that can rejuvenate the aged. (False)
2. They are ruled by Prester John. (False)
3. They can bring people back to life. (True, but only their heads and torso. Combined with a zombie, this can work just as well, but intelligence is down a level plus an additional level for each month the subject has been dead.)
4. They hate Spaniards. (True. They hate everybody.)
5. The head of one nailed to a bowsprit will cause bad luck to enemy ships. (False, but it might cause it to your ship if you killed the man in a temple or if he was a priest.)
6. They can turn lead into gold. (False)
7. They have fruit that prevents aging. (True)
8. They live in the seven cities of gold. (So False, you wouldn’t believe it!)
9. They are in the pay of King Phillip
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Role-playing game design is a profession for a few, and nowadays a pastime for many. RPGs are the biggest thing to hit the hobby in years; TSR is the most prominent (and certainly not the only) company to be rocketed to success by a successful role-playing game. And almost everyone who plays D&D, or any other similar game, has been introduced his own modifications. The “personal” rulebooks of many GMs take up more space than the original rule sets they’re based on.

Beyond a doubt, RPG design is more of an art than a science. The success of D&D has spawned many imitators — companies working on the theory that if D&D could sell, something substantially the same, in a glossier package, would sell better. Not so. Like any fad, RPGdom has seen its share of “quick-and-dirty” design — most of which achieved a well-deserved oblivion within weeks of release. But more than one reputable company has seen a carefully-researched effort relegated to the status of a “resource” book for its less polished, but better-established, competitors.

It seems to be impossible to isolate the “spark” that makes a RPG work. But it is easy to point at many efforts and say why they don’t work! This article will discuss the known factors that go into a good RPG. As for the rest ... that spark of “inspiration,” “life,” or just “fun” that can’t be added by formula. Get the mechanical details right, and the spark will show itself, if it’s there. Good luck.

Components

Component design for a RPG is very simple. Most of your rules will be narrative paragraphs, interspersed with charts and tables. The customary way to handle this is in three or more large booklets. Multiple booklets can be handy, since several players can read the rules at the same time, whatever you do, index them thoroughly. When you’re dealing with a body of rules as large as that of an average RPG, good cross-referencing is a must.

Commonly used charts and tables should be printed separately for easy reference. These may be placed on a “GM screen,” a sheet of cardboard that can be used to hide the Game Master’s notes from the players.

Depending on the combat system used, you may also include strategic or tactical maps and counters. For most RPGs, players will be drawing their own maps, so put in some blank grid or hex paper. Two years ago, any game that required “polyhedra” dice (anything except the standard 6-siders) was almost honor-bound to include them in the box. Now that such dice are becoming more common, it is reasonable to assume that your players will already possess such dice, or have easy access to them.

In general, follow the same guidelines for developing components for an RPG that you would for any other game — definitely including the proof playtesting stage. Erroneous charts are killers.

The phenomenon of “supplements” — auxiliary rulebooks for RPGs — should be mentioned here. There are two kinds of supplements. The first provides new rules that are really necessary to play the game ... sold as an afterthought. This sort of thing is sloppy, if not downright dishonest. The second sort presents some sideways to the game: a new adventure setting, a set of rules for an unlikely but interesting situation (or one outside the original scope of the game), or some similar set of suggestions for a GM. Supplements like these offer the designer a good way to expand on his original conception (or publish his own favorite game-world). They are also ready sellers when the original game is popular.

Researching a RPG

This is a matter of the designer’s individual preference. If you want to spend hours researching the difference between a glaive and a guisarme, be warned that most people will never care. On the other hand, if your crossbow does no more damage than a dagger-throw against plate armor, you may get some complaints. Just remember that too much detail will impede playability. The objective should be to achieve a realistic effect with as few and as simple rules as possible. Remember that ANYTHING that can happen in real life (and some things that can’t) should be covered by a RPG. If the player can say that his character is doing it, your rules must be able to handle it — not necessarily with total realism, but convincingly.

Character Generation

By definition, a RPG is one in which each player takes the part of one individual and controls that individual through
various adventures. The first element of any RPG, then, is the system by which a character is created.

Commonly, a character will be defined in two ways. The first may be called attributes: a set of numbers, each of which represents a level of ability in one thing. Common attributes are Strength, Dexterity, Luck, and Intelligence; many others are also used. Each character will have some numerical ranking — high, low, or average — in each attribute.

The second part of a character may be called abilities. An ability may be all-or-nothing, or it may also have a numerical rank attached. An ability could be considered an attribute which most characters possess only at a level of zero. Typical abilities would include magic spells, ability to pick pockets, ability to paint, etcetera. Attributes are general-use talents; abilities are specific-use talents.

These two concepts may be combined in a variety of ways. D&D, for instance, uses "levels." A level is a sort of attribute, in that each character has one and higher levels are better. However, a level indicates generalized competence. DragonQuest applies a separate "Rank" to each of a character’s abilities; RuneQuest gives a percentile for each ability, with 0 representing no knowledge and 100 representing perfect knowledge.

Other descriptions may be used. Some systems divide characters along various spectrums such as good-evil, lawful-chaotic, self-altruistic, etc. The position a character takes on the spectrum will determine his relationships to other characters. And, of course, details of a character's wealth, physical possessions, social status, appearance, etc., are often useful.

The more detail a character-generation system has, the less manageable and more realistic it will be. Three basic rules:

(a) All characteristics should be easily computed, and a record sheet should be designed which will allow players to refer to any characteristic as it is needed.

(b) The number of characteristics that directly affect normal play should be kept to a minimum. Other characteristics may be supplied for the sake of verisimilitude.

(c) ANY TIME there is a question of a character’s ability to do something, the answer must come from one of his attributes or abilities, either directly or as a die-roll modifier.

Combat

While combat may not be necessary to a RPG, no successful RPG has yet ignored combat. Games without conflict don’t seem to be too interesting.

Basically, the combat system should be a quick, simple tactical game in which the combat abilities of the pieces are drawn from the characteristics of the characters. Simplicity is the prime virtue of such a system. D&D, with a combat system so rudimentary as to be laughable, has proven immensely popular. Chivalry and Sorcery boasts a highly realistic combat system, which plays so slowly as to be seen only rarely in tournament play. The moral ought to be clear. Realism and detail are nice. Speed and comprehensibility are much more important.

Depending on the game’s subject, it may be necessary to have more than one combat system. Traveller obviously requires both a man-to-man and ship-to-ship system. En Garde simplifies the “battle” system to a die-roll chance for the player’s character to die, be decorated, or flee in disgrace.

Resolution of Actions

This is the means whereby a GM in your game will take the character’s statement about his actions (“I’m going to jump over the pit, pick up the rifle, and fire at the dragon”) into a game result. In the original D&D, the referee would have either replied “Okay, you’re firing at the dragon. Roll to hit,” or “You can’t do all that.” Either way, an argument might well

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Coming This Month: MARTIGAN BELT

Adventure scenario for use with Space Opera.
have ensued. Some later games reduce each step (jumping, grabbing the rifle, and firing) to a die-roll chance based on the character's abilities; others assign a certain number of "action points" to each character each turn. The action-point system is very flexible, if somewhat slow, and probably represents the best current compromise between detail and ease of play.

Strategic Movement

This is usually a simple question. In order for players to get from one adventure to the next, they will have to travel on a map of the game-world. Translate the speed they are moving (by typical conveyance) into days of travel and be done with it. If the terrain traveled through is a potential adventure site, assign a chance each day that something interesting will occur. Large "encounter tables" may be created to cover the various possibilities. Should travelers survive the adventures generated by such a table, they may reach their goal and proceed.

World-Building

This is the process by which the game master fleshes out the background of the "game-world" in which the players move their characters. The GM will create a universe, world, continent, town, or dungeon. The designer must provide the parameters within which his "world" is to be built.

The more ambitious the scale of the game, the more detail must go into world-building rules. If a game-world is to consist merely of an underground dungeon, world-building will be completed when a floor-plan is drawn and the rooms stocked with beasts. (The characteristics of each sort of beast must be noted for purposes of combat.) On the other hand, a town background must include dozens of buildings and hundreds of people. If a whole world is being laid out, details of geography, ecology, and history will have to be considered (at least briefly) by the GM ... which means that the designer will have to think of them first.

The more flexible a game system, the better it is. The final test of a RPG system is the believability and completeness of the "big picture." Bunnies and Burrows, a RPG about intelligent rabbits (!) is very limited in scope. Yet almost everything a rabbit could want to do is covered in the rules. In this sense, they are highly complete, and B&B is mildly popular in some places because it is believable and fun. If, reading your rules, a GM can find no hint of how to represent something in his game-world, the omission is significant.

If your medieval world has bows and arrows, a good GM will be able to work out gun rules as needed. If you have omitted missile weapons entirely, you have a problem.

The Game Master

In any RPG, the game master (referee, dungeon-master, umpire, etc.) is the last word. He creates the fantasy world and interprets the rules as the players move through it. His word is law, and your rules must make that clear.

But -- the better the game, the fewer rules decisions the GM will have to make. A good RPG will leave the GM free for creation and improvisation. A weak rules set will say, every few paragraphs, that "details are up to the referee." A bad rules set will not even refer players to the referee for a decision.

"Flavor" and Objectives

One design decision that will heavily affect your final game is the main thrust, or "flavor," of the game. What do characters spend most of their time doing? This will be the rules section that requires the greatest detail and playtesting.

In D&D, for instance, characters spend most of their game time exploring rooms, grabbing treasure, and counting it up. En Garde placed its heaviest emphasis on the player interactions among the characters and NPCs in its swashbuckling French milieu. Source of the Nile emphasizes exploration and mapping -- everything else is secondary. Car Wars puts most of its emphasis on combat and preparation for combat. The Morrow Project characters are looking for their lost project HQ and trying to civilize, or at least tame, the territory they cross on the way.

Playtesting the RPG

An RPG -- especially a big one -- is the hardest game to playtest in terms of sheer time. Balancing this is the fact that RPGs are popular, so playtesters are easier to come by. (If you can't find a good playtest group for your new RPG, that's probably a sign that it is dangerously similar and inferior to something already on the market -- or else that it's just plain uninteresting.)

RPG playtesting should go through all the stages described in an earlier section. Additionally, the designer should sit in on several sessions as a player, with someone else as a GM. The designer should start by running sessions as a GM; then he should participate as a player while someone else GMs. If possible, the designer should also play in a "blind test" game -- i.e., the GM is one who learned the game only by reading the rules, and ideally, doesn't know that fellow across from him was the designer!

RPG rules must be clear. The average level of maturity of RPG fans is perhaps not quite as high as that of, say, Napoleonics buffs. Rule arguments will be loud and intense when they occur. Too many arguments, and they'll find another game. So you've got to find ambiguities during the playtest stage, no matter how long it may take. The alternative is another hack RPG.

Keep these opposing ideals of flexibility and clarity in mind, whether you're reworking your favorite set of rules or trying to design the new standard in RPGs. Go for originality in concept, rather than reworking tired ideas. Maybe you'll be the one to create new worlds for the role-players.
Adventures on TSCHAI

by Steve Winter and Forrest Johnson

In the years 1968-70 Jack Vance wrote four books – City of the Chasch, Servants of the Wankh, The Dirdir, and The Pnume. These are two-fisted adventure stories set on the planet Tschai. They are full of aliens and exotica, larded with violence and well-nigh choked with detail... in short, perfect for Traveller.

Tschai is 212 light years from Earth. It was, amazingly enough, discovered during the initial period of Solomani exploration. Even more surprisingly, one expedition member, Adam Reith, survived and returned to Earth. A second expedition was planned, but the First Interstellar War intervened and the precise location of Tschai, with many other records, was lost during the hostilities. It is generally presumed to lie somewhere rimward of Earth.

Tschai's profile is 967670. It orbits a K2 star, and has two small moons, called Az and Braz by the natives. There are a number of starports on Tschai – Hei and Ao Hidis must be reckoned as Class A – but none are open to strangers. In fact, it is not even safe to orbit the planet. For each day in orbit, roll two dice; on 8+ someone has fired 1-6 nuclear missiles at the ship, a token of Tschai hospitality.

Tschai is the home world (and presumably the only world) of the Pnume, who still live in secret cities beneath its surface. About 7 million years ago, it was conquered by the Shivran, followed by the Gjee, the Fesa, the Hsi, and so on. Nothing remains of these races but ruins. The oldest invading race still on Tschai is the Old Chasch, which has been there for a mere 100,000 years. There also exist colonies of Blue Chasch, Dirdir and Wankh. An uneasy peace prevails.

About 50,000 years ago, the Dirdir brought some HumaniZed slaves, probably of Solomani origin, to the planet. These have multiplied into hundreds of diverse races, scattered over the entire globe. All intelligent creatures of Tschai, except the Phung, Green Chasch and Wankh speak a common language. Some have other languages as well.

Economics

Off-world currency is worthless on Tschai. The basic monetary unit is the sequin, a hexagonal disc one inch across. Sequins are obtained from chrysophine, a crystal which grows only in the uranium-rich soil of the Carabas. A full node yields 282 sequins.

A sequin’s value is determined by its color. Immature sequins are clear, and progress through the colors of the spectrum as the node matures. Once harvested, sequins do not change in color. Clean, therefore, are the basic value sequin.

Values of the other colors are:

<table>
<thead>
<tr>
<th>Color</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>5 cleas</td>
</tr>
<tr>
<td>Sard (light blue)</td>
<td>10 cleas</td>
</tr>
<tr>
<td>Blue</td>
<td>20 cleas</td>
</tr>
<tr>
<td>Emerald</td>
<td>25 cleas</td>
</tr>
<tr>
<td>Scarlet</td>
<td>50 cleas</td>
</tr>
<tr>
<td>Purple</td>
<td>100 cleas</td>
</tr>
<tr>
<td>Bice</td>
<td>Fragment, 1/6 of a clear</td>
</tr>
</tbody>
</table>

The economy is not controlled in any way. Anyone may enter the Carabas, or Black Zone, and harvest chrysophine nodules if they can (a) locate the nodules among the gullies and rocky hummocks of the Carabas and (b) escape or evade the Dirdir hunting parties from the camp at Khusz. An average day in the zone nets a group about 400 sequins.

Prices on Tschai are variable. If a buyer looks wealthy, the price goes up. The following is offered as a general guide:

- Decent meal: 1 sequin.
- Frugal lodging: 5 sequins/day.
- Simple durable clothing: 10 sequins.
- Sailing ship passage: 4 sequins/day.
- Caravan passage: 1 sequin/3 km.
- Unskilled labor: 4-6 sequins/day.
- Devices of tech level 7 or higher will be of alien manufacture, expensive when available at all. Obvious off-world technology will arouse wonder and suspicion.

Weapons

Gunpowder is rare on Tschai. Aliens are often armed with laser pistols. Humans have a fairly standard assortment of swords, spears, and so on. In addition, there are at least two weapons peculiar to Tschai:

- Hand Catapults. These are basically upgraded sling shots, firing feathered bolts. Treat a catapult as a sporting crossbow.
- Sand Blast. A sand blast accelerates electrostatically-charged grains of sand to near-light speeds. Treat as a light machine gun, but weight is double.

Scenarios

Many, many adventures are possible on Tschai. Referees should have no trouble expanding on these ideas:

- Exploration. Tschai is carpeted with improbably ancient ruins. Investigation could prove fruitful.
- Rescue. A distressingly handy scenario. Characters will need frequent rescues from slavers, from the Dirdir, from the Old Chasch, from . . .

Prospecting. The Carabas is always a likely scene for an adventure.

Underground. A really ambitious party might try raiding Foreverness. In this case, Traveller would take on some of the aspects of D&D.

Leaving. As Adam Reith discovered, Tschai is not a good place to park a spaceship. Spare parts are hard to come by. The natives are not friendly. A safe landing can be difficult; a safe take-off may require heroism.
Events

Parties travelling on Tschui should check the following tables daily:

<table>
<thead>
<tr>
<th>Steppe</th>
<th>Jungle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Settlement</td>
<td>1. Heat</td>
</tr>
<tr>
<td>3. Air/Raft</td>
<td>3. Marshes</td>
</tr>
<tr>
<td>5. Storm</td>
<td>5. Settlement</td>
</tr>
<tr>
<td>6. Ruins</td>
<td>6. River</td>
</tr>
<tr>
<td>7. Green Chasch</td>
<td>7. Swamp</td>
</tr>
<tr>
<td>8. Green Chasch</td>
<td>DMs: Seacoast +1</td>
</tr>
<tr>
<td>DMs: Dead Stephie +2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Desert</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Settlement</td>
</tr>
<tr>
<td>1. Ruins</td>
</tr>
<tr>
<td>2. Chasms</td>
</tr>
<tr>
<td>4. Storm</td>
</tr>
<tr>
<td>5. Animal Encounte</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mountains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Animal Encounte</td>
</tr>
<tr>
<td>2. Settlement</td>
</tr>
<tr>
<td>3. Ruins</td>
</tr>
<tr>
<td>4. Gullies</td>
</tr>
</tbody>
</table>

Ocean

| 1. Nothing | 5. Pirates |
| 3. Nothing | 7. Settlement |
| 4. Air/Raft | 8. Wankh |
| DMs: Seacoast +1 |
| Kachan/Rakh/Vord Seacoast +2 |

City

| 1. Slavers | 5. Servant Race |
| 2. Thieves | 6. Aliens |
| 3. Police | 7. Aliens |
| 4. Patron | 8. Aliens |
| DMs: Allen City +2 |

Explanation

Air/Raft. An air/raft is flying in view. It will investigate a spacecraft on 8+ otherwise passing by on 4+. Check for occupants:

1. Blue Chasch
2. Blue Chasch
3. Dirdir
4. Dirdir
5. Dirdir
6. Humans
7. Humans

Jungle

| 1.12 | 6/10 |
| 2.5 | 11/10 |
| 3.5 | 1/0 |
| 4.1 | 6/10 |
| 1.12 | 17/12 |
| 0.3 | 6/10 |

Desert

| 1.1 | 10/7 |
| 2.1 | 7/8 |
| 1.3 | 5/12 |
| 4.4 | 10/12 |
| 5.1 | 15/12 |
| 6.8 | 6/12 |

Animal Encounters

**Steppe**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Weight</th>
<th>Hits</th>
<th>Wounds</th>
<th>Weapons</th>
<th>Armor</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>400</td>
<td>21/10</td>
<td>11</td>
<td>claws</td>
<td>none</td>
<td>A7F982</td>
</tr>
<tr>
<td>2.20 Grazers</td>
<td>200</td>
<td>15/9</td>
<td>9</td>
<td>hooves</td>
<td>none</td>
<td>F6A1081</td>
</tr>
<tr>
<td>3.1</td>
<td>50</td>
<td>15/5</td>
<td>5</td>
<td>hooves/teeth</td>
<td>cloth</td>
<td>A8F582</td>
</tr>
<tr>
<td>4.10 Poucous</td>
<td>25</td>
<td>13/8</td>
<td>3</td>
<td>claw/teeth</td>
<td>none</td>
<td>A7F582</td>
</tr>
<tr>
<td>5.12 Nighthounds</td>
<td>100</td>
<td>17/12</td>
<td>1/0</td>
<td>hands/teeth</td>
<td>mesh</td>
<td>A8F782</td>
</tr>
<tr>
<td>6.1 Killer</td>
<td>100</td>
<td>22/6</td>
<td>8/8</td>
<td>claw/teeth</td>
<td>A3F582</td>
<td></td>
</tr>
</tbody>
</table>

**Jungle**

| 1.12 | 6/10 |
| 2.5 | 11/10 |
| 3.5 | 1/0 |
| 4.1 | 6/10 |
| 5.8 | 17/12 |
| 6.3 | 18/9 |

**Desert**

| 1.1 | 12 |
| 2.10 | 6/1 |
| 3.13 | 5/12 |
| 4.4 | 10/12 |
| 5.10 | 15/12 |
| 6.8 | 3/12 |

**Mountain**

| 1.1 | 1600 |
| 2.22 | 6/5 |
| 3.5 | 18/7 |
| 4.9 | 18/7 |
| 5.10 | 17/12 |
| 6.2 | 17/6 |

(Note: Nighthounds can occur in any terrain. They are nocturnal, wolf-like creatures closely related to the Pnume. Nighthounds can be recognized by their characteristic wailing.)

8. Wankh
9. Humans
DMS: Kishovan +1
Kachan/Rakh/Vord +2
Charah +3

There will be 1-6 passengers. If the race is alien, on 7+ there will also be 1-6 passengers of a servant race.

1.12 Aliens, 1-6. Pnume, Chasch, Dirdir or Wankh.
If the party is trespassing, they will attempt to detain on 8+, otherwise ignoring on 9+.

Chasms. This terrain is completely impassable to ground travel. It will take all day to go around.

Dirdir Hunting Party. 3-5 Dirdir, attack on 4+.

Green Chasch. The party encounters a tribe of Green Chasch. Roll for reaction at -2.

Gullies. This terrain is highly eroded. Halve travel distance today.

Heat. The jungle is even more sweltering than usual today. Each character must roll endurance or less on two dice or become Prostrated. DMs: Medico, Survival.

Marshmen. 10-60 marshmen lie in wait with their spears and clubs.

Nomads. The party encounters a nomadic tribe. Roll for reaction.

Patron. Someone attempts to hire the party. Check Book 3, p. 72, or 76 Patron.

Pirates. A galleon with 10-60 crew attempts to overtake the vessel. It will attack on 11+ if the potential victim is obviously well-armed, otherwise on 8+.

Police. 1-6 local police, armed with catapults and swords, attempt to interrogate the party. Roll for reaction.

Prospectors. The party encounters 1-3 humans who are looking for sequins. Roll for reaction.

River. A river obstructs ground travel. Roll 8+ hourly to find a ford.

Rutha. The party finds a ruined city. Roll for origin.

1. Wankh
2. Old Chasch

3. Humans
4. Blue Chasch
5. Unknown
6. Dirdir
7. Pnume
8. Humans
9. Humans
10. Unknown
11. Pnume
12. Humans
13. Unknown
14. Pnume
15. Humans
16. Kothan +1
17. Kishovan +8

A solitary Pnume will be present on 8+; an animal encounter will occur on 11+.

Servant Race. 1-6 Pnumeklin, Chaschmen, Dirdirmen or Wankhmen. If the party is trespassing, they will attempt to detain on 6+, otherwise ignoring on 9+.

Settlement. Here is a town of 100-600 souls. Alien on 10+.

Slavers. A gang of 2-12 slavers eyes the party as potential merchandise.

Snow. Heavy snow delays ground travel. Halve travel distance for today.

Storm. Swirling winds buffet the party for 2 d10 x 5 hours. Ground and air travel are impossible. At sea, the captain must roll 6+ to avoid damage to his vessel. If he misses by 2 or more, there is a shipwreck. DMs: Watercraft.

Swamp. The ground here is very marshy. Halve travel distance today.

Thieves. 1-6 thieves attempt to rob or swindle the party.

Wankh. A Wankh is observed swimming below the surface with water jets. He will ignore the party in 3+.
Here are the races of Tschaï... the Pnume, Phung, Old Chasch, Blue Chasch, Green Chasch, Dirdir, and Wankh. A UPP is given for each. The UPP may be used directly if it is necessary to generate a character in a hurry; otherwise it may be used to obtain die modifiers for character generation. For example, the Pnume have an average strength of A, so give a generated Pnume character a +3 modifier for strength. (A = 10. 10 - 7 = 3.) If this process results in a characteristic less than 1, raise it to 1.

The given tech level is the level each race maintains on Tschaï; home planet tech levels are higher. Tech levels vary a good deal because of trade. The tech level of the Pnume is unknown because the Pnume are a mysterious race, and it is hard to tell the full extent of their resources.

The listed skills are those a typical individual might have - the civilized species have a considerable variety of skills available.

Note that some of the listed aliens - particularly the Phung and Green Chasch - are not suitable for player characters. Also, no Pnume, Chasch, Dirdir, or Wankh is likely to deal with humans as equal unless he is himself an outcast or fugitive. Aliens will appear more often as patrons or as enemies.

Some of the aliens have servant races of humans, inbred over the millennia to resemble their masters. There are many other races of men on Tschaï. The major ones include:

**Nomads.** Tech 1. Their tribes ride endlessly across the steppes. Some are camels; all practice banditry. Tribes include the Issim, the Emblem Men, the Yellow-Blacks, Mad Axes, and the Kite Fighters.

**Marshmen.** Tech 0. A dwarfish, yellow people who live among the reeds. They always attack if surprise is possible, and the enemy is not too numerous.

**Grays.** Tech 3. A widespread, stocky, yellow-gray race. Grays tend to be tolerant, commercially-minded and rather fatalistic.

**Yao.** Tech 6. The most technologically advanced humans of Tschaï. Yaus are the predominant race of Tschaï. They are obsessed with elaborate etiquette and punctilio. It is dreadfully easy to offend a Yao.

---

**Peoples of Tschaï**

Hoch Hars. Tech 1. A primitive people who live east of Cath and hate all Yaus, ostensibly for having destroyed the ancient Hoch Har empire.

Lokhars. Tech 4. People of central Kachan. The men dye their skin black and their hair white, the women the opposite. Many are employed by the Wankh as technicians.

Dougbo. Tech 1. A ragged, gypsy-like people said to have psychic powers.


Kabs. Tech 5. A slender, alert people of southern Charchan. They have brown hair, wide cheeks, and black eyes. Their thieves are deft; their marital customs, bizarre and dangerous.

---

**The Pnume**

UPP: A78688
Population: 150-160,000
Tech Level: Unknown
Skills: Recon -2, Leader -1, Admin. -1
Special: Bare hands treated as club, skin as mesh. Because of their decentralized nervous system, Pnume cannot be knocked unconscious, only killed.

The Pnume are natives of Tschaï. They are about two meters tall and slightly built, though quite heavy (100 kg). Their white, expressionless faces are the cast and color of a horse's skull, with complicated rasping and chewing parts beneath. A Pnume's legs are jointed in the reverse of that of a horse. Traditionally, Pnume dress is a black cloak and floppy black broad-brimmed hat. The Pnume are closely related to nighthounds (see Animal Encounters) and to Phung (see below). The three creatures appear to be physically similar and mutually tolerant, but the exact relationship is unclear.

The Pnume live in a network of underground tunnels and subterranean rivers crisscrossing the entire subsurface of Tschaï. Within these dimly-lit corridors, concealed passages and immense chambers is a society complete with industry and trade. Pnume society is secretive and stratified; an individual's knowledge depends on his social standing. The Pnume rarely carry (or need) weapons.

The Pnume are obsessed with history. They observe everything, frequently seizing "exhibits" for their museum, Forevers, which details seven million years of Tschaï history. Restraint and unobtrusiveness are primary Pnume virtues. They have one-track minds, and no amount of reasoning or pleading will sway a Pnume from its purpose. Captured enemies are dropped into deep pits, if they are not needed as crystallized exhibits in Forevers.

Pnummekin, humans living among the Pnume (UPP: 687744), have evolved psychologically toward the Pnume. They are introverted, timid, fearful of open spaces, fatalistic and naive. Diko, a hormone suppressant which prevents the onset of puberty, is a regular part of their diet. They scrupulously avoid "bolsterous activity," which includes physical contact, noise, sudden movements and being seen without a hat.
This map, from the Imperial archives, is said to have been pieced together from smaller maps brought to Earth by Adam Reith. The original maps were evidently based on a variety of scales and cartographic theories. Information taken directly from Adam Reith's memoirs is often vague, contradictory, or incomplete. Some geographical features cannot be located with any accuracy. A comprehensive survey of Tschai is not available.

The scale is approximately 1,000 km/hex.

**Terrain Key**

- Desert
- Jungle
- Mountains
- Seacoast
- Steppe/Ocean
- Old Chasch City
- Blue Chasch City
- Human City
- Dirdir City
- Wankh City

- NW(6)
- NE(1)
- W(5)
- E(2)
- SW(4)
- SE(3)
The chief overland mode of travel is the caravan — consisting of 10-60 motor drays, of which at least 1/6 mount sand blasts. Motor cars and trains are common in certain limited areas. Air/rafts are always scarce, at least among the human population.

The standard riding animal is the leap-horse, a cantankerous creature which jumps around on its oversized hind legs. To control one of these beasts, it is sometimes necessary to thrust a control bit through a hole drilled in the skull. A leap-horse is a gatherer, about 200k, with horns and armor as jack.

Sailing ships are standard for ocean travel. Sometimes motor ships are available.

### Travel Times

(hours per hex)

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<tr>
<td>Motor Ship</td>
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<td>30</td>
</tr>
</tbody>
</table>
The Phung

UPP: EBC542
Population: 4-5,000
Tech Level: 0
Skills: Recon -2, Brawling -2, Survival -2
Special: Bare hands treated as cudgel, skin as mesh. Phung share the decentralized nervous system of the Pnyme. They cannot be knocked unconscious, only killed.

Like the Pnyme, Phung are native to Tschai. They resemble the Pnyme in build and dress, having a similar, half-human, half-insect appearance, and wearing the usual black cloak and hat. However, they are larger than the Pnyme, standing over two meters tall, and they wear high boots. Their appearance suggests a grasshopper in an assassin's cloak.

Phung are solitary, living in caves and ruins. It is not known how they reproduce. They appear to be intelligent beings, but never communicate with other creatures and display no rationality or logic. The most widely accepted explanation for their behavior is that all Phung are totally insane. They usually are seen dancing in and out of shadows, but are just as likely to leap into a whirling, thrashing attack as they are to stand motionless while they are chopped apart.

A Phung may pick up a weapon, if its use is both obvious and imminent. However, it does not regularly carry weapons, preferring to crush its enemies or tear them apart. They can throw rocks at short or medium range for 4 dice damage.

A Phung is adept at dodging; it is -2 versus any missile weapon.

A Phung which encounters a Chasch, Dirdir, Wankh or human will give some thought to killing the prospective victim with as much artistry as possible. It will then confront, terrify and slaughter its foe, not always in that order. It appears to take more pleasure in its victims' fear than in their pain, and does not care at all for its own safety.

There is no human subspecies associated with the Phung.

Old Chasch

UPP: 585778
Population: 2-3,000
Tech Level: 8
Skills: Liasion -2, Carousing -2
Special: None

Tschai fell under the heel of numerous off-world invaders before the arrival of the Old Chasch 100,000 local years ago. But the Old Chasch have the longest residency of all the alien races currently occupying the planet. They spent much of that time feuding with their cousins, the Blue Chasch, and later with the Dirdir, but they have been no threat to anyone for 20,000 years.

Old Chasch resemble large silverfish with arms and legs. Their skin is like minutely-scaled ivory satin. They have fragile bodies and eyes like small silver pellets that move independently.

Once a grand race, the Old Chasch retain only a shred of their former magnificence. They manufacture drugs and cloth, trading them for perfumes and scents. They love to play pranks on humans. Sometimes they are cruel, sometimes only mischievous. Stories are told of unwary travelers with new features grafted on their faces and new memories implanted in their minds. Anyone valuing his sanity is advised to stay out of the low white domes and parks of the Old Chasch.

Old Chaschmen (UPP: 758633) are slight and stooped with gray wrinkled faces, bulging foreheads, puckered mouths and no chins. They wear false scalps which jut over their brows and rise to a point, simulating the shape of an Old Chasch cranium. Their skills are the minimum necessary to serve their Old Chasch mastes as porters, freighthandlers and technicians. They may be the butt of Old Chasch jokes, when other victims are unavailable.

The Old Chasch live in West Kotan. Their only known city is Golisse.
Blue Chasch

UPP: 758778
Population: 300-400,000
Tech Level: 10
Skills: Streetwise -2, Laser Pistol -1, ATV -1
Special: Skin treated as jack

Blue Chasch have short heavy legs, a powerful wedge-shaped torso and chitinous shoulder-plates curving into a dorsal carapace. Their skull rises to a bony point, with a heavy brow over glittering metallic eyes and a complicated nasal orifice.

The Blue Chasch invaded Tschai 90,000 local years ago, fighting their racial kin, the Old Chasch. Since then, their technology has declined, and they have lost all zest for space travel. However, they do still maintain missile pits to threaten their old enemies, the Diridis.

Blue Chasch have a highly developed sense of smell. With it they can identify men and their possessions and can follow a trail if it is less than one day old and doesn’t cross water. They use artificial amplifiers to detect fainter traces.

The Blue Chaschmen (UPP: 768743) are short and stocky with bowed legs and blunt, chinless faces. They wear Chasch-like skullcaps which rise to a point and overhang the brow, and believe themselves to be the first stage in the Blue Chasch life cycle.

Blue Chasch cities consist of spacious gardens, with low white domes.

Green Chasch

UPP: C7A522
Population: 80-100,000
Tech Level: 1
Skills: Survival -2, Hunting -1, Broadsword -1, Catapult -1, Recon -1, Tactics -1
Special: Skin as jack

Green Chasch are seven to eight feet tall, massive and thick-limbed, with clearly defined glistening green scales. They have the characteristic jutting brow and pointed scalp of all Chasch.

Green Chasch are the barbaric descendants of hybrid warriors brought to Tschail by the Blue Chasch to serve as shock troops against the Old Chasch. Harboring a fierce hatred for the Blue Chasch, they roam Kotan in bands of 50 to 1,000, raiding caravans and human settlements. They fight from the backs of their giant leaphorses with broadswords, picks, crossbows and the Tschai hand-catapult. A Green Chasch broadsword is too heavy for a human to wield.

The life of a Green Chasch is nasty, brutish and short. A tribe of Green Chasch will accept terrible losses in combat, retreating only when there is no longer any prospect of success. Even when the enemy is fleeing, the Chasch will continue to attack out of sheer ferocity. To replace their losses, Green Chasch pilgrimage to a breeding area northwest of Jalkh; during this period, they are relatively peaceful. Except for that, Green Chasch seem to take no pleasure in anything but slaughter.

Green Chasch are telepathic among their own kind, giving them superb battlefield coordination. They use colored banners to communicate with outsiders, various combinations signifying such things as willingness to trade, bloodlust or the desire to pass through quietly. They have no language. Green Chasch become lethargic at night, but will defend themselves if attacked.

There is no human subspecies associated with the Green Chasch.
The Dirdir

UPP: 787769
Population: 250-350,000
Tech Level: 11
Skills: Hunting -2, Brawling -2, Survival -1, Laser Pistol -1, Air/Raft -1
Special: Claws; skin as jack

Dirdir average two meters tall, are slight and wiry and move "like lizards on a hot day." Their hard skin has the appearance of polished bone. They have deep-set eyes in vaguely human faces, and their heads are topped by antennae which glow when they are excited. (These antennae are removed if a Dirdir becomes an outcast.)

The Dirdir came to Tschai 60,000 years ago, during a period of aggressive expansion. They fight occasional skirmishes with Chasch and Wankh patrols, but take more pleasure from searching out hidden Pnume tunnels and flooding them with poison gas.

Dirdir are descended from carnivore chaser-killers. Their savage heritage is evident in their ritual hunts. When hunting, Dirdir become animals; reason is subordinated to instinct and aggression. Prey is eaten. The victims, often human, are kept alive until needed for food. They are controlled with electronic pain inducers.

In their hunting parks and preserves, Dirdir hunt unarmed and on foot. Away from their preserves, Dirdir hunt from air rafts with laser pistols, swords and infrared and electronic sniffers. They carry shields which give the same protection as cloth armor.

The principal Dirdir city is Hei, which is connected to the (human) island city Sivishe by a causeway. At the center of Hei is a glass-enclosed park eight km long, five km wide and 300 meters high. It is surrounded by spires which house the numerous Dirdir clans and castes and remind them of the hollow-tree dwellings of their home planet Sibol. The park is a hunting preserve built to simulate Sibol's cool desert environment. Inside, human criminals are hunted in ritual fashion before spectators.

Dirdirmen (UPP: 777767) are tall, pale and completely hairless. They believe men and Dirdir are two branches of the same evolutionary stock, and revere Dirdir as the higher form.

The Wankh

UPP: 967778
Population: 4-5,000
Tech Level: 12
Skills: Pilot -2, Navigation -1, Communications -1, ATV -1
Special: Amphibious

Slightly larger than a man, a Wankh has a heavy dark torso, squat head, short legs and splayed-web feet. In place of eyes they are equipped with two black lenses which emit pulses every half-second. They wear no clothing.

The Wankh arrived on Tschai 10,000 years ago (13,000 Earth years) during a war against the Dirdir, and built forts on Kachan, Rakh and Vord. They remain on Tschai to keep watch on the Dirdir but they have little interest in the affairs of men. They are rarely seen outside their stern, black-glass towers.

Wankh architecture is stark and labyrinthine, based on concepts incomprensible to humans. The Wankh language is likewise incomprensible, pictograms conveyed by single chime-like sounds. The written language is a series of shaded rectangles, each corresponding to a chime.

Humans can learn Wankh only with long and difficult study. No Wankh understands any human language at all.

In general, the Wankh are so alien that the Pnume, Chasch and Dirdir seem almost neighborly by comparison. However, the Wankh are far from being as furtive as the Pnume, brutal as the Chasch or rapacious as the Dirdir. They come and go openly, not seeming to care if humans stare at them. They prefer understanding their enemies to killing them out of hand. (However, the Wankhmen are noticeably more quick on the trigger.) Captives are sent to work in the mines; stubborn cases may be subjected to the mysterious "black boxes."

Wankhmen (UPP: 777777) are self-centered and ruthless, serving as spies and lackies for the Wankh. They hire Lokhars to perform menial and technical work. Wankhmen serve their own interests first, and those of Wankh second. They are the only humans that can speak Wankh, and they use this ability ruthlessly, translating and mistranslating as seems expedient.
StarMaster

Air screams around your ships as they enter the atmosphere. Missile-launchers fire deafeningly to port and starboard while atmosphere-lighters drop in shrieking dives from their hangars below. Warriors, tightly clenching their weapons, check their pressure suits one last time and climb in grim silence into their landing shuttles. In the distance six more heavy cruisers of your empire are firing and unloading their cargo, their hulls gleaming crimson in the light of the red sun above.

This is not a drill. Already laser and missile fire from the mile-wide guardian fortresses below have turned the sky into an exploding nightmare of smoke, fire, and fragmented metal. Planes and shuttles twist and dodge down towards a landscape rapidly becoming an inferno of flame and radiation.

This is no mere raid. For years your people had explored nearby systems without violence, trading technology to the primitive civilizations there in exchange for raw materials. Some species had even thought you gods. Then you met the Aerastang. Merciless, brutal, they destroyed your exploring ships and began to slaughter your colonies. But you found their home planet and launched the greatest fleet your kind ever built to carry the war to your enemy. To fight for your very survival.

Will it be enough?

StarMaster is a correspondence game of galactic exploration, diplomacy, and conquest allowing for interaction not only between each player and the worlds of the galaxy, but between the players themselves.

New players begin further out from the Galactic Center than established players allowing them to develop themselves of their own. You may lead a powerful reptilian race, carving out a vast empire of colony and subject worlds; or perhaps an insectoid species, engaged in a holy crusade to convert the galaxy to the worship of their many-legged god.

As chosen ruler of your people, you must decide what diplomatic and military policies will be followed in order to lead your kind to dominance among the sentient beings of the galaxy.

The galaxies of StarMaster are a complete fantasy environment of solar systems, with geographies ranging from worlds near absolute zero to worlds where rivers of molten tungsten bubble, with technologies spanning from rock-throwing cave-dwellers to advanced Elder Races with near-godlike abilities.

Nor is the StarMaster environment limited in terms of playing area. There are multiple galaxies allowing for extra-galactic invasions across the voids. There are both natural and constructed gateways to (and from!) other dimensions and parallel universes.

StarMaster is limitless in possibilities, bounded only by imagination! It is a game where, literally, anything is possible.

StarMaster offers these features:
- Design your species as if you could have directed evolution to this moment.
- Design your home world in terms of temperature, atmosphere, and mass.
- Choose your government and social order.
- You decide the production for all worlds of your empire, building colonizing ships, merchantmen, warships, warriors, and fortresses.
- Technology increases steadily, permitting larger ships, deadlier weapons, and scientific breakthroughs.

The galaxies are dotted with the ruins of Elder civilizations lacking the strength to master the stars. Can you lead your world to greatness where so many others fell short?

StarMaster may be entered for $10.00 which includes the first three turns, a rule booklet, and all necessary material (except return postage). Thereafter, turns are $2.50 each.

Send to: Schubel & Son
P.O. Box 21454B
Sacramento, CA 95821

Enter me in StarMaster

Name ____________________________
Address ____________________________
City ___________________ State ______ Zip ________

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Featured Review:

DRAGON PASS

by Forrest Johnson

In 1975, Chaosium first released White Bear and Red Moon, one of the most elaborate fantasy board games ever created. WB/RM quickly became a favorite, despite its amateur-printed rulebook, dull map and murky rules.

Now we see a revised edition, called DRAGON PASS. The rulebook is professionally printed. The map is beautiful, hand-drawn in many colors. But alas, the rules are still murky.

Glorantha

DRAGON PASS, like Nomad Gods and the FRP game RuneQuest, is based on the imaginary world Glorantha, a place where Conan, Fafhrd and Cugel could all feel at home. Magic flourishes. Elves, trolls and dragons are present, but they have little in common with their D&D counterparts. The concepts behind Glorantha are surprisingly original and remarkably consistent.

The connection to RuneQuest is obvious. The sites of two published RQ adventures, Apple Lane and Snakepipe Hollow, can be located on the game map. DRAGON PASS would provide a fine campaign map for a RQ referee, even if he never punched out the counters.

In a corner of the map, there is a row of hexes labeled "Plains of Prax." Evidently, these will interlock with the 2nd edition Nomad Gods map when it appears later this year. The rules have been integrated — this may confuse players who, for example, search the terrain effects chart for "chaparral," which is mentioned in the rules, but appears only in Nomad Gods. A third game, called Lords of Fate, or maybe Masters of Luck and Death, is supposed to join the first two in 1982. (It better be good; Chaosium has been promising it since 1975.)

The Game System

At the most basic level, DRAGON PASS is a fairly straightforward movement-combat game. There are three scenarios provided for players who aren't ready for the magic rules. Unfortunately, the rulebook is not organized to take advantage of this; novices will have to read two or three pages of rules to pick out one that is relevant to the basic scenarios.

There are four categories of magic — Spiritual, Physical, Chaotic and Exotic. Each is applied differently, and the last is just a grab-bag category, including all sorts of peculiar effects. Chaosium has moved mountains to get such a complex system to work at all. But, in many cases, Pike's Peak has been planted where Mt. Everest was needed. For example, I played a few games before I figured out that the destruction of a magician's spirit does not necessarily destroy the magician.

About half the units have some kind of special ability, and all have individual names. The Sartar army includes the Wolf Runners, the Wind Children and the Ducks. The counters are coded, but it still takes a lot of head-scratching to discover what some units are supposed to do.

Diplomacy is central to the advanced game. Each side seeks alliance with "independents," like the Grazelands Pony Breeders or the Dragonwits. A successful alliance brings a fistful of units to the lucky player's side. However, the diplomacy rules seem pretty well balanced. Both sides are likely to benefit from diplomacy, but neither side has much chance to win an overwhelming advantage.

Some might say DRAGON PASS is too well balanced. Despite all the dragons and superheroes, magicians and exotics, the net result is often a bloody stalemate, and victory occurs when the other side runs out of units.

On the other hand, the system encourages "super stack" tactics. One stack of units may be worth 50 or 60 combat points, and the game is sometimes decided by a single die roll.

Five Years, for What?

Chaosium has had five years to tinker with this game. It would be unfair to call the result an unmitigated failure. I believe "mitigated failure" would describe it better.

My judgement has nothing to do with the components, which are superb, or the game system, which is clever. The problem is, the rules are so fouled up that no two people are likely to read them the
same way. To support my judgement, I present the following evidence:

Exhibit A: Mix and Match Rules. In section 7.4.3. we read, “Every active unit that was adjacent to an inactive unit at the start of the combat phase must attack an adjacent inactive unit.” Below that, 7.4.4 says, “Each stack is treated as a whole. If any of the units in a stack are to attack, all of the units in that stack must take part in the same attack.”

Fine, so far. But 7.5 describes five different kinds of attacks. If the Stormwalkers are attacking stack A by melee, can they also attack stack B by magic? Further down, we read that some units are immune to some kinds of attacks. If Harrek is adjacent to the Twin Stars, neither can attack the other, but 7.4.3 requires them to attack.

After that, things get worse. 7.10.3: “At most three of the major units in each stack can fight in a melee.” 7.10.4: “The attacker can withdraw some or all of the attacking units from fighting in a melee.” 7.10.5: “A retreated unit is not affected by the results of a melee.”

Of course, I am not quoting these rules in full, but I see little attempt to reconcile the apparent contradictions. There are no examples of combat. Players must decide for themselves what is reasonable, and their opinion may have nothing to do with Chaosium’s.

Exhibit B: The Homeless Horde. Included with the game, there are 14 green counters labeled “The Barbarian Horde.” Someone just opening the box will have a hard time deciding which side they’re on. They have no apparent connection with the red Lunar units or the pale orange Sartar units. They are not listed under “Independents.” The color coding suggests they are Prax units, but it is not clear which side (if either) Prax is on. Some elements of the Horde are listed as fighting for Sartar in a few scenarios, but the advanced scenarios do not list the Horde at all.

After some thought, I decided the Horde probably belonged to Sartar. A careful scrutiny of the “Miscellanea” in the back of the book reveals a reference to the Horde under “Creation of the Sartar Army.” Also, in my 1975 copy of White Bear and Red Moon I found the Horde (somewhat different in composition) listed under “Sartar Battalia.”

Unfortunately, there is no “Battalia” list in DRAGON PASS. Chaosium apparently assumes this matter to be self-evident.

Exhibit C: The Cryptic Counters. The counter coding seems to indicate the Red Emperor has an exotic magic ability, but he is not listed under “Lunar Exotics.” The Task Riders have a special movement “ability or restriction,” but the rules don’t tell you what it is. Keener Than is listed with “Sir Ethilind and his Black Horse Troop,” but the commentary and the color coding seem to imply he belongs elsewhere.

There are a couple of ways a player can handle these questions—he can get out his ouija board, or he can consult the I Ching.

These are only a few of the more prominent glitches. For every one above, half a dozen might suggest themselves to a reasonable man, or any number to a nitpicker.

The rules for DRAGON PASS are no cleaner than those for White Bear and Red Moon. After all this time, Chaosium should know better than to publish a game which has not been blindtested.

DRAGON PASS (Chaosium); $14.95. Designed by Robert Corbett and Greg Stafford. Box includes 24” x 34” map, 300 counters, 28-page rulebook, (inadequate) errata sheet, one die, 2-3 players, playing time one hour up. Published 1980.
Deus Ex Machina

Play-by-Phone Update

by Bruce Webster

Back in TSG 35, I discussed the concept of "play-by-phone" (PBP) games. In brief, the idea was to set up a PBM-type game on a computer. The players would then submit moves and get status updates by dialing the computer and using a terminal or another computer to communicate with it. The advantages included faster turn-around time, reduced overhead for postage, paper, and handling, and (probably), lower per-turn costs for the player. Some problems I foresaw involved security, dedicated phone lines, and game turn costs. And I asked for feedback from the readers.

Well, a number of you took the time to write and to give me both positive and negative feedback on the ideas presented. The main lesson I learned from the letters is that I should go into more detail the next time I write on a subject like this. Many of the suggestions received (as well as answers to most of the objections raised) were already in my notes; I just hadn't used them due to time and space constraints (read: laziness). Anyway, here are some of the ideas and criticisms received, along with my responses to them.

Comments Received

Most of the criticisms received came from David Breeding, who runs the PBM game The Colonies. His arguments against the idea centered around the cost to the players, which he estimated as being $600/year for the first year and $300/year thereafter. This high cost was due to (1) high set-up cost because of modem purchase, (2) high cost per turn, and (3) high phone costs. His estimates were as follows:

$300 Cost for modem (set-up)
$156 $1.50/tum, 2 turns/week
$83 to $204 Phone, Houston to D.C.

By comparison, his estimate for a PBM game was $70/year: $15 set-up, $52 for game turns ($3/turn, 1 turn/3 weeks), $3 postage. His conclusion was that the idea as presented wasn't feasible.

I must take exception to all three of his estimates. First, it's a little ridiculous to include the price of the modem as part of the set-up cost. This is not unlike deciding whether or not to build a drive-in theater on the basis of how many people will go out and buy a car to be able to attend it. Modems are one of the hottest selling items in personal computing right now, due to computer "bulletin boards," local networks, over a dozen national timesharing services, and other such applications. This proposal presupposes that the user has a modem or will buy one and receive benefits from it far beyond the game.

Second, there are two problems with his comparison of game turn costs. First, $1.50/tum is, as I stated in the original article, too high a cost for a PBP game, though the market will ultimately determine this. Second, even if the game-turn charge were that high, you would still be paying only half as much for an equivalent amount of gaming and would be getting far better turn-around to boot. For example, suppose someone wanted to play a given game for 10 game turns. By Breeding's own estimate, a PBM version would take 7 months and would cost the player $30 in game-turn charges. By comparison, a PBP version would take 5 weeks and cost only $15 (assuming $1.50/tum).

On his last item, phone costs, Breeding strikes closer to home. This problem was brought up briefly at the end of the original column, but I should have gone into more detail. There are a number of solutions here, depending on your financial backing and desired scope. These include:

a) Aim for a local market. If you live in a large metropolitan area, you could probably support yourself doing this. If players from farther away have the bucks to spend, fine.

b) Get an 800 (toll free) or 900 (50 cents/call) number. This would probably be feasible only for larger firms, but would draw a nationwide group.

c) Utilize one of the many national timesharing services (Micronet, The Source, etc.). Flying Buffalo has already gone this route with Starweb, and there are rumors that Empyrean Challenge may do the same soon.

d) Minimize phone connect time (also suggested by Andrew McGregor). This can be done by players who have their own computers. The player dials up, receives status information in a compressed version, and the connection is broken. His (or her) computer then decodes the information and presents it in a more expanded (and human-readable) form. To submit a move, the player runs another program on his/her computer which prompts for all the necessary information and then encodes it and compresses it. The player dials up the game computer, the compacted info is quickly transferred, and the connection is broken. Since a 300-baud line can transmit 1800 characters/minute, one minute is all that should be needed for each call. Two calls per game turn would add $0.44 to the cost of each game turn (Houston to either coast, night/ weekend charge rate). Since the postage charges for a single game turn of a PBM game come to at least $0.36 (first class postage from player to moderator and from moderator to player), the difference in communications between the two systems would be negligible.

These suggestions ignore two other factors. First, phone costs tend to be "hidden," since we are billed once a month for all our use, and a lot of players would probably not notice a monthly increase of a few dollars in their phone bills. Second, a number of very large (and not-so-very-large) firms are developing data communication utilities for public use. If successful, these could provide low-cost, high quality datalinks...
and those who are ready to move into that market when it opens up will have a definite advantage over those who are not.

Scott Fleming, a computer science student at Georgia Tech, wrote with some useful comments. He raised the problem of two or more users being on the same system at the same time and trying to use the same file (for status, moves, etc.). There are a number of solutions here. The simplest is to allow only one player on the system at a time. The next simplest is to create two files for each player, one for moves and one for status information. During the access period (i.e., the time when players can call the computer), each player can modify his move and read from his status file. During the update period (i.e., the time when the computer is acting on all the moves), the program reads from the move file for each player and updates all the status files. The problem, of course, is that a lot of files are created. There are more complex solutions, dealing with temporary and master files, multiple master files, and synchronization via semaphores, but I'm not sure this is the place to go into all that, so I won't.

Fleming also brought up the issue of Player A sending a message to Player B and signing it with Player C's name. He feels that is shouldn't be possible, while I felt that it should be under certain circumstances (i.e., intercepting a message and then sending on an altered version). The decisions here, though, are game-dependent.

An excellent suggestion Fleming made was to issue a second password to each player which allows him/her to change the regular password. Thus if a particular player suspects that someone else has discovered his/her password, then he/she can change it.

I also received letters from Andrew McGregor, who also came up with the data compression idea, Michael Faycheck, and Jon Wooldridge. Wooldridge, who is currently setting up a PBM game, is very interested in attempting a PBM game some time in the future and would like to communicate with anyone else with anything to say on the subject. You can write him at:

The Buchanan Company
P.O. Box 195
Winfield, Kansas 67156.

Closing Comments

All the letters that have come in have been greatly appreciated. I remain convinced that play-by-phone games are a very feasible alternative to the high-cost, slow-turn-around play-by-mail games currently in existence. The biggest hurdle I see is the software system required for modern communications, file manipulation, security, and so on, but that area in itself could be a market. For example, someone could develop all of the support routines to run under a particular system (say, C/PM 2.2 on a Z-80 CPU) and then sell them to moderators who want to set up PBM games. To be completely honest, it will probably be a few years yet before the market for PBM games completely opens up, but that is what will have to happen. I will try to get people to write on the subject from time to time, and I would like to continue to hear from those of you with comments to make. You can write to me at the following address:

Bruce F. Webster
Lunar and Planetary Institute
3303 NASA Road 1
Houston, TX 77058

I'm not sure yet what I'll tackle next month. If there are subjects you would like to see during the coming months, let me know — you're the ones I'm writing for.
Cumulative Game Index
Issues 15-39

This is our second cumulative index to game articles and reviews, covering issues 15-39. Our first index, covering only numbers 1-29, appeared in issue 30.

All articles are listed by game. Some listings may refer to more than one article; some articles may appear under more than one listing. Many articles of a general nature are not listed at all. The index is coded:

c = Capsule Review
d = Designer's Article
e = Errata
f = Featured Review
g = Game
h = Mentioned in Game Master
i = Strategy Article
j = Variant
x = Mentioned in Contest or Contest Results

Examples: "Predator War" x19 means that the game Predator War appeared in TSG issue 19.

Abyss c33.
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Zargo’s Lords c31.
THE SPACE GAMER reviews board games, role-playing games, computer games, video games, and game supplements. We review play-by-mail games if a reviewer is enrolled. We will review any science fiction or fantasy game if the publisher supplies a copy. We do not guarantee reviews of historical wargames. TSG may publish a review of a game we are not sent — IF a reader submits a review.

The staff will make reasonable efforts to check reviews for factual accuracy, but opinions expressed by reviewers are not necessarily those of the magazine. For information on writing reviews for TSG, see "Writing Reviews for THE SPACE GAMER" further on in this section.

Games for which reviews have been received or assigned include: Action & Bumper Games, Attack of the Mutants, Basic Role-Playing, Breakout, Dallas, D&D Dungeon Geomorphs, D&D Outdoor Geomorphs, Dungeons & Dragons, Furfurio, High Guard (2nd Ed.), I.S.C.V. Leader, I.S.P.M.樊 Nik, Monster Mash & Battle ship, Scouts & Assassins (2nd Ed.) Separation of Oblivion, S.V.F. Valkyrie, Thieves' Guild, and Tutun of the Isles.

Games for which we are currently seeking reviewers include: Amoeba Wars, Asteroid Pirates, The C&S Sourcebook, Conflict 2500, Dark Stars, Demon's Run, The Dragonlords, The Hammer of Thor, Imperial Data Recovery System, Interstellar Skirmishes, IPSF/ISIS Maps, Nebula 19, Oregon Trail, Space Ace 21, Space Raid!, The Sword and the Stars, SwordQuest (boxed Ed.), Swords & Sorcerers, and Torpedo Fire.

THE BARBARIANS (Yaquinto): $8.00. Designed by Neil Zimmerer, 8-page, 81/4" x 11" rulebook, 200 extra-thick die-cut counters, one dice (of two required), 2 mounted map boards, "improved album" format with liner box, 2 or 3 players; playing time 30 minutes to 1 hour. Published 1981.

THE BARBARIANS is actually two games in one. Sack Rome is a game of the fall of the Roman Empire while Mongol covers "the Mongol invasion of Europe, 1237 to 1242 AD." These games are quite similar. Both are stylized and use area movement. Sack Rome is unique in that Rome always falls to the barbarian hordes. To determine the winner, two games are played with each player taking a shot at Rome. The winner is the one to hold Rome the longest.

THE BARBARIANS are clean, quick, and simple games to play. Though designed for two players (with an optional third player for Sack Rome) they are very easy to run solitaire. The "improved album" format is super. No more warped map boards due to stonc counters in the jacket sleeves. The biggest drawback is that these games are too simplistic. Even the optional rules do nothing to change this.

All in all, THE BARBARIANS are excellent beginning wargames. They are also pretty good as short fill-in games. To add just a touch more, I suggest changing the "shifting initiative" optional rule to give the high roller the choice of who moves first. Even then, these may be too simple for the serious wargamer.

—Gregory Courter

DAWN OF THE DEAD (SPI): $8.00. Designed by John H. Butterfield. Boxed, with 8-page 81/2" x 11" rulebook, 11" x 17" multicolor map, 80 counters, 1 to 4 players (basic design for 1 or 2; playing time 1 to 2 hours. Published 1981.

This game plays just like a sequence from the movie it takes its name from. The four humans, trapped in a small shopping mall, try to clear of the zombies and close the outer doors. Meanwhile, the zombies shamble ever closer to the humans and try to swarm, overwhelm, and eat them. A human can be "infected" by a zombie attack; then it's only a matter of time until he, too, becomes a zombie.

The best thing about DAWN OF THE DEAD is the beautiful graphics. In some games, all the artwork is painted on the cover, and the game components are cheap and drab. Not so here! The map and counters are well designed and skillfully executed. They mesh well with some good points of the role system — for instance, a small group of humans when the dead begins, and these are shown in a separate holding area. Movement is by square grid, and the human movement system is excellent. Humans move using a modified action-point system allowing them to trade movement for shooting doors and grabbing weapons. No human may move more than one square in a turn — a design oddity that gives a nice effect in play. The rules are well organized and fairly clear, as any rules should be. To be on the whole, this game is fun the first few games, for the player who can get into zombieling or zombie-hunting.

But development should have continued longer on DAWN OF THE DEAD. Once players grasp the game's essentials (which may take two or even three plays) the player will realize that an ultra-conservative, ultra-boring strategy of "run up, shoot a couple of zombies, run back" will almost guarantee a win. The only thing that can defeat this is bad luck in the form of a strong zombie and bad die roll. In contrast with human movement, the zombie movement rules are boring. Normal zombies cannot stack, and usually move only one square per turn (berserk moves two, superzombies a big three.) By contrast, human movement runs from 12 to 20! On any given turn, most zombies may not move at all, a few will be forced to move one square toward any humans they "saw," and 1 to 5 may move one square in any direction the player likes. The zombie player has little chance for skill; he is reduced to pushing his units haphazardly about the board. His opponent will trip over a concealed zombie or do something stupid. If the zombie gets one human, he can usually get a couple more and win — but if he doesn't get a kill in the first ten turns, before the scattered humans can link up, he's not likely to get any at all.

On the whole, DAWN OF THE DEAD would be worth the money to somebody who liked the movie. It also plays much better as a solitaire; in a two-player game, the zombie player will feel like a zombie himself before the game is over. If zombie movement had been slightly higher, or if normal zombies had been allowed to stack, it could have been more interesting and better balanced. As is . . . pretty counters, nice try.

—Steve Jackson

WRITING REVIEWS FOR THE SPACE GAMER

Capsule Reviews

Most of the reviews we print will be "capsule" reviews — 400 words or less. We pay $5 for each capsule review accepted. We want to run a review for every new w-s or fantasy game or supplement.

Each capsule review should be five paragraphs long and contain:

1. Basic information. Present these facts, in this order: NAME OF GAME (Publisher); price; Designer. (If applicable: "Supplement to ___, " "Companion to ___," or similar note.) Follow list of components, with sizes of maps and rulebooks, number of counters, etc. Number of players; playing time; publication date.

2. General description of the game: background, the sides, course of play, special features, etc.

3. Strong points. Discuss what is good about the game; in every game, there is something worthwhile. "Fun" is a useless adjective. Be specific.

4. Weak points. Every game has its problems, too. If the only faults you can find are minor ones, say so. If the game is fatally flawed, come right out and say So. If you can phrase your criticisms as suggestions for improvement, do so.

5. Summation. Your overall opinion of the game. Who should and should not buy it, and why.

All reviews must be signed; the reviewer's name will be printed. No game may be reviewed by its designer, by a play-tester, or by an employee of the publisher. (Designers' articles are welcome, but must be billed as such!) Final note: If you can write a complete review in less than the full 400 words, by all means do so.

Featured Reviews

These will be game reviews 1,000 to 2,000 words long. They should contain all the above information, plus whatever else the reviewer wants to say. They may be written in any format. A featured review may cover either a new game or one that has been on the market for some time. If TSG has not already printed a capsule review, write one and submit it at the same time. We may even use both.
SUPPLEMENTS

THE BLADE OF ALCULTIS (SPI); $4.95.
Designed by Nick Karp. Scenario for Dragon-
Quest, 26-page, 8½" x 11" booklet. Referee
and 1-6 players; playing time 4-6 hours. Published
1980.

As our story commences, our heroes are
approached by soldiers of a mysteriously vanished
duke. Their mission should be decided to ac-
cept it, is to find said duke, believed to be cap-
tured by evil-doers on a magic island. What is
THE BLADE OF ALCULTIS? Ah! That's for
the players to discover at their peril, meanwhile
and players must role-play rather than just roll
dice.

The major cause of dissatisfaction is the Dragon-
quest rules. Too much time is spent flipping
pages, looking up spell descriptions and peren-
tacles. Travel times are unspecified, though time
to central to the adventure. If players are keen,
events channel the characters away from most of
the island's "scenic attractions," and playing
time will be less than the advertised 6-8 hours.

Maps aren't placed near their descriptions
(more page flipping), and there's the occasional
 typo (p. 11, Section 12, paragraph 2, should
read "At the northwest..."). BUT THE BLADE
OF ALCULTIS should be judged on what it
does - provides an exciting time for all. If you
use DragonQuest rules, if you enjoy prepared
scenarios, THE BLADE OF ALCULTIS should
please you.

— Ron Pehr

I.S.P.M.V. TETHYS (FASA); $5.00. Designed
by Jordan K. Weissman. Approved for Trav-
eller. One 8½" x 11" information sheet and
seven 11" x 17" deck plans. Published 1980.
The TETHYS is an Interstellar Para-Milli-

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THE VALETIAN ARCHIPELAGO

...with a hissing shriek a second Rask leaped from the outcropping, swinging a short battleaxe. Telagar snapped his shield up to catch the blow but the force knocked him flat on his back a second time. As his shoulders hit he pushed up and over his head with the shield, flinging the Rask away before it could free its axe for another try. Scrambling to his feet, Telagar faced the Rask who'd already recovered its footing. It brandished its axe wary. Telagar advanced a step and feinted with his saber tip.

...as he pierced the Rask through, the axe missed his helm and smashed into the Dwarf's shoulder. The mail shirt withstood the edge, but the shoulder was broken.

Before Telagar could roll the Rask over to recover his saber, the first Rask had recovered its breath and its feet...

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Tell us you saw it in The Space Gamer.

PLAY BY MAIL

WOFAN (The Gamemaster, POB 2878, Anaheim, CA 92804): $10.00 set-up, including three $2 turns. Designed and moderated by Larry G. Hall. Founded 1980.

WOFAN is a multi-player, human-modulated play-by-mail game, similar in many respects to The Tribes of Grame (reviewed TSG 39). It is cup, maneuver of 3 and carries a crew of 31 including flight personnel for some armed pinnaces. The entire ship interior is drawn in scale for use with 15mm miniatures. While there are no rules supplied with TETHYS, SNAKE or Ashanti High Lightning can be used. The plans are detailed and understandable and generally well done, though without color. The last few plans in my set are faded.

Unfortunately several important pieces of information are left up to the player. The ten turrets are not specified as to size or type. No scenarios are provided, there are no High Guard statistics, and the pinnaces' armament is not listed. Most passengers will have to rely on low passage berths, with only one medie of unknown skill aboard to revive them.

All in all the TETHYS seems incomplete. Perhaps, with a lot of work, it could be usable for miniature play or to provide a platform for a shoot-out in space. You'd probably better off saving up for Ashanti High Lightning.

— Richard A. Edwards

MINIATURES

CITIZENS, MERCENARIES, PATRONS
(Martian Metals): $2.95 each. Approved for use with Traveller. Twelve 15mm miniatures per pack. Released 1981.

Martian Metals has released three more sets of Traveller miniatures, CITIZENS, MERCENARIES and PATRONS. These sets of figures are basically well-cast (with some notable flaws), as were earlier sets in the line (reviewed in TSG 32). They provide a variety for those Traveller players inclined to use miniatures. The MERCENARIES, mixed with figures from the earlier TROOPERS and MARINES sets, should serve admirably for any miniature mercenary actions requiring infantry troops only.

Unfortunately, most of the figures in these sets are rather uninspired. Few of the CITIZENS or PATRONS look very futuristic at all, limiting their use to lower tech level planets — unless the fact that you have a figure is more important to you than how realistic the figure looks (in which case, figures from any of the earlier sets would do just as well as these, eliminating their necessity at all). One figure in the CITIZENS set even looks like John Steed of The Avengers — not exactly what I'd expect to run into in Traveller II. One of the PATRONS is obviously Darth Vader (as one of the ALIENS in that set was the X-wars). If you're into 15mm miniature use in your Traveller scenarios, you'll probably want to pick up a set or two of MERCENARIES. If you provide added variety for those Traveller players inclined to use miniatures, you may even want to pick up a set (no more than one) each of CITIZENS and PATRONS. If you're strapped for cash, forget the latter two and use your ADVENTURERS and other figures instead. And hope that Martian Metals will keep on coming up with their efforts to sets such as Aslan, Droyne, Zhodani, Centauri and true Traveller beastsies and forge more faceless human figures that have as much place in Traveller as a set of clowns and circus artists would.

— William A. Barton
fact, it was started in part as a reaction to the dissatisfaction of some players with what they felt was excessive interference by the gamemaster. In WOFAN, the gamemaster is a simulation of a non-
level world on which the nomadic tribes of two
warring races strive for power and riches. Each
player controls a tribe and its possessions, and
attempts to increase the wealth of the tribe by
increasing its herds, judicious trading, and occa-
sional raids against wealthy cities or tribes.
WOFAN is carefully moderated, and the
gamemaster takes pains not to try to control
the flow of the game. Reports of combat are
given in detail, and include both a description
of the action and a diagram of troop dispo-
sitions. "Special actions" can be used to give spe-
cific orders to the tribe or to set out such things
as combat tactics or the action the tribe will
take on encountering a particular type of wild
animal. Player turns are non-simultaneous,
allowing a player (in theory) to take as many as
four turns in a row.

Unfortunately, there are some deficiencies
in the game as it currently exists. The rules for
city leaders, which allow a player to rule one of
the cities that dot the landscape, have yet to be
distributed, despite several promises to the
contrary. While my turns seem to be processed
promptly, other players have complained of
month-long delays. This kind of problem sug-
gests that the game was not thoroughly thought
out before being opened. It drives the "world
conqueror" type of player crazy, and makes one
wonder whether enough players will join the
to keep it in existence. (Rumors that the
game was hospitalized for some time due to
an accident may explain some of these prob-
lems, particularly since the game seems to be a
one-man show.)

As a whole, I like WOFAN and enjoy play-
ing it, but it still seems somewhat disorganized,
and does not presently offer the complexity of
play possible in The Tribes of Crap. Hopefully
Larry Hall can get the problems sorted out over
the next few months. Until then, WOFAN is
still potentially a very good game.

— David Bolduc

**COMPUTER GAMES**

**MICRO-80 PINBALL MACHINE (Micro-80
Inc., 2665 North Buzzy Rd., Oak Harbor, WA
98277); $125.95. Cassette for the 16K TRS-80.
One player; playing time 5 minutes. Cannot be
saved. Published 1980.**

The ball bounces off the snare, hits the pad-
elle, and taps the hunter (who extends his rifle),
before striking the elephant who then overruns
the helpless big game adventurer. Variations on
a theme are provided by casting your pinball at
a variety of point targets in a number of settings.
This is an inexpensive pinball program with
multiple scenarios. The pot is sweetened by
the fact that you get to keep the pinball for
all these variants.

Unfortunately this is the worst pinball sim-
lulator I've seen. There is no degradation of ball
movement secondary to "gravity" effects. Paddles
either exist or don't, and players quickly learn
to keep the paddles in constant exis-
tence. Movement of the ball is relatively slow
as the program is in Basic.

Overall, I'd say this is a good buy for kids.
For the serious video/pinball fan forget it.
— Jon Mithen

**MILESTONES (Creative Computing); cas-
sette $11.95, disk $19.95, 48K program for the
Apple II. One player; playing time 1 1/2 hour.
Cannot be saved. Published 1981.**

From the advertisements, I had expected an
auto race game, with a map and lots of econo-
ic decisions. What I found was a computer card
game, decidedly similar to Racing. The com-
puter shuffles, deals cards from the deck, displays
your hand, and decides what cards your oppo-
nent plays.

For once, the imitation is better than the or-
iginal game. There are now cards and victory
conditions, both of which tend to spice up play.
The computer plays its hand very well. The hi-
res graphics are fine -- the "Accident" card
shows a car wrapped around a lamp post; "Out
of Gas" shows a driver pushing his vehicle.

MILESTONES is not for the average orangutan -- strategy can be opti-
mized much too easily. Still, it is a good game
for people who enjoy solitaire.

— Forrest Johnson

**SUMER (Crystal Computer, 12215 Murphy
Ave., San Martin, CA 95046); $19.95. Disk for
the TRS-80, Apple, PET or Atari. One player;
playing time less than one hour. Cannot be
saved. Published 1981.**

This program is similar to the classic Ham-
merstein's. Establish taxes, pay tithes to the
Gods. Make war or peace. Distribute grain to
entice immigrants. Your object is a kingdom of
imortal size and fame.

This game allows many of the complex popu-
lation/growth/economic factors to interrelate
well. How much grain to save and how much to
distribute? Speculate in the market or invest in
the military? Go to war now or mass a larger
army? Even the best planning can go awry if
the Gods frown upon you.

Regrettably this is the game is done very poorly.
There is no documentation, so players must ex-

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P.O. Box 589595.
Miami, FL 33154
experiment for a long time just to understand basic commands. Further, if a player twice offers double the grain, the program scrolls with huge numbers of incoming populace — so many that the program bombs by the eighth year. I wrote the company for a correction but none has been forthcoming.

If you enjoy multiparameter city-state type games then I recommend you avoid this. Buy Santa Paravia instead.

— Jon Mitheon

WHO-DUN-IT? (Instant Software); $7.95, 16K cassette for the TRS-80, 1-5 players; playing time 30 minutes. Published 1979.

Five dastardly crimes have been committed. You choose which case you will investigate and whether you will compete against the computer or up to four human opponents to be the first to solve the crime. While there are five scenarios, they are all solved using the same technique. Each case consists of five questions such as “Who did it?” or “What was the murder weapon?”. Each question has four possible answers. There are five witnesses and each has three clues. By questioning the witnesses and using a process of elimination, the correct solution can be determined.

Fans of the board game Clue should enjoy WHO-DUN-IT?. Movement is eliminated, but otherwise the games are very similar. WHO-DUN-IT? plays equally well solitaire or with human opponents. The correct solutions are generated randomly, so cases are replayable. Deduction, a variant of Mastermind, is also included on the cassette.

WHO-DUN-IT? has minimal graphics and no sound. After playing a few cases, I found the scenarios all blurring together as indistinguishable logic problems.

I only recommend WHO-DUN-IT? to those who enjoy mysteries or logic problems. If you fit those categories, it may well be worth the relatively low price.

— Bruce Campbell

ZORK (Personal Software); $39.95. Disk for 32K Apple II and TRS-80. One player; playing time many hours. Can be saved. Published 1980.

Play your prayers may be answered. Trapped deep within the complex of the Loud room, the mirror rooms, the coal mine, or the temple you may have cause to remember that.

This is not just another adventure.

The game does play well as a pure adventure. Treasures cannot just be left anywhere. A sinister lurking figure may pick up such things. The clues and tools fit together well. There is combat with progressive wounding. Best of all, adventurers can type full sentence commands. If you want to pick up the jeweled box and take out the purple diamond please do so. The command structure allows sentences with multiple verbs and clauses. For the first time your every whim (well almost) is translated into action. A real pleasure. Naturally, as one delves deeper the mystery grows harder. But if you are killed, the game does not end. Rather, one is penalized 10 points and forced to start over. Very nice.

Other than the absence of graphics, this game has no weak points I can find. Although $40 is expensive I believe this is a first rate game and well worth every penny.

— Jon Mitheon

PUBLICATIONS


The Journal of the Traveller’s Aid Society is probably one of the most popular of the many professional magazines covering SF role playing. Every copy of its first year in print has sold out, and it won the H. G. Wells Award for Best Role-Playing Magazine of 1979 to boot. As an aid to Traveller players, the Journal is next to indispensable. Now that issues 1-4 are out of print, GDW has wisely released THE BEST OF THE JOURNAL, VOLUME I, reprinting selected articles from the magazines first four issues.

THE BEST OF THE JOURNAL contains nearly every item from the quickly sold-out Journal 1 — including TDX explosives, the Bush Runner and Tree Kraken from The Bestiaire and the Computer Programming module, which was originally omitted from the Traveller rules. From Journal 2 comes the Serpent-class Scout Ship and Underwater Activities. From issue 3, there is the Arctoid Mining article — in essence a solo Traveller adventure — and Beakers and Sea Bears. From No. 4, we have the Trade and Commerce module. The entire 3-part Robots feature from the Journals 2-4 Ref’s Notes, has been slightly abridged and revised into one consistent article.

The only problem evident in BEST OF THE JOURNAL is that all of the articles — except Robots — have been reprinted exactly as they first appeared, typos and all. Thus some programs are still missing from the Computer Programming article, no price is set for TDX — and a “continued on page 31” has been left at the bottom of an article that actually continues on the next page. Why the opportunity to add a price to the zero-G movement package in the revised Robots feature was overlooked escapes me. And of course, everyone’s favorite article couldn’t be included in the BEST: The feature on Victoria from Journal 2, or the Advanced Powered Battle Dress module. or the Bestiaire integrating Alien into Traveller, for instance. Some — like issue 4’s Gazelle-class close
**Air Traffic Controller**

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This fast-pacing, real-time game has you in the cockpit of an air traffic controller. You control 22 prop planes and jet airliners to take off and land over your airspace. You must direct the planes to change altitude, turn, maintain a holding pattern, approach, and land at two airports. Written by an air traffic controller, the realistic and challenging language simulation includes navigational beacons, and requires planes to take off and land into the wind. With its continuously variable skill level, you won't come out of this absorbing and instructive simulation.

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No. 31. "Sam Beowulf"; 1980 Game Software survey; Game Design Part 5; Random Maze Generation; 9 pages of reviews.

No. 32. Traveller issue... Alternate Character Types, reviews of play aids, scenarios, and variants; also Game Design Part 6; Deus Ex Machina; "Minus Two Reaction"; software survey update; Yaqinto Games report; 9 pages of reviews.

No. 33. Play-by-mail issue... Feature reviews of four PBM games, a War Warg, Campaign, Survey of PBM companies; also, Contest Report; Company Report from Schubel and Son; "End Game" GEV scenario; Game Design Part 7; Deus Ex Machina; The Good Guys, Part I; and 10 pages of reviews.

No. 34. Miniatures issue... Cardboard Heroes Designer's Notes, LORTR Miniatures, Painting Fantasy Miniatures Advanced Techniques, Survey of miniatures manufacturers; also the "Challenge" Artifacts Designer's Notes, Expanded Rules; 1-3 Display; All; Game Design Part 8; With Contest winner; and 8 pages of reviews.

No. 35. The 1980 Game Survey; Solitaire Ogre; Notes for Novice DMs; The War of the Worlds featured; Insane Variant on Stomp; Character Contest results; More Pictures for Traveller; Game Design Part IX; Deus Ex Machina; and 9 pages of reviews.

No. 36. Computing damage in Star Fleet Battles; The Fine Web, Artifact for Traveller; a Featured Review of Akalbath; Eon Products Company Report; The Ten Deadliest Sins of Computer Game Programming; Computer Graphics contest winner; and 8 pages of reviews.

No. 37. Gaming the Alien; Hyborian Risk; Improved Mission Resolution for Freedom in the Galaxy; Troubles in Valodia; Cosmic Encounter Review; PGU Company Report; Winners of the Weapons Contest; Ten Deadly Sins Part II; and 6 pages of reviews.

No. 38. 1980 Game Survey Results; Designer notes for The Lords of UnderEarth; Used ships for Traveller; Selling Your Game Article; Expert D&D and Time War reviewed; Combination Game Contest; The Complaints Department; and 7 pages of reviews by all of the authors.

No. 39. Computer, Issue... Designer's Notes on Akalbath, Strategic Simulations Report, Strategy in the Warp Factor, Computers to Go, a TRS-80 Briefing. An update on the gaming world; also Rumor Reliability in Traveller; Scenario for Triplanetary; "Fantasy World" Magic contest results; Simple Tricks; and 12 pages of reviews.

No. 40. Cumulative Index to Game Articles; Planet of Adventure: Tehai; a new Traveller combat system; results of the non-human races contest; Deus Ex Machina; Aboard the Leviathan; and 9 pages of reviews.

If you are a TSG subscriber, you can get discounts on back issues. Use the order form on the mailing cover of your subscription copy.
The program "Fragment 2" by Joseph Power presented in issue 38 has a major design flaw. "Fragment 2" generates all its pseudo-die rolls on a bell curve. This procedure is correct for generating multiple die rolls such as 3d6 or 10d10, but is incorrect mathematically for generating single die rolls such as 1d6 or 1d10 whose probability curve is flat, not bell shaped. When a d6 is rolled manually each side has exactly 1 in 6 chance of coming up. With the "Fragment 2" program "rolling" on d6 a 1 or a 6 has only a 1 in 25 chance of coming up.

This flaw would greatly affect the play of many games in which single die rolls are common. It can, however, be corrected fairly easily with the following code changes to "Fragment 2":

8340 IF N<1 THEN 8346
8342 R = INT(RND(1)*5) + 1
8344 GOTO 8360
8346 R = INT(5*N*S(1) + 5 + RND(1)) + N

This code generates the result by a method which gives a flat curve when only one die is rolled and uses Mr. Power's method for multiple die rolls.

I would like to make a brief comment on the Game Design article in this issue as well. Perhaps terrain effects and like matters could be presented in the text, but a table is much more convenient for the players in most cases. Steve Jackson seems to have an irrational bias against tables as he knocked Different Worlds in a previous issue for publishing too many tables. I still think tables/charts are the best way to present many types of information which must be referred to often during a game and I hope most game designers keep using them.

Randall S. Sisleye
San Antonio, TX

I would like to make some comments on two reviews which you published. The first is an addendum to my own review of Shooting Stars in issue 37. As I play this game more, especially the advanced rules, one point comes clear. The scenarios are made for the basic rules. The use of the advanced "console" takes up a lot of room and it is often almost impossible for one player to get hits on the other. The result: good games using the basic rules but very overbalanced scenarios when using the advanced. I recommend setting up your own. Also, try building your own ships using a point scale.

I would also wish to comment on John Stromh's review of Mythology in issue 31. I have to admit that the rules were not easy to understand. However I found no typos on the counters as he alleged and very few in the rules. Also, the use of a feast does not cause "other Gods to lose their turns." Inaccuracies like these lead me to believe that John may not have studied the rules as well as he might have. This is not to say that he is totally off base.

My first reading of the Mythology rules generated a list of about 10 questions which I sent to Yaquinto. They answered promptly and over half of the answers were satisfactory. As we played the game, more questions arose. We are answering many ourselves and I hope to someday compile these and send them in again. The biggest problem with Yaquinto (as you alluded to in your review of Time Wars) is their luck of blindingest. It's easy for a game author to explain a misunderstood rule but something else to correct it on paper.

Even given these problems, I feel that Mythology can be an excellent game. I hope Yaquinto will attempt to clean it up and issue errata. If not, I may have to write up a "variant" which would actually be my own explanation of this game's rules.

Gregory S. L. Courter
Mt. Pleasant, MI

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Letters

News & Plugs

Michael Crane (219 Ridgewood Dr., Northfield, NJ 08225) offers the amateur zine Crucible, a "vehicle for providing pbn slots for games that you generally can't find pbn slots for." Price: $0.50.

Personal Software offers Monty Plays Monopoly, a program for the Apple and TRS-80.


Metagaming has announced a forthcoming line of "Metagames," larger than the micros. Most titles are historical.

In order to keep up with demand, Clemens and Associates has licensed another moderator for Universe II. The new game will be called Universe III. See ad, p. 3.

Automated Simulations has converted three games for the Atari 800 - Invasion Orion, The Datestones of Ryn and Rescue at Rigel. All three are available on cassette; 32K RAM required.

Ramware offers Time Lord, an adventure program based on the BBC series Dr. Who. 48K in Integer Basic on disk for the Apple. Price: $29.95. Available from The Software Exchange.

Upcoming releases from GDW: Traveller Book 6 - Aliens, Supplement 8 - Library Data (A through M), and a Deluxe Traveller set.

Stock in Avalon Hill's parent company, Monarch Avalon, Inc., is available for approximately $12/share. Contact: Harold Cohen, 4517 Harford Rd., Baltimore, MD 21214.

FASA is issuing its Traveller ship plans with new covers and 3 or 4 short adventures each. More supplements, and computer play aids, are planned.

Mattel has released a licensed Dungeons & Dragons Computer Labyrinth Game.

Metagaming has published the first issue of Interplay, a digest-sized magazine devoted to Metagaming products.

Avalon Hill has released Conflict 2500, a computer space game for the TRS-80, Apple and Pet.

Ragnarok Enterprises (1402 21st N.W., Washington, DC 20036) offers the FRP zine Abyx, published bimonthly. One-year sub $5; single copy $1.

Conflict Simulations of Australia (4 Parklands Ave., Chatswood Park, Victoria) publishes the digest-sized quarterly Breakout! Subscription enquiries should be sent to: Military Simulations Pty Ltd, 19 Foneo St., Mordialloc, Victoria, Australia.

According to the first issue of Breakout!, Airfix is in receivership. Confirmation is not immediately available.

Reliable sources report that TSR has bought out the Operational Studies Group.
Calendar

June 5-7: DALCON '81. Gaming con - several tournaments, dealers, etc. Contact Dalcon '81, 12600 Abrams Rd., Dallas, TX 75243.
June 5-7: PHRINECON 2. SF fan con, including T&T tournament. Contact PhringeCon, Inc., P.O. Box 128, Tempe, AZ 85281.
June 12-14: MDG MICHICON 10 GAMEFEST. Contact Metro Detroit Gamers, P.O. Box 787, Troy, MI 48099.
June 19-21: STRATACON II. Boardgaming, miniatures, SF, and RPG. Contact G. Patterson, 5373 Commercial St., Vancouver, BC V5P 5N4.
June 26-28: GAME CON ONE. Contact Game Alliance, 481 Ferry St., Salem, OR 97301.
July 3-5: ORIGINS '81. To be held in Dunbee Motel, San Mateo, CA. Contact Origins '81, P.O. Box 3833, San Jose, CA 95150.

The Good Guys by JD

FLUKE: I've released you so that we can have a dazzling laser sword fight to the finish!

IN THAT CASE, I TOLD YOU HE WAS READY, MASTER YODA!

I HOPE YOUR READY TO DIE LORD MADER!

ON GUARD, FLUKE!!

EAT THIS, LORD MADER!!

I DON'T BELIEVE IT!! FLUKE LASERED HIMSELF!!

OH??

WHAT THE?!!

WHAT THE?!!

SUDENLY: KAWAM!!

I GUESS YOU HAVE TO FIGHT ME, RIGHT, MR. MADER? I UN

KAWAM!!

NEXT, THE PEEL ROLLER

July 9-12: 1981 IPMS NATIONAL CONVENTION. Scale model con. SASE to Ed Cameron, 29 Mathew St., South Farmingdale, NY 11735.
July 11-12: MINNESOTA CAMPAIGN FIVE. Contact Mr. Jeff Berry, 343 E. 19th St. Apt. 4B, Minneapolis, MN 55406.
July 16-19: CWA-CON '81. Wargaming & adventure-gaming con. Contact P.O. Box 10397, Ft. Dearborn Station, Chicago, IL 60610.
July 17-19: ODYSSEY '81. Con featuring all kinds of gaming. Sponsored by the UNH Simulations Games Club; for information contact R. Bradford Chase, UNHSCC, Memorial Union Building, Durham, NH 03824.
July 17-20: 9th ANNUAL FLYING BUFFALO CONVENTION. Contact P.O. Box 1467, Scottsdale, AZ 85252.
July 23-26: GENCON EAST. Contact at P.O. Box 139, Middletown, NJ 07748.
July 31-August 2: MAINECON. Boardgames, miniatures, FRP. Contact Mr. John Wheeler, Director, Mainecon, 102 Front St., Bath, ME 04530.
July 31-August 2: NANCON 88-IV. General gaming con. Send SASE to Nan's Game Headquarters, 118 Briar Grove Center, 6100 Westheimer, Houston, TX 77057.
August 8: DRAGONMEET IV. SF&F gamers con. Chelsea Town Hall, Kings Road, London SW3.
August 8-9: 5th ANNUAL BANROG AREA WARGAMERS CONVENTION. Contact Edward F. Stevens, Jr., 83 N. Main St., Rockland, ME 04841.
August 12-16: GENCON XIV. FRPG & new gaming releases. Contact GenCon XIII, P.O. Box 756, Lake Geneva, WI 53147.
September 3-7: DENVENFEST TWO. SF con. Contact Denvenfest Two, P.O. Box 11345, Denver, CO 80211 or (303) 453-9774.
September 4-7: GLASC VI. Simulation gaming con, including monster games. Contact GLASC Secretary, c/o L. Daniel, 20550 Wyandotte St., Canoga Park, CA 91306.
September 11-13: DRAGON FLIGHT. A FRP con, to be held in Seattle. Contact The Brass Dragon Society, P.O. Box 33872, Seattle, WA 98133.
September 25-27: BABEL CON '81. Star Trek, F&SF con. Contact Steve Harrison, Babel Con '81, 1355 Cornell SE, Grand Rapids, MI 49506.
September 25-27: GALACTICON 81. SF con. Contact Galacticon 81, P.O. Box 491, Daytona Beach, FL 32015.
September 25-27: URCON III. SF and simulation gaming con. Contact P.O. Box 6647, Rochester, NY 14603.

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ULTIMA

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Designed by Lord British

Available thru your local Computer Store.

A TOP OF THE ORCHARD SOFTWARE PRODUCT from California Pacific Computer Company
This map, from the Imperial archives, is said to have been pieced together from smaller maps brought to Earth by Adam Reith. The original maps were evidently based on a variety of scales and cartographic theories. Information taken directly from Adam Reith's memoirs is often vague, contradictory, or incomplete. Some geographical features cannot be located with any accuracy. A comprehensive survey of Tschai is not available.

The scale is approximately 1,000 km/hex.

**Travel on Tschai**

The chief overland mode of travel is the caravan — consisting of 10-40 motor drays, of which at least 1/6 mount sand blast. Motor cars and trains are common in certain limited areas. Air/rafts are always scarce, at least among the human population.

The standard riding animal is the leap-horse, a cantankerous creature which jumps around on its oversized hind legs. To control one of these beasts, it is sometimes necessary to thrust a control bit through a hole drilled in the skull. A leap-horse is a gatherer, about 200k, with horns and armor as jack.

Sailing ships are standard for ocean travel. Sometimes motor ships are available.

**Terrain Key**

- Desert
- Jungle
- Mountains
- Seacoast
- Steppe/Ocean
- Old Chasch City
- Blue Chasch City
- Human City
- Dirdir City
- Wankh City

**Travel Times** (hours per hex)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Steppe</th>
<th>Mountain</th>
<th>Desert</th>
<th>Jungle</th>
<th>Ocean</th>
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<td>220</td>
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<tr>
<td>Leap Horse</td>
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<td>250</td>
<td>200</td>
<td>220</td>
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<tr>
<td>Caravan / ATV</td>
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<td>35</td>
<td>20</td>
<td>75</td>
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<tr>
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<td>14</td>
<td>10</td>
<td>10</td>
<td>100</td>
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<tr>
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<tr>
<td>Motor Ship</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>30</td>
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