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The Magazine of Fantasy, Swords & Sorcery, and Science Fiction Game Playing -



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Because this issue had to go to press much earlier than usual, the return of **Out On A Limb** has been delayed one month. We are trying to get back on what we once called our schedule, and we are gearing up with a new printer with a longer lead time. Sorry for any inconvenience or disappointment. — Ed. *******

This issue contains an article sure to arouse the ire of many fantasy purists. I'm referring, of course, to the RAIL BARON piece. It is sure to set off howls of anguish in some quarters, and yet, even knowing that, I feel it should be published, and have done so. The big question now must certainly be WHY?

Why, indeed? The reason is more substantial than the fact that I really enjoy playing RB any chance I get (regrettably too seldom): I feel that RAIL BARON will prove to be a classic game, and deserves exposure. It is certainly no less a fantasy to become a railroad magnate than to fight monsters, or explore outer space, though admittedly the scope is less sweeping. ******

After all the bad news in last month's RUMBLES, I have even more this month. It seems the paper situation is worsening, and supplies are getting even tighter. If that isn't bad enough, the news that paper prices are going up an additional 13% in December was not heartily received. As over 60% of our costs are for paper, you can surmise what that does to us. Just after we are forced to raise our prices for the first time in two years, another inflationary broadside has belted us, eating up our entire margin of safety. We are vigorously exploring all avenues of recourse in light of the staggering news. *******

We have some "good stuff," as Chuck Barris would say, coming up in future issues for your delectation. Next month will see the publishing of the first International DM List. The response was somewhat less than expected, but a good one nonetheless.

We have a new Gardner Fox tale that will be published in Feb.; another saga of Niall of the Far Travels, created especially for TD.

In a more general vein, we have a number of kettles boiling for future issues, including another odd game or two, and some more outrageous songs, as well as some as-yet-unpublished charts and tables for Adv D&D.

I urge all of you reading this that consider themselves pretty good dungeon or encounter designers to enter the Module Contest. We are giving a lot of valuable prizes, and the winner, and perhaps others, will appear in TD.

The staff of TSR Periodicals wishes you all a pleasant and safe holiday season.



If your mailing label says TD 21 this is your last issue

blisher's Statement

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Search for the Nile Revisited:

Designer's Notes, Addenda, Clarifications & Response

by David Wesely

ED. NOTE: As soon as he had finished his article on Search for the Nile, (Published in TD last month) Gary Gygax mailed a photocopy to Dave. Because of press-time, the inherent delays in using the U.S. Mails, etc., Mr. Wesely's reply was not in time for the last issue, and it came in the form of a letter. However, it makes an excellent follow-up article and provides some fascinating ideas and insights. Having been infected with "SftN Fever" by my publisher, I am now among the ranks of admirers of this fascinating game.

Length

As we say on page 2 of the rule book exploring the whole of Africa at one sitting is a marathon task. Our playtesters found it to take about 8½ hours. Of course fans of *Drag Nach Osten* will find this to be nothing - but for people with more moderate gaming tastes, we recommend a 20-turn limit. That is, each player is given 20 turns to get organized, get into Africa, make some significant discoveries and (if he survives) to publish them. (Knowing when to quit is the most important skill in the game. The greatest killer of expeditions is STUPIDITY. In a 20-turn game one is forced to pick an objective that can be accomplished in a reasonable time - e.g. finding the source of the Benue, not the Nile.) A 20-turn game, with a full six players (120 turns in all) can be played in about 2 hours, once the players are used to the rules. While some turns can be much longer-with mapping, discovery of natives, negotiations, battles, more negotiations, trading, and hunting all happening in a single turn - the average player turn will run about 1 minute in length.

I wish we had been more specific in our recommendation as to time-limit games. In the rules we left limits to players' discretion; this has evidently left a number of players with the impression that you have to try to explore the whole map in each game.

After playing a 20-turn game, we recommend that the players leave its results on the map, and treat the unerased, published hexes from the first game as preprinted, known territory in the next. If effect, while the map as printed shows Africa as known in 1821, and the players first game will start in 1821, the next game will start at some later date, say 1831. As a result, starting with the first 20-turn game, every player's mapboard will develop its own unique history which will be passed on from game to game, and the exploration of Africa becomes a "campaign" rather than a "monster game".

Survival

It is important to note that *players*, not *explorers*, score points, while *explorers*, not *players*, die.

Of course the explorer must survive each expedition to score points for his player but the death of an explorer will only prevent the player from scoring points for the expedition in progress; he will not lose points already scored for previous expeditions.

Thus the players are immortal; you can think of them as being newspaper editors or heads of scientific societies sending out expeditions while they stay safe at home, or you can assume that each player is "reincarnated" as the heir of the deceased explorer, ready to pursue the family tradition of African exploration. Rationalization aside, we found that "bang, you're dead and out of the game" rules discouraged vigorous play and made sheer cowardice the best strategy. Thus, players are encouraged both to stick their necks out and to "retire" dud explorers in favor of new ones as the game goes on.

Organization of Rules

We debated the layout of the rules, being familiar with the *Strategy & Tactics/ Moves* discussions of narrative versus outline versus order of play versus grouped by subject, etc., formats. After six drafts of the rules we settled on the present set as being the most acceptable to playtesters who had previously not seen the game.

In so far as possible the rules are written in a "main sequence" format. That is, everything a player could conceivably do in one hex in one turn is covered in the order it would occur. Alternate activities that would branch off of this pattern are listed after the main sequence and the reader is directed to them by title. Within each major activity, i.e., *Natives:* a similar pattern is employed. We deleted a graphic "decision tree" representation of these relationships along with a "flow chart" for determining the presence

& direction of rivers when it became obvious that the only playtesters who wanted us to include these diagrams were the computer-trained ones who could read them!

The "main sequence" format breaks down when there are topics that must be referred to from several other rules, e.g., NATIVES: POISONING EXPLORER could follow NATIVES: NEGOTIATION, EXPLORER SPECIALTIES: EVANGELISM or EXPLORER SPECIALTIES: MEDICINE. To handle this the rules do have a TABLE OF CONTENTS which gives the location of any rule to which one is referred.

Completeness of Rules

As you remark, the rules are reminiscent of the original D&D@. In part this is because both attempt to leave room for imagination and creativity on the part of the player. This similarity also arises from the fact that both sets of rules had to be cut down to be published, with the hope of releasing further material as suppliments. Our first suppliment, called "*Tributary*" is being prepared for release around December 1, '78 and will answer a good many questions that other people have asked us.

Clarifications

DISASTERS: O.K. I'm game. Although I prefer to make retribution for being too stingy to hire a guide more certain, your suggestion *is* more realistic.

EXPLORING: MOVEMENT. As you point out, through a combination of rules, *Jungle Swamp* hexes are impossible. They were *intended* to be impassible. However, there are two exceptions. First, canoes can follow the coast thru a jungle-swamp hex (or any other kind of hex, for that matter). Secondly, where guides can be hired in a jungle swamp hex, they know ways through the hex that may be used by either canoes, men or horses.

A related question is what happens if an expedition moves into an unknown hex and finds terrain it cannot enter (i.e., an expedition on camels finds jungle or one with no canoes finds a lake). Basically the expedition either reorganizes to eliminate the conflict (e.g., abandons/sells/shoots its camels) or goes back to the hex it came from. Even if the latter choice is made, however, the expedition will poke around on the border of the new hex for the rest of the turn - long enough to "explore" it. i.e. map it, find natives, etc. For hunting purposes, the expedition gets to hunt in the better of the two hexes. If natives are found, the expedition may succeed in negotiating with them, hiring guides and/or canoes, camels, etc., needed to enter the hex and thus overcome the obstacle. If the expedition is attacked and takes prisoners, it cannot find the native village if it cannot enter the hex. If the explorer is taken prisoner by the natives, however, and eventually escapes, he will know the paths through the hex.

EXPLORER SPECIALITIES: We developed each of the explorer specialities as branches off of the basic explorer stock. Each would have its advantages in terms of enhanced opportunities to score points (e.g., the Zoologist or Geologist who can score points by doing research in any unpublished hex. He does not have to take chances with Unexplored hexes; he can just slide into nice safe (well, less dangerous, as least) hexes with lots of rocks or bugs and flowers that someone else has mapped and rack up point). Each would have its disadvantages in the terms of demanding a certain devotion to one's calling (the Geologist has to risk death by thirst to stop and look at rocks in the desert. Knowing this, his player had better have him take plenty of water to avoid possible desert hexes. "Neither rain, nor sleet, nor Waziri's on the warpath will keep us from knockin' rocks"). Thus the basic explorer has quite a few advantages over his specialized competitors in the simple matter of STAYING ALIVE. You propose several "bennies" for non-specialist explorers, explorer-explorers, etc., but I would be a little afraid that these (especially in combination) would make the other specialities unattractive Most playtesters settled in non-specialists as it was (of course, most D&D@players would rather be Conan than Gandalf, too, so this may have more to do with the Macho image than with one's chances of winning with a given character type).

NATIVES: AMBUSH Hey you caught us here! We edited out the line that stated "Natives deciding to attack an expedition which is following policy number 2 will only be able to catch it if they take it by surprise". The effect of this rule is to make it nearly impossible for the natives to catch the explorer if he runs for it at first sight.

NATIVES: REACTION to EXPLORER POLICY You add together the following factors:

EXPLORER POLICY NUMBER BONUSES FOR GUIDES BEING UNARMED, etc. DISTANCE FROM COAST

TRIBAL ATTITUDE (initially zero)

And compare the sum to the roll of three dice. The natives are hostile if the sum is less than the die roll. Therefore, an increase in the ATTITUDE LEVEL will make it more likely that the tribe is friendly, as we said.

MAXIMUM NUMBER OF NATIVE WARRIORS PER HEX The system given in the rules to generate size of tribe can give anywhere from 1 to 216 warriors-however, with the adjustment for distance from the nearest port of entry (slave trade) the maximum and average number of warriors is significantly reduced. Since minimum and maximum sized tribes (rolling triple ones or sixes respectively) are quite uncommon, the average number of warriors per tribe is the most significant factor:

2 hexes from PoE	average 16	max 72
3	23	108
4	31	144
5	38	180
6 or more	43	216

This produces fewer warriors than the system you propose. Actually neither our system nor yours comes close to reality (the Zulus were largely confined to one hex of our map but they could easily field 6000 warriors). However, the typical native nation was not so centrally organized and the explorer would have only had to deal with it one village at a time. If we did this "realistically" with one-day turns and ten-kilometer hexes. . . So what we are doing is giving the explorer bout one encounter per week with a typical village of the tribe in the hex and letting this take the place of a lot of dull, repetitious, encounters with every village in the hex.

Although we have generally played that one can wipeout a tribe (remove it's marker) by capturing or killing all of it's warriors, this is really not a reasonable result. No explorer is going to have enough Askaris to wipe out the kind of populations we are talking about. Victory over the inhabitants of one village isn't going to dent the total population in the hex. Therefore, what we should be doing is interpreting the "number of warriors" as the number in an average village in the hex (as a result of kinds of crops raised, local geography and militaristic tendancies or lack thereof). This number can change temporarily during combat, but only because only one village is being fought. Explorers moving into/remaining in the hex on subsequent turns will find that the defeated village has been brought back up to strength by immigration from other villages, or, to put it another way, they will have to take on a different village every turn.

Looting and trading will be limited by the size of the village (since one must waste a lot of time traveling from one to another we limit this to one village per hex per turn). However, no amount of repeated looting will eliminate all the natives from the hex-one just keeps looting different villages. By the way, for those who have not played the game, I want to state that the games does not endorse this kind of policy towards the natives. Although it is an available activity one can engage in, we have tried to discourage morally reprehensible conduct.

NATIVES: TRADING I like your proposed modifications to the limits on looting and trading. We do need to add something like this to control the "buy your way across Africa" strategy that can be overwhelming late in the game.

NATIVES: POISONING EXPLORER Good point. Probably should be a break for Zoologists here too, since they are liable to notice that their mushrooms are different from everyone else's at the dinner. . .

NATIVES: ATTITUDE LEVELS As previously stated the adjustments are NOT reversed.

EXPLORER SPECIALTIES: I would incline to lump the Botanist advantages you cite into the Zoologist specialty. Zoologists and Geologists were generally not popular with our playtesters who hated to waste time "rock-knocking" or "pickin'-posies". As remarked earlier, the specialist is supposed to be a dedicated professional who is going to do heroic (i.e. stupid) things for his calling be it science, medicine or religion.

MEDICINE: On a roll of three, after telling the natives how great he is,

the good doctor fails to hald an epidemic. The natives are (understandably) disappointed by this phony, and the tribal attitude (which influences his chances of escape, if he is a prisoner and of friendly relations, in any case) goes down one point.

The second part of the question arises from a confusion between SCORING POINTS for medical success and ADJUSTING ATTITUDE LEVELS. In short it says that the doctor gets 1 or 2 points for every disease he can report a cure for (when he gets back to Europe) but that he doesn't lose SCORE just because he failed to cure somebody* and made the natives unhappy**. He also can sit at one tribe and keep treating them rather than having to find new tribes after every success, the way a missionary does.

*(a comment on 19th-Century Medicine's success rate). **(and/or racial attitudes).

PRESERVATION OF RATIONS: Playtesting revealed that the game is surprisingly sensitive to changes in the food supply. Allowing players to save some or all of the food they shot made it too easy to live off the land. However, if this was coupled with a requirement to sit still for 1 turn while the meat was being smoked and cured, maybe it wouldn't get out of hand.

Naming Tribes

I am really taken with your native tribe facts sheet and your TRIBAL NAME GENERATOR. We thought about using real tribal names on our countersheet, but abandoned it as too expensive and/or confusing to the players and just used numbers. Ideally, one could give a chart showing what tribe was in each hex in 1821. However, your table serves admirably to dress up the game. Being attacked by the 19's or trading with the chief of the 37's just doesn't hold a candle to encountering twelve heavily armed Ru'ug at an oasis or preaching to the YoGowauku deep in the heart of darkest Africa!

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The Dungeon Hobby Shop 772 Main Street Lake Geneva, WI 53147

THE OTHER HUMOROUS SIDE OF D & D®: or, You Don't Kill Too Many Characters, Do You?

by Mike Crane

A while back in *TD*, there was an article entitled "They shoot hirelings, don't they?". This article told of the many humorous things that the players did in the author's area, to the amusement of the DM. Well, here in my area, exactly the opposite is true. The DM, instead of the players performs many humorous stunts, every adventure, without fail.

On one such adventure we set out, complete with 4 player characters, 10 or so non-human guards, and 3 dancing girls (I never found out why they came along). Our mission was to rescue a mighty King's daughter. Why, I asked, why is this mighty king (who had legions at his command) sending a bunch of clods like us after his daughter (our highest character was level 3)? But of course our DM had an answer, "Well you see, he doesn't like her very much".

On approaching the site of her captors' stronghold we found that it was a solid block of marble, without any visible doors. Immediately on arriving we were also chased by 30 bandits. Picking the better part of valor, we ran, only to be chased. Knowing how bandits like dancing girls we shouted back that we'd give them one if they'd stop chasing us. They agreed, and we told the DM we were throwing the dancing girl down. The DM then informed us that she hit her head on a rock when we dropped her from the high altitude of 4 feet, and so the bandits were still chasing us. Luckily we lost them, but the DM informed us it took our group 1 day to cover 600 yards because the bandits had left 1 man. Of course if we attacked, his yell would then summon the rest of the bandits (in their camp 7 miles away).

After coming back to the marble block he informs us that he decided that it was now 600 yards high-no it didn't grow, he just decided it should be 600 yards high. We then finally found a secret door and entered. But, of course, it wasn't a regular door — most of us took damage when we went in (why, I never found out).

Going down the hall, one character was burned to ash by some type of ray. Finally coming to another door we tried to open it — the result was burned hands. We again tried it and it opened, revealing 20 beds. Of course it was too dark to see the 6 inches into the beds unless we lit torches, although the rest of the building was magically lit. We did however, and found 8 men sleeping in the bunks. Only problem was we couldn't slit their throats or their blood would drip down, setting off the *sensors*. Could we inject air into their veins? "Sorry, you left your needle at home."

Quietly leaving the room, we were informed that one of the players

fell down a pit and was impaled on the stakes below. Fine, now the trap is sprung, right? But the DM, of course, changed his mind and changed it from a pit to a ray machine that reduces people to ashes.

Needless to say, we were captured by 80 warriors in the next room. Later we found out that there were magical swords but we were Clerics so he decided it wasn't important to tell us. We were then put into cells, only to be attacked by hordes of hungry rats. One character protested that he was in full armor and the rats couldn't bite through iron. But the DM had an answer, "Well, these rats are the special ones that had their teeth capped with steel".

After escaping from there, we were attacked by 70 guards, who killed all but 2 of our characters. The DM was a big help during the battle, however: none of the players were armed and our mercenaries would not loan us weapons. And of course, none would attack unless we led them. He also helped us by having the slaves along with us throw one of the players onto the swords of the guards. Needless to say, only myself, another player, and the princess happened to escape.

Going down the stairs we found our weapons and were looking for a way to depart, so we listened at several doors, all but one sounding like they were filled with an army. Going into that one we found a box, complete with 4 buttons. Pushing one, the other player character started a security alert. Pushing another one he was teleported home. Attempting to do the same thing, after I said this I was informed by the DM that the box had dropped and I did not know which button to push. After a short, fruitless debate with the DM I said I would push button #1. Upon saying this he told me that the box had then disappeared.

He then told me "20 guards are outside the door". Knowing this, having no other exit, and alone with the princess I said I gave myself up. He then told me that I was dead and the princess had escaped. Upon inquiring on how that happened he informed me that the guards were outside the door 70 feet away and that while I gave myself up she escaped through another passageway that we never found. He never did tell me how 1 could hear guards 70 feet away through a marble door! We then had a good argument about his statement that the guards were outside the door. To this he cooly replied that I had assumed that he meant my door, which was incorrect.

This was then topped off by him boosting the single remaining character 2 levels instead of one. So, as you can see, the DM is often funnier than the players!



Q: WHAT DO YOU CALL A 25th LEVEL WIZARD? A: Whatever he wants.

by Brian Blume

Is your **D&D**® game (or whatever role playing game you play) lacking that certain something? Are your players duly impressed when they encounter the local wizard? Below is a do-it-yourself titles kit which is guaranteed to impress any player with the splendor and might of your non-player characters.

Simply consult the following chart. Choose one item from column one, one from column two, one from column three, one from column four, one

from column five, insert the person's name after column five, add one item from column six, one from column seven and add a few descriptive words. For example, consider Rogor, the 20th level Paladin. His title might be: The Captain General, His All Triumphant Magnificance, The Duke Rogor, The Colossal, Destroyer of Evil.

It is also possible to delete certain columns, and to embellish others. For example, delete column one and column five, and embellish others. For example, delete column one and column five, and embellish columns three and seven. Thus we have His Most Glorious, Sublime, Superior Excellency Rogor the Splendid, Victor of the Fields of Kor, Slaughterer of the Minions of Evil and Lion of Mondra. Let your imagination run wild.

1	2	3		4		5
The Lord Protector, Marshall, General, Admiral, Viceroy, Chancellor, Chamberlain, Lord Mayor, Captain, Governor, Captain General, Guildmaster	His (Most) (ever) (AII)	(Distinguished) (Sage) (Puissant) (Omnipotent) (Excellent) (Supreme) (Eminent) (Glorious) (Illustrious) (Majestic) (Sublime) (Brilliant) (Radiant) (Grand) (Splendid) (Munificent) (Magificent) (Noble) (Superior)	(Peerless) (Matchless) (Incomparable) (Devout) (Reknown) (August) (Heroic) (Exalted) (Marvelous) (Miraculous) (Miraculous) (Wondrous) (Stupendous) (Amazing) (Astonishing) (Chivalrous) (Just) (Resolute) (Triumphant)	Illustriousness, Immensity, Sagacity, Puissance, Omnipotence, Potency, Greatness, Excellency, Supremacy, Eminence, Majesty, Sublimity, Brilliancy, Radiance, Primacy, Grandeur, Splendor, Sufficiency, Grace,	Honor, Munificance, Magnificance, Highness, Piety, Lordship,	The Crown Prince King Prince Duke Archduke Marquis Grand Duke Earl Count Viscount Baronet Sir Emperor Lord
6 The Incomparable, Distinguished, Superior, Greater, Peerless, Matchless, Devout, Silient, Loyal, Insurgent, Reknown, Glorious Illustrious, Honorable, Splendid, Brilliant, Proud, August,	Herioc, Elite, Superlative, Exalted, Grave, Honorable Unsurpassed, Miraculous, Miraculous, Wondrous, Mysterious, Stupendous, Amazing, Astounding, Colossal, Adroit, Adept, Deft,	Clever, Shrewd, Powerful, Irrestible Invincible Invulnerable, Bloodletter, Strangler, Poisoner, Deadly, Crusader, Belligerant, Chivalrous, Just, Contnetious, Perverse, Unyielding, Resolute,	Determined, Relentless, Triumphant, Usurper, Terrible	Slaughterer of Strength of Protector of Subduer of Subjugator of Commander of. Queller of Siliencer of Slayer of Dispatcher of Butcher of Decimator of Fighter of Victor over Champion of Master of Dominator of	Killer of Destroyer of Lord of Murderer of Vanquisher of Enslaver of Hero of Hero of Peer of Guardian of Scourge of Terror of Horror of Light of Sword of Hammer of	

Game Review: THE DRAGONLORDS

THE DRAGONLORDS Designed by Scott Bizar and Adam Gruen Fantasy Games Unlimited Box 182 Roslyn, NY 11576 \$11.00

Without implying any criticism, *THE DRAGON-LORDS* is the *BLITZKRIEG* of fantasy board-gaming. It presents a straightforward situation of territorial conquest and uncomplicated mechanics which make for a playable game that embodies enought variability to avoid becoming stereotyped or repetitious.

In physical quality, the components are utilitarian rather than elegant. The rules are bound in booklet form but are set in non-justified type. The counters are die-cut, but unit types are differentiated by rather detailed drawings that are not readily distinguished due to small size and somewhat muddy printing. The map is unmounted, printed in black on buff matte stock, with blue. green and brown for rivers, swamps, forests and mountains. Several charts are provided, printed on slick card stock and everything is packed in a zip-lock bag. An added nice touch is the provision of about half a dozen 3" x 5" zip-lock bags for counter storage.

The board represents a peninsula isolated from the mainland by an impenetrable mountain range along one map edge. The peninsula contains two large and three small countries. The two players represent the wizards who rule the large countries, and their object is to gain control of the whole map. To do this, they have their own powers as wizards and the services of troops which they hire. Money for this comes from control of castles, making territorial expansion a profitable operation.

Before the start of the game, each player chooses which kind of wizard he will be: Sorcerer, Enchanter, Conjuror, Illusionist or Necromancer. There are no major differences among these types. Every wizard can, with enough proficiency, perform 25 or 26 of the 33 spells provided, plus create money. Each one does lack some powers the others have, and for most spells held in common, the degree of difficulty varies from type to type. A wizard cannot perform any spell whose difficulty level is higher than his own "Magick Level", and the greater the difference between those levels, the less chance there is of the spells he can do backfiring or not working. Advancement in Magick Level is accomplished only by defeating the other wizard in combat or spending three turns in one's own castle studying (i.e., no movement or spell casting allowed). The spells themselves are considered "Battle" (tactical

CURE FOR THE "SAME-OLD-MONSTER" BLUES

by Wm. Callison

Looking for new monsters? Who isn't? Why not take some from a limitless source that is as old as the world itself? That's right! In your search for more monsrous creatures turn to good old Mother Nature. I don't think she'll mind, as long as it gives her a chance to get back at some of those ravaging humans. You can choose from a fantastic selection: mammals, reptiles, birds, insects, crustaceans, arthropods, arachnids, fish, protozoans, and of course we must not forget the plants.

Will such animals work? Need you ask such a ridiculous question? Since time immemorial man has been afraid to go out his front door after dark because of the unknown horrors of the night. The distant cry of the cougar, the hooting of owls, and the howling of wolves have all sent chills down his spine. And much of man's fear has been with good reason. Who would dispute the claim that a pack of ravenous wolves can take care of a party as easily as orcs, elves, or other such creatures? They sure sent mightly ol'Gandalf up a tree fast enough, didn't they?

I know that a number of animal types are already in widespread D & D use, but I suspect that better utilization of them can be made in some dungeons. Let me start with the ever-popular giant snake. How many of you DMs take advantage of the many different types of snakes? You can have poisonous snakes (with varying poison levels), or it may be a constrictor, or the unlucky beast may have neither weapon and must depend on its plain old bite. Note: As far as I know, snakes may possess either poison ok constriction powers but never both. Serpents can be of many different color patterns; thus allowing knowledgeable characters to identify the powers of the specific type encountered. They can live almost anywhere, but, like all reptiles, are cold-blooded so they cannot live in cold areas (a bonus for all of you magic-users with a cold spell).

Some snakes can move swiftly over distances while others are very sluggish (especially after eating). All snakes are deaf, but have the ability to pick up vibrations of those moving on the ground (perhaps with the exception of those wearing elven boots). Most snakes live alone, although one may be unfortunate enough to encounter a whole den of them. Many snakes will coil up before striking, thus gaining an initiative bonus against those foolish enough to let it get set. So add some variety to your snakes, they can be of any length or have as many hit dice as you care to give them, within reason, of course.

Another of the super-familiar giant animals is the giant spider. From now on, instead of just saying, "you see three giant spiders", and then fighting it out, use some of the spiders' natural characteristics. As a thought on that last comment, most spiders will be living alone; only a few types have "community webs". The many varieties of web weavers catch their prey in their strong, sticky, and low luster traps. Once stuck, the prey will be bitten immediately by the spider who will usually back off until the poison takes effect, or, if the prey is small enough, it will stay and try to subdue the struggling creature in order to prevent excess damage to the web. If the prey is not securely entangled at first, the spider may well cast a few more web strands to ensure the capture; it may also drag the victim off of the ground to give the quarry less leverage. It should be stressed that web weaving spiders are out for *live* prey that is *paralyzed* by the poison and wrapped for a future meal.

Of course not all spiders need webs. There are the wolf spiders who often lurk around corners, in dark side passages to leap upon their unsuspecting prey with surprisingly quick speed. And there is my favorite: the giant trap-door spider. It will often attach its strong grey door over some abandoned pit and wait for game to walk by (an alert party may detect a hollow sound, should they happen to pass over the trap-door). If there is a shortage of old, unused pits in the dungeon, the spider might cover up a side passage or doorway with the door. Needlessto-say, the spider jumps at its prey from behind, usually gaining complete surprise. It then quickly retreats back to its covered lair, with the victim in its grasp. As you can well see there is no typical giant spider; hit dice and poison levels will vary as much as do the methods of food gathering.

There are some serious misconceptions being made by some people about other giant animals I've found that when many people think of centipedes the envision a poisonous caterpiller with 100 legs. While they do kill prey with their poison, the caterpillar image is completely wrong. Centipedes are long, sleek, hairless creatures that have a hard exoskeleton (AC 2-3?), are dark red in color, and move with blinding speed. If you have had the wrong image of centipedes, look for a picture of one in an encyclopedia, or better yet try to find a live one. They live in dark, damp places, including dungeons!

Two other common giant creatures are very often the victims of "number appearing" problem. Scorpions *always* live alone; except when mating or when the young are born, in which case they leave the mother soon enough since she doesn't feed them. Yet I have often heard of them being encountered in groups and have even read one story to that effect. Of course you have the right to ignore this natural fact and can consider giant scorpions to be of different habits than their smaller relatives; if you feel that they cannot do well enough on their own!

Then we have the giant ants which are positively social animals and should only be found in large numbers or within a reasonably short distance of the rest of the gang. Their blindness is not a big factor since their incredible sense of smell allows them to follow scent trails (home or in order to follow food). They live in anthills, or if you don't want to put any more holes in your dungeon, you can give them a series of rooms to serve as their lair, complete with a single queen and a bunch of eggs. All prey is taken back and is fed in equal portions to the whole colony.

Of course the above are the familiar D & D animals, you want new ones right? Well, I don't intend to give away all of my ideas so I'll have to tell you to find them yourself. Just use some of the above animals as guidelines and look up the natural characteristics of your base animal. Most will have to be put on a proper size ratio as opposed to its prey: man. Don't worry about getting the size, hit dice, etc. exactly right, my snakes may be slightly larger or smaller than someone else's, but since neither size is what nature had in mind it doesn't really matter. Some animals will have to be given a taste for flesh and a few of them can be given all of the cunning wit of humans. When you use animals as monsters keep as close as possible to their actual natural characteristics and habits. Your research should take you to encyclopedias, books, and the highly recommended and entertaining areas of study that are actual observation and some of the National Geographic specials and other things of that sort. You shouldn't have any trouble finding new monsters, the natural world is one of prey/counter-prey. Some topics that you may want to look under for specific species and habits are: Insects, Arachnids, Arthropods, Crustaceans, Mammals, Reptiles, Birds, Fish, Echinoderms, Protozoans, Carnivorous or poisonous plants (a bit hard to lure players into but you can manage to do it), you might find something under Predators or Carnivores.

As a final thought you should remember that not all deadly natural life must be made giant size; poisonous snakes, bears, wolves, big cats, etc. can also kill men. And all of you farmers can stop complaining about those terrible locust swarms, at least they aren't flesh eaters . . . yet! !!



D&D Wariants INFLATION IN D & D? ? ? ?

by Willie Callison

I know that nobody likes inflation. Today it is considered to be this country's number one problem, it even overshadows the terrible afflictions that are unemployment; heavy taxes, and the threat of spreading Communism (whether it is real or imagined). We constantly complain about the Government's ridiculous inability to balance the country's budgets, and yet we allow it to be present in our fantasy worlds, the very places where we go to forget the pains of reality. We never seem to notice it, in fact we enjoy it, as long as we are on the receiving end.

If you do not believe that many of the fantasy campaigns of D & dand *EPT* are suffering from inflation, then perhaps we should take another look at what the word means. I basically see it as the loss of a unit's value. In our world it is the dollar that is constantly losing its value. What about in D & D? What can you do with one gold piece in your campaign?

In a recent *THE DRAGON* article, dungeon masters were given the idea of rewarding experience only for money spent instead of for money gained. While this may help get rid of the players' loot it is not terribly realistic. In most cultures you gain power (experience levels) by *gaining* material wealth, not by getting rid of it. But if you don't give players incentive to spend their money the won't; and so the problem of too much money remains. Such is the result of too much gold being given to the players.

I think an analogy should be made between the gold piece and our dollar. How many dollars is a gold piece worth? While I recognize that such a comparison is impossible to make I ask you to imagine the gold piece being equal to the dollar in value. In various campaigns I have repeatedly seen players gain tens of thousands of gold pieces by slaying a single monster (not always worthy of possessing such treasure). If we converted that to the modern scale it would make the player instantly rich.

Again using the 1:1 ratio we have common peasants walking around with hundreds of gold pieces on their persons. How many of us routinely carry hundreds of dollars in our pockets? If you have that much money floating around, available to anybody, what happens? Because of the merchants' attempts to stay even the prices go up. INFLATION! !!

And if you are one of the many (including myself) who consider a gold piece worth more than a dollar (maybe 5 or 10) then the situation becomes even more unbelievable. There is another thing wrong, if everyone has that much money the can easily buy land, build castles, towns, etc. Usually this is in a setting where most (the vast majority) or people didn't even own their homes; rather, they lived according to the feudal system. But I guess everyone owns their own place in these campaigns. The Middle Ages were never so good!

What about silver and copper? They seem to exist merely to add variety to the treasures so easily found by the players, they are merely converted to gold and then forgotten. After all what are they worth? What can you buy with a copper piece? With a silver piece? Instead, the need is seen for such metals as Platinum and Electrum, worth even more than the inflation ridden gold piece.

The whole idea surrounding precious metals is that their rariety makes them valuable. Is it any wonder that gold is virtually worthless when the world contains so much of it? That must be why the preconditioned players, used to monstrous amounts of coins, grumble so loudly when they enter my campaign and initially receive only (?) 1-10 gold pieces, or when they go to all the trouble of pickpocketing some poor little commoner and get nothing but a few copper pieces? What the hell can you do with that? Much of the same things that you use gold for in most other campaigns. I merely cut the prices when I cut the amount I give them; thus silver and copper are brought into use.

Money is not the only thing that has lost its value to inflation. With the advancement to 20th or 30th level what is a single hit point worth? Its worth a heck of a lot when you don't have too many of them. Magical items are also in ridiculous abundancy. Why, just the other day, a purple dragon (on the 1st level) gave me a plus 5 sword and 2 plus 5 spears, just because he liked me. Now, come on, people!

I think, rather, I know, that there are more than a few of us who should read an old *STRATEGIC REVIEW* article (Vol. II No. 2) by Gary Gygax that was entitled "D & D is Only as Good as the DM". I wish *THE DRAGON* would reprint it but I guess they have given up on getting through to some of you and frankly I can't blame them.

So those of you complaining that your players have too much gold, possess too many magical items, or are of too high a level for ordinary monsters to kill, can just quit your whining. You are the dungeon master, you are god, if you don't want them to get that powerful then make it so they cannot or at least make it so that it is very difficult to do so. Maybe you have room in your campaign for every player to own their own castle or become a demi-god in strength but I do not. Like they say: SMALL IS BEAUTIFUL!

PROPHET PROOFING or How To Counter Foretelling Spells by David Schroeder

Clairvoyance, Clairaudience, Wizard Eye, ESP, and X-ray vision are five spells designed to test DM's patience. A common, exceedingly frustrating scenario involves a party approaching a door, behind which lurks a vicious monster that the DM hopes will mangle the adventurers. Suddenly, the caller speaks out, "Argle 1) drinks the potion, 2) uses his Wizard Eye, 3) X-rays the door, etc. What does he see?" The dungeon-master is then obligated to describe just what *is* behind the door, totally ruining his element of surprise. The party can prepare for that particular menance, and no other. For example —

"It's six orcs and a troll, Charlie," says Argle. "Have Bungle throw asleep spell on the orcs and I'll blast the troll with a fireball. Hugo, you open the door and be prepared to hack at the troll if it doesn't buy a farm. Ready? One, two, three, GO!"

Thirty seconds later six orcs are in dreamland, a troll is crisped, and the party is a few thousand gold pieces richer, without taking a point of damage. What a pain! What's a dungeonmaster to do?

The best solution to the problem of a forewarned party is to make the forewarning spells a little less attractive. A few strategically placed Medusaes are great for discouraging the over-use of Clairvoyance, Wizard Eyes, and X-ray vision. Harpies are just as effective against Clairaudience. Adventurers who have been turned to stone or harpy-charmed frequently tend to be more cautious.

ESP is harder to counter, but Kevin Thompson's fine article in TD #18 on Insanity provides the key to bollix up an ESPer. Postulate — if a sane person reads a madman's mind, the same person will become insane in the same manner for 2-7 turns. Clairvoyance and Clairaudience users can suffer the same consequences. Gibber, Gibber, Gibber, . . . hee, hee, hee. . .

Special limitations are also effective deterents to "foretelling" spells. Wizard Eyes, for example, could be restricted such that they would be unable to penetrate liquids and solids. That would make them fine for peeking around corners, but useless for spying into closed rooms. Clairvoyance, Clairaudience, and ESP could be declared non-directional, so that the caster would receive the sights, sounds, or thoughts of all beings within 60 feet (including or excluding members of the caster's own party at the DM's discretion), so that the foreteller could never be sure just where a given thought was coming from. X-ray vision has a built-in limitation — it can't penetrate lead. (I sandwich three inches of lead in my lower level walls, ceilings and floors for just that purpose.) Paranoid, high-level, non-player characters in my world often possess Amulets vs. ESP, etc., or other means of protection against the foretelling spells. Science fiction author Lloyd Biggle's novel, *Silence is Deadly*, feature such a protective means — a gargoyle shaped creature with singular powers.

Finally, a DM can pull some sneaky tricks. One Wizard Eye Medallion, which allowed its wearer to project a Wizard Eye spell three times per day, had a subtle flaw. The Wizard Eye was a voyeour, and 33% of the time it would ignore its owner's wishes and would search for mating monsters or pornographic wall paintings in the depths of the dungeon. The Magic-User who owned the medallion made a mint renting the Eye out to wealthy townsmen who loved its "blue movies."

A final "dirty trick" involves a Helm of Telepathy. On the sixth level of one of my dungeons lived a magic-user of high level who owned such a Helm. When he detected a party approaching using an ESPspell, he began to think into the Helm, "KOBOLD, KOBOLD, KOBOLD." The party, expecting an easy kill, smashed open the door and abruptly charged into a fifteen hit-die fireball. Singe. . .

Knowing hat's on the other side of a door can be a great advantage, but only if you can be sure. A little insecurity keeps players on their toes!

D&D Variant SENSIBLE SORCERY

by Ronald Pehr

One of the joys of being a Magic User in D&D@ is the chance to invent new spells appropriate to the types of situations the player encounters. Magical research is conducted at the inn or castle or guild hall, in between quests, and is a good way to use up the copious amounts of treasure that sometimes come a player's way. However, too often players select spells as if out of a vending machine. They "put in" gold pieces, wait the requisite time period, and out comes anything they want. Too often, DMs let players get away with this - forgetting that just because research was conducted doesn't mean:

- a) The spell is a particular level just because that was declared.
- b) The spell is appropriate to the Magic User just because he wants it.

c) The character researching the spell can, in fact, do a spell of that level. Naturally, players want the most powerful spells at the cheapest cost. A good guide for what would be an appropriate spell level is the current list in the D&D@ rules. There seems to be a basic assumption among players that if a spell is in *Gravhawk* or the new, revised D&D@ rules, that the spell is common knowledge in the profession. This gives standard to measure proposed research. An example of an appropriate spell appeared in Paul Suliin's article in the September 1978 issue of The Dragon. "Moon Runes" are a written version of the Magic Mouth Spell. As a first level spell they would have been too cheap — as they can accomplish far more than a Ventriliquism Spell — and at third level they would have not been worth having, as the written spell Explosive Rune is a third level spell which can cause damage.

Another example from that article is "Magic Missle II" as the obvious second level equivalent of the standard Magic Missle. (When a Wizard of my acquaintance researched it a couple of years ago, we called it "Magic Javelin").

Some of Mr Suliin's level choices for researched spells allow a player too much too soon. "Wall of Water" blocks creatures under 5 hit dice and does 6 dice of damage to fiery creatures. The already extant fourth level spells, Wall of Fire and Wall of Ice, block creatures under 4 hit dice and Wall of Ice does only 1 die of damage to fiery creatures. Furthermore, both of these spells require concentration while "Wall of Water" does not. Another example of an overly powerful spell for fourth level is "Shatterray" which does 5-30 pts. of damage, can be used against inaminate objects, can be aimed, and increases in power with the level of the caster. The Grayhawk spell, Ice Storm, is fourth level and does 3-30 pts. of damage but has none of the other advantages of "Shatterray."

This brings up Rule One of Research: No researched spell may cause more damage, gain more information, summon more powerful beings, or give more control over mind and matter than an already existing spell of the same or lower level. The exception to this rule is if the researcher is of a



profession more suited to the spell. For instance; if a DM allows "specialist" Magic Users, a "Fire-Mage" might get "Firebolts" or "Firebeams" doing equivalent to Fireballs at second level.

Rule Two of Research: A character cannot learn a spell that is the province of another profession. This is highly subjective and utmost DM discretion is called upon. There is some overlap already - Magic Users can do some Illusionist spells (but of course, Illusionists are a profession which did not exist until those spells had already been given to Magic Users) such as Hallucinatory Terrain, and both Magic Users and Clerics can do Light Spell — but in general there should be a dividing line between professions. Clerics do not manipulate natural/ supernatural forces to attack - Web, Magic Missle, Fireball — and Magic Users don't get divine guidance and intervention — Detect Traps, Speak With Dead, Resurrection. Sharply delineated character classes, each with special powers and weaknesses, increases game enjoyment immeasurable.

Rule Three of research should be self-evident: A character cannot research a level spell of a level he cannot yet learn. Forcefield-type spells might be researched at any level (E.g. Shield is a first level spell) but if the third level spell Protection From Normal Missles is not available to a character then certainly he can't research any sort of magical weapon protection. If a character can't do Wall of Ice he certainly can't research Vortex" or "Wall of Dust."

DMs should apply these rules strictly, so that when the day comes that a Novice Magic User has fewer Sleep Spells than the DM has orcs, the DM won't be confronted with "But don't you remember? I researched a first level spell of 'Sneeze to Repel All Orcs' just last week!"

BOOT HILL ENCOUNTER CHART

or, What To Do Between Bank Jobs

by Robert Wagner

This chart is modeled after the fact that most towns specify the characteristics or weapons of each encounter so the referee may suit each one to fit into his game. The referee may also decide when there should be a chance for an encounter (1 every hour, half-hour. etc.)

- Town till 8 p.m. (1 out of 6 chances)
- 1 Pickpocket
- 2 Stealing job offer*
- 3 Mugged by 1 person
- 4 Questioned by deputy
- 5 Irate merchant after you
- 6 Shot at by I person
- 7 Jumped by I person
- 8 Small posse after you (unarmed)
- 9 Harm person job offer* 10 Drunk wants to fight you
- I I Deputy shoots at you
- 12 Arson job offer*
- 13 Undercover deputy
- 14 Mugged by 2 people
- 15 See mugging
- 16 Gunfighter wants to gunfight you
- 17 Murder job offer*
- 18 Falsely arrested
- 19 Shot at by 2 people
- 5 Vigelantes ambush you 6 Shot at by 2 people 7 See bank being robbed 8 Jealous husband 9 Escaped prisoner 10 Insane gunfighter I I Shot at by 3 people 12 Challenged to a gunfight 13 Mistaken for a murderer 14 3 deputies try to arrest you 15 Lynch mob after you 16 Large brawl in street 17 Wanted man with a price on his head 18 Hidden sniper 19 Large posse afte you (armed) 20 2 deputies after you 20 U.S. Marshal tries to arrest you *Most job offers are made by merchants wanting

Town after 8 p.m. (2 out of 6 chances)

4 Small posse after you(armed)

I Lady of the evening

3 Mugged by 2 people

2 Murder job offer*

their competition eliminated.



Encounters with Personality or, How to Amuse the Dungeon Master! by Rod Stevens

Encounters can grow dull and routine, each being practically identical to all the others. This can be avoided by giving the people the players encounter personalities. Giving these people pasts can liven up a game greatly. The possibilities are sometimes deadly but they are often quite amusing. The following examples can be used to add flavor to city encounters, and the first seven can be modified for dungeon encounters by adding appropriate companions.

1. BLARG: Ftr. Cha/Evil. Hobgoblin. Blarg hates everything but ogres. These he emulates but they hate him.

3rd 20 5 16 7 7 6 8 6 +1 +1 shrt. sd.

2. SNIR: Ftr. Cha/Evil. Orc. Snir's right hand was cut off by an elf superhero. He learned to use his hammer as a weapon in his left hand. He still remembers the pain of the elf-sword so if an elf-sword passes near he will immediately attack its bearer. He eves elves with distrust but fears them so he will wait until the elf's back is turned before he attacks. 4th 23 6 15 9 7 12 9 4 Ave. Ave. hammer

3. GANTOL of Een: MU/Ftr. Law/Evil. Human. If encountered, Gantol will try to join the party. He got tired of being a Wizard, so he decided to try being a Fighter. Having enchanted much of his equipment, he has +2armor, a +2 sword, a +2 shield, and a +1 spear. Because he knows almost nothing about being a fighter, he also carries a mace, a 2handed sword, 6 daggers, a heavy crossbow, a longbow, and a sling. His good friend Panitole the Patient (MU, 15th level, 53 HTK, AC 7, +2 protection ring, Staff of Fireballs) accompanies him.

17/1st 64 -2 8 17 9 11 13 11 AVE. +st. Ave. 4. IRADAIN: Ftr. Law/Good. Elf. Affectionately

called "The Plugger" by friends. NEVER misses even moving, man-sized targets at distances under 100 yards (5%/10 yards thereafter). Aims to disarm unless he is seriously threatened. His longbow named "Thwesta" is his only weapon.

6th 36 7 17 12 10 13 19 16 +2 +2 longbow CLAR: Ftr. Law/ Good. 5. Werebear. Has no companions. He is usually taciturn but will open up is he is sure of your intentions. If threatened, Clar will turn into a large (12'tall) bear doing 1-3/claw and 2-8/bite damage (hug on a roll of 18 or more withclaws, 2-16). 7th 45 *2 18 16 14 18 9 11 +4 none +6

*appears to be AC 9 when human.

TARKY HELM-SPLITTER: Ftr. Law/Evil. Berserker 6 who roars with laughter if a good joke is told. He rewards the teller of a good pun with a draught from his wine skin (quadruple strength ale). 11th 69 7 18 10 8 16 11 14 +3 +4 2-hnd. sd.

7 LONTIPOL the Cursed: Cleric. Cha/Evil. Human. His favorite pastime is sending insect plagues to villages. If he is encountered, 40% chance he will inflict heavy wounds on elves and 80% chance he will inflict heavy wounds on Lawful Clerics, without provocation.

13th 51 9 8 6 19 7 7 7 Ave. Ave. Staff of Withering CLARENCE LINDIR: Ftr. Law/Good. Human. He is 8 a constable who is always accompanied by 11 other constables. He will do anything to make an arrest including arresting jaywalkers, people with water in wine skins, or anything else he can think of. He often makes up absurd charges. When in court he will then charge resisting arrest if the party didn't come peacefully. Of the hundreds of arrests he has made, he has only gotten 2 convictions. The townspeople pointedly ignore him and call him "Clarence the Clown" behind his back. $1 st \ 9 \ 7 \ 17 \ 9 \ 10 \ 9 \ 7 \ 8 \ +2 \ +2 \ mace \ \& \ spear$

GARY BENDERLACK: Ftr. Cha/Evil. Gnoll boy (16 9 years old). He haunts stores and grabs customers' legs immediately upon his victims entering. He begins crying and won't let go until he is bribed with more than 5SP cash or 1GP in merchandise. He prefers to visit food and candy shops and bars. He will attack anyone who breaks free without paying him.

lst 9 9 18 12 8 16 4 5 +3 +3 dagger in sock continued on page 23



RUNEQUEST, Fantasy Role Playing in Dragon Pass!

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THE TRIBES Of CRANE

You, task chief of the Leopard people wandering tribe of Crane, sit in your great wagon awaiting news from your swift searching outriders. Suddently hoof beats approach. The outriders leap from their mounts to your wagon flushed with excitement for they know full well the meaning of their news. But one sector to the North the great merchant caravan of the Impala people has been spotted. The order is given "To arms to arms!" You snap your orders, "Gather my captains of hundreds. Let all know the tactic will be enfilade right. Now my arms, my mount." You heard that Kate, chief of the Impala people, has chosen a stand and defend tactic twice before; will he again? You know also that the Impala people are fine warriors as are all the people of the many tribes. This will be no raid of the strong on the weak, but rather a mighty clash of the TRIBES OF CRANE

The **Tribes of Crane** is a unique correspondence game, allowing for interaction between players and the fantasy world of Crane and each other through a continuous game that may be entered at any time.

As a new player you will start as the chief of one of the many wandering tribes of Crane. Perhaps your tribe will be of the Sea people or Caravan merchants.

As chief you will know many secrets of your people and their lands, but there will be much you have still to learn of the lost secrets of Crane. It will be you who decide if your people will remain in their familiar homeland or begin a journey to new lands as you strive to increase your herds, train warriors, and learn of the ancient lost secrets that can move your people toward prosperity and dominance.

The land of Crane is a complete fantasy world with a full range of geography from the permanent ice of the polar regions, to the deserts, and tropical forests of the equator.

Cities dot the continents of Crane providing centers of trade and homes for the powerful Shamans and King Lords.

The creatures of Crane are as varied as its geography. Cattle goats and the caribou are the mainstay of the tribes, depending on the geography. But horses and the great mancarrying war hawks are important to the fierce warriors. Many undomesticated creatures also inhabit Crane such as the Euparkeria, a hugh bipedal lizard that feeds on cattle in the grasslands of Crane.



Interaction between players is very common. Alliance, trade, and combat are always possible. Combat is determined in part by a comparison of tactics used by the antagonists, the relative number of warriors, and the geography.

The games objective is to increase the relative strength and prosperity of your tribe which is measured by different criteria. depending upon the type of tribe, and thus obtain points. Players try to obtain high average points per turn thus placing new players on a par with those who have been playing longer.

The **Tribes of Crane** may be entered for \$10.00 which includes the first six turns, a rule booklet, and all necessary material (except return postage). Thereafter, turns are \$1.50 each. If dissatisfied after the first turn, you may return the materials for a full refund. A rule booklet may be purchased separately for \$3.50.

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OLYMPICA: A Game Review

It is the year 2206 and the colony on Mars has come into the ominous grip of the "Web, a new evolution in mankind: the group mind. And it is a paranoid mind, xenophobic, and bent on the conversion, by coercion if necessary, of the normal Martian population. On Earth, the UN strives desperately to come up with an attack plan that will deter the Web. Troops are assembled and trained hurriedly for a battle they never expected to fight.

This then, is the setting for OLYMPICA, Metagaming's seventh microgame, named for the crater on Mars on which the UN launches its raid to capture a Web generator. The mechanics of the game allow one player, as the Webbie, to use fast and lightly armed infantry, strongpoints, and a defensive tunnel system to keep safe the Web generator, while the other, as the UN, uses light and heavy infantry, laser tanks, and rocket powered lifters to piece the enemy defences and seize the generator.

The 8" x 14" map covers the northern area of the Nix Olympica crater on Mars where the Web generator is located. The map is on heavy paper and colored a basic orange with cliffs and ridges done in black, a not particularly pleasant color scheme.

The counters, though thinboard and only cut one way, are artistically excellent. Paul Jaquays has lent his ability to *OLYMPICA* to provide some well done counters with silhouettes of the units represented. Web forces are white on deep blue; UN counters are just the opposite.

Web forces include 19 infantry counters, value 8-3 attack/ movement, and a range of 2; five strongpoints, value 30-0 and a range of 7; five dummy counters and a series of tunnel mouths and deep tunnel counters.

The United Nations player command a more varied force. There are twenty-three heavy infantry, values

10-3 range of 2; eight light infantry, value 6-3 range of 2 and capable of moving twice a turn; six laser tanks, a hefty 25-2 and range of 6; three lifters (10)-25 used for transport only, and one BOAR, an armored laser drill.

The exact mix of units in a game varies with the scenario being played. Within certain limits, player may make substitutions during the initial set up.

The game begins with the Web player's setup. The Web generator, the target of the UN assault, must be placed within a nineteen hex "zone of uncertainty". All Web units are deployed face down, hence the inclusion of the handful of dummy counters. Any Web units that move or fire are revealed for the game's duration, but this initial advantage of hidden deployment does much to confuse the first few turns of the UN assault.

The defender's setup complete, the UN player makes his initial drops of troops. In a manner similar to *STARSHIP TROOPERS*, the UN troops land *via* drop, in small clusters, and though not subject to scatter as in that game, they may be compelled into disadvantageous terrain by the Web generator if they attempt to land too close.

Web forces, due to their familiarity with the local ground, pay no extra costs for moving through certain terrain, giving them considerable mobility over the UN in restricted areas. UN units must halt when they enter incline or cliff hexes and in the latter suffer the possibility of destruction by avalanche on the roll of six. Lifters and the BOAR are automatically wiped out if caught in these hexes. Cliffs severly hamper combat as well, halving it both for attack and defense.

Another, non-natural terrain feature, is the Web defensive tunnel system, introduced in the advanced game. Units in tunnel mouths are doubled for both attack and defense in ranged combat and may ignore combat results such as retreat or "dust". Units in deep tunnel hexes (placable only next to tunnel mouths) are immune to ranged combat. The UN BOAR may drill into deep tunnel hexes by moving into the hex and rolling a 4-6 in the movement phase. Success allows UN troops to move right in during the same phase.

There are two types of combat in *OLYMPICA:* ranged and close assault. Ranged combat takes place between units in different hexes, using their printed combat factors to obtain a ratio on the CRT. The table is fairly bloody; every odds column of 1-2 or higher features at least one exchange and one or more elimination results. Other possibilities are retreats and "dust", the latter being an indication of the effect of hermatite dust raised during combat and minor suit damage. In game terms, the afflicted units may not move and have their combat strength halved for a turn.

Strongpoints and laser tanks have special advantages in combat, in that they may ignore dust results and are not affected by exchanges when involved exclusively with infantry.

Close assaults are much bloodier. They occur in the movement phase when a phasing unit enters a defender's hex. The *defender* rolls first, on the 4-1 table. Three of the six results are DE, killing the assaulting unit; there is one exchange, a defender retreat, and a dust (equating to no effect in this case). Only if the dust result is obtained does the assaulting unit have an opportunity to fire, turning the tables and rolling on the same odds column. This process continues until no more than one unit is left in the hex. Close assaults favor the defender greatly, as can readily be seen, and the Webbie in particular. Note that combat strengths are irrelevant in close assaults, so a laser tank has equal value to Web infantry. Web units are relatively plentiful and weak, and making numerous close assaults is not that risky. The UN player must reserve such tactics for important targets such as strongpoints and units in tunnel mouths.

Most of the special rules concern the Webb player. The only special units the UN has are the BOAR (already mentioned) and lifters, fragile transport craft with high movement rate that can be used to shuttle UN troops around the battlefield. The Webbs has (quite naturally) the Web generator, possessing some special properties of its own. During drops, it may

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Left: Our full sized mounted map of the stellar, neighborhood near Sol, using a scale of one hex equals one-half parsec. Right: Artist's

conception (our box cover) of an incident in the game.



Imperium is a game of interstellar empires in conflict. It envisions a young, struggling Terran Empire expanding out into the territory held by an older, less vital Imperium, which resists, but slowly. Within the situation, the fate of worlds hangs in the balance as interstellar wars rage through the skies.

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THE HALL OF MYSTERY A section deep in the Greenlands Dungeon

Don Turnbull - Cambridge, England

The entrance to the main hall (see diagram) is by means of a vertical ladder set into the wall which foots on a small landing. A short flight of steps leads down to a curtain beyond which lies the Hall proper.

The hall is permanently illuminated from an unseen source above; the ceiling is quite high - say 45' and bare. The floor and walls of the hall are in black marble veined with red, while the side passages and rooms are in rough stone. White curtains conceal all openings off the hall and white marbel pillars rise from floor to ceiling. The dotted lines across each entrance, except the main entrance to the hall, are steel panels which initially seal off the pasages.

Normally the main hall is guarded; in Greenlands the Guardians were two Umber Hulks.

There are five large mirrors, each 10' square, around the hall, supported on the walls so that their bottom edges are only a few inches from the floor. All are initially draped with a sheet of white muslin attached along the top edges, and no magical powers of the mirrors can operate until the muslin is drawn aside. Mirrors b, d and e are ordinary, with no unusual properties (though they are placed in useful positions in relation to some of the passages). Mirror a is a Mirror of Opposition. Mirror c has a small section of Life Trapping at the centre of an ordinary mirror; the section is circular, about 6'' in diameter and covered by apiece of red material which adheres to its surface but can easily be removed. The section contains one Life — a Succubus in my version.

In the centre of the hall stands a rock cylinder, smooth, 5' high and domed on the top. The surface is absolutely smooth and no opening or crack can be seen in the dome.

Near the east wall stands an ornate wooden roll-top desk which can be opened without danger. The desk has pigeon-holes and drawers — treasure can (and in my case, was) hidden in some of them, but only one thing must be there. This is a rolled piece of parchment which reads as follows, in Lawful:

Midway twixt place of literary toil and frame	For wisdom low will not on it prevail
Which image in one part will not reveal	The name of mighty sword must spoken be
But elsewhere shows the face of him before	By one who covers hair and head in shame
A rampant pillar hides the road to fame	Of sin who lest evil Demon Woman wail
Ann all who it observe must stand in awe	And kiss the fool with hungrey kiss profane
Remembering lake lady's gift of steel.	That name repeated twice yeilds access free.

The punctuation has, of course, been omitted in the interests of obscurity, but the message itself is quite simple to grasp. The place of Literary toil etc. is the writing desk; the frame which in one part will not show an image is mirror c; so the rampant pillar is the rock cylinder (pretty obvious even if the other things are not identified). The lake lady's gift of steel was the sword Excalibur of the King Arthur legend. The second verse says that the sword's name must be spoken (later it says repeated twice, so it must be spoken three times) to reveal the road to fame; it also contains an oblique warning about the Succubus and some completely irrelevant instruction about low wisdom and wearing a hat.

when 'Excalibur' is spoken three times, two cracks appear at right angles across the domed top of the stone cylinder and the four sectors formed hinge slowly back to reveal the horizontal top surface of the cylinder. On it is inscribed a dial with nine positions — marked o, i, ii etc. in Roman numerals, picked out in gold paint. Just inside each mark is a slot in the stone. Pivoted at the centre of the surface is a heavy metal pointer firmly fixed at the centre but free to rotate clockwise. Under the pointer end is a spring-loaded steel bar which fits any of the slots near the dial markings. To move the pointer requires manual operation in order to manipulate the spring properly.

The markings refer to the surrounding rooms, which are marked in threes starting from the north-east (the markings are not in the rooms themselves, of course). Initially, the pointer is set in the neutral 'o' position. When the pointer is moved and comes to rest, with the sprung bar correctly in place, at one of the positions i-viii there is a violent but harmless display of pyrotechnics during which the person operating the pointer is teleported to the point x in the appropriate room. The device then ceases to operate until the pointer has been moved back to rest at the neutral position; after this, it will operate again, for the same position or a different one, as before.

Teleportation to any one room is limited to a maximum of three people; if a fourth attempts to teleport to a given room he will be displaced one room clockwise (or two etc. if the first is already 'full').

The surrounding rooms are paired and share a number of common features Each access corridor is initially blocked by the steel panels, which slide noiselessly up into the ceiling at the same time as the rock cylinder panels hinge apart. The long corridor of each pair contains a monster -in my case I used Magic Absorbers, an interesting creation of Nicolai Shapero which first saw the light of day in issue 12 of Alarums & Excursions. Stronger Magic Absorbers tended to associate with weaker monsters in the rooms beyond, since the rooms gained via the long corridors had two monster guards each, those via the short corridors only one each.

Each of the rooms contained an additional monster at point G, white curtains in the positions shown and treasure at point T. I devised a table of probabilities to determine whether monster-guardians were alerted to the arrival, behind them, of a teleporting character. If so, it burst through the curtain and attacked.

Obviously, all the monsters and treasure can be varied according to the degree of toughness required and/ or the whim of the DM. In my case I was generous with treasure and rather fierce with monsters, which included a Mind Flayer, a Flesh Golem and a Shambling Mound, plus some other curious creations culled from the pages of other magazines. Remember, in populating this sort of arrangement, that single monsters, rather than packs of them, are the order of the day — they have been specifically chosen to guard treasure.

Adventurers in the Greenlands dungeon found this an absorbing section to explore and left a number of their friends behind when they finally decided to move out. Nor was the adventure without its amusing side — one day I might be allowed to tell you how it was that an 11th level Paladin came to be standing on one leg with a sack over his head, singing the British National Anthem in Hebrew. Trouble is — no-one wil believe it! Don Turnbull.

THE HALL OF MYSTERY - Monsters Used

Main Hall — two Umber Hulks	Room vi - one Manticore
In Mirror of Life Trapping — one Succubus	Room vii — one Shambling Mound
Room i — one Night Hag	Room viii — one Flesh Golem,
Room ii — one Intellect Devourer	Corridor to room i - Trapper
Room iii — one Otyugl (7hd)	Corridor to room iii - Trapper
Room iv — one Mind Flayer	Corridor to room v — Trapper
Room v — one Ettin	Corridor to room vii - Trapper





by Gary Gygax

Introduction

RAIL BARON from Avalon Hill is an excellent board game — although it is neither a wargame, a role playing game, nor fantasy/science fiction — it is exciting, fun, and requires strategy and planning; therefore, it is a great game for the hobbyist and deserves attention in the journals normally reserved for details of ancient armies, panzers, or spells and monsters. TSR found the game so good that they awarded it a special Strategists Club Award, the DONALD R. KAYE AWARD, naming RAIL BARON a "Future Classic". When a recent issue of the AH GENERAL (Julv-August 1978) carried an article on the game, after Don Greenwood had told me he doubted the magazine could allow a non-wargame within its sacrosanct pages, I was very pleased and quite surprised, and I asked your Kindly Editor if he would publish something on the game — especially if I opened up and revealed all of my theories on RAIL BARON and the methods I used to arrive at them. After comparing notes awhile, he gave me the green light, and you are now reading the results, so please continue!

RAIL BARON is for three to six players. Most three-player games tend to be very even, and the same is true of four-player games if the participants are skillful. Fiveand six-player games tend to speedily weed out the indifferent and the luckless players. What follows can be applied to any of these numbers. To play a game well, one must keep in mind the object of the game. The player must understand the game rules and the mechanics of play. He or she needs then to acquire an accurate knowledge of which properties are the most desirable — be they the center of the board as in chess, defense lines in a boardgame, properties in *MONOPOLY*, or rail lines in *RAIL BARON*.

The object of the game is to accumulate at least \$200,000 in cash and return to your home city before any of your competitors can do so, meanwhile moving about the board on whatever rail lines are chosen to travel from destination to destination, paying low usage fees for personally owned or unowned roads, very high ones for railways owned by other players. Because of the excessive cost of moving on opponent's lines, it is imperative to acquire railroads in a network which gives you the optimum chance of paying low usage charges regardless of the destination you must travel to. Upon arrival at such a point, a certain payoff is collected -as little as \$1,000 or as much as \$35,000, with the typical sum of \$15,000 being the expected. From these payoffs the player must purchase rail lines, as well as pay usage charges and possibly improve train service. As destinations are determined randomly by dice roll, and then movement from start to each new destination is accomplished in the same manner, knowledge of probabilities of the dice is important. Likewise, methods of improving the odds are desirable, not to say that destination probabilities can be altered, but movement from point to point can be. This, and the probabilities of competing players having to pay for the use of your roads, are also important considerations in play of RAIL BARON.

MOVEMENT

Before an analysis of destination and railroad effectiveness is undertaken, let us consider briefly the movement factors in the game, for *RAIL BARON* is a game of movement. The normal move is the number of spots shown on two six-sided dice (2d6), with a bonus of 1d6 on a roll of 12, for an average movement of 7.1 *dots* or *cities* — stops. As the average distance between destinations is something over 20 stops, say 21 to 25 (and this will be dealt with in a moment), it will take three turns to arrive

and receive a payoff. If an EXPRESS is purchased for a payment of \$4,000, the average move is increased to 7.6 spaces $(2d6 + 1/6 \times 3.5)$ — worthwhile insurance if you can not or do not desire to make a rail line purchase on any payoff turn, for it additionally gives you the "free die out" on turns you arrive at a destination by moving only as many, or fewer, spots as are shown on doubles on the dice. If a SUPERCHIEF is purchased at \$40,000 (or an average of \$34,000 if the optional rule is used) the average move is increased to 10.5 stops per turn; more important, it allows frequent use of the "free die out", and that too needs further discussion. In a game with two or three opponents, it is not bad strategy to purchase a SUPER CHIEF immediately if your first destination is a high payoff city, i.e. distant from your home city. The rapidity of completion of runs between destinations SUPER CHIEF gives will quickly allow you to gain parity with early purchases, then forge ahead near the period when the lines are all owned. The SUPER CHIEF, at \$5,000 +/- per .5 of additional movement, is not as good a bargain as the EXPRESS, at \$4,000 per .5, until the "free die out" is considered, at which time it becomes more cost efficient.

Free die out

While it is nice to get to a destination city, purchase or not as desired, and then get a new destination city and move 1 to 6 stops all in the same turn, this "free die out" is very important when arrival and departure must be via an avenue owned by an opponent where usage fee can be \$5,000 or \$10,000 per turn. The "free die out" often allows you to pay only one use charge!

"Where Am I Going?"

The percentage figures of the likihood of any *regional* destination are also misleading because a rule of *RAIL BARON* allows the player to choose any region he or she desires if the region indicated by the die roll is the same as the one he or she is currently in — a 14.3 % probability each time a new destination is rolled for.

This also makes average distances between destinations impossible to determine exactly, for the smart player selects close or distant regions according to his or her aims and situation almost one time in six. Similarly, it makes the overall average chance of going to any given city destination something less than absolute, although chances for a city within a region are not affected. The selection rule also allows players to use average dice roll probabilities to work in his or her favor by choosing a region which has the most likely destination city at an optimum distance for the dice being rolled -regular, EXPRESS, or SUPER CHIEF.

There are seven regions on the RAIL BARON mapboard, and the base probability of each being generated is:

NORTHEAST	20.83%
SOUTHWEST	16.66%
NORTH CENTRAL	15.15%
SOUTH CENTRAL, SOUTHEAST	12.59%
NORTHWEST, PLAINS	11.10%

The destination cities in each region are given below, with percentage probabilities shown regionally and overall. Thus New York is 19.4% likely within the Northeast, 4.2% likely overall as the destination likely to be rolled on any given determination.

CITIES BY REGION

City	Regional %	Overall%
ALBANY	5.6	1.5
BALTIMORE	12.6	2.7
BOSTON (B&M)	13.9	2.9
BUFFALO	8.3	1.7
NEW YORK	19.5	4.2
PHILADELPHIA	13.9	2.9
PITTSBURGH	9.7	2.1
PORTLAND, ME. (B&M)	5.6	1.3
WASHINGTON	11.1	2.3

SOUTHWEST

City	Regional %	Overall %
ELPASO	5.6	.9
LAS VEGAS (UP)	8.3	1.4
LOS ANGELES	23.6	3.9
OAKLAND/SAN FRAN.*	26.4	4.4
PHOENIX	11.1	1.8
RENO	4.1	-7
SACRAMENTO	6.9	1.2
SAN DIEGO (AT & SF)	9.7	1.7
TUCUMCARI	4.1	.7

NORTH CENTRAL

City	Regional %	Overall %
CHICAGO	22.0	3.4
CINCINNATI	11.1	1.5
CLEVELAND	13.9	2.0
COLUMBUS	6.9	1.1
DETROIT	15.3	2.3
INDIANAPOLIS	6.9	1.1
MILWAUKEE	11.1	1.7
ST. LOUIS	12.6	2.0

SOUTH CENTRAL

SPOKANE

City	Regional %	Overall %
BIRMINGHAM	8.3	1.0
DALLAS	11.1	1.4
FT. WORTH	8.3	1.0
HOUSTON	12.6	1.6
LITTLE ROCK	5.6	.8
LOUISVILLE	9.7	1.3
MEMPHIS	9.7	1.3
NASHVILLE (L&N)	9.7	1.3
NEW ORLEANS	12.6	1.7
SAN ANTONIO	8.3	1.0
SHREVEPORT	4.1	.5

SOUTHEAST		
City	Regional %	Overall %
ATLANTA	20.8	2.6
CHARLOTTE	4.1	.5
CHARLESTON	5.6	
CHATTANOOGA	4.1	.5
JACKSONVILLE	8.3	1.0
KNOXVILLE	8.3	1.0
MIAMI (SAL)	13.9	1.8
MOBILE	8.3	1.0
NORFOLK (N&W)	9.7	1.3
RICHMOND	6.9	.9
TAMPA	9.7	1.2
NORTHWEST		
City	Regional %	Overall %
BILLINGS	6.9	.8
BUTTE	6.9	.8
CASPER	5.6	.7
POCATELLO (UP)	5.6	.6
PORTLAND, OR.	23.6	2.6
RAPID CITY (C&NW)	5.6	.7
SALT LAKE CITY	12.6	1.4
SEATTLE	25.0	2.8

City	Regional &	Overall %
DENVER	16.7	1.9
DES MOINES (CRI&P)	6.9	.8
FARGO	4.1	.4
KANSAS CITY	25.0	2.8
MINNEAPOLIS/ST. PAUL*	19.5	2.0
OKLAHOMA CITY	11.1	1.2
OMAHA	9.7	1.1
PUEBLO	6.9	.8

The rail line noted in parentheses () after a city indicates it is the sole road to the place, i.e. the line has a lock on that city.

An asterisk *following the city indicates that place is a twin destination, i.e. although there are separate listings for it, only one stop exists, so for all purposes it is ONE location. Thus, although there are 67 different cities named, there are only 65 city stops in the game.

A brief perusal of the regional cities will reveal some interesting facts about each. To cover the NORTHEAST well you must have service to five or more of the cities-NEW YORK, BOSTON, PHILADELPHIA, BALTIMORE, WASHINGTON, and then possibly PITTSBURGH and BUFFALO, but the first five give over 70% of regional probability, while NEW YORK, BOSTON, and PHILADELPHIA represent almost 50% of the probable destinations in the region. In the SOUTHWEST, LOS ANGELES and OAKLAND/SAN FRANCISCO account for 50% of the probable destinations, so service to these cities is vital to a viable network there, with other cities serviced nice, but not crucial. The distribution of probabilities in the NORTH CENTRAL is very similar to the NORTHEAST, with CHICAGO, DETROIT, and CLEVELAND being paramount, ST. LOUIS, CINCINNATI, and MILWAUKEE valuable additions which bring total service to over 80%. The SOUTH CENTRAL has very even city probabilities for only its 11 destinations, so you must try to get as many as possible! ATLANTA and MIAMI are outstanding in the SOUTHEAST, with NORFOLK and TAMPA secondary major destinations; so obviously the strategy to follow in this region is quantity of cities, not quality, as long as ATLANTA is on the list. Three cities amount to 60% of the probable destinations in the NORTH WEST - SEATTLE, PORTLAND OR SALT LAKE CITY - the six others are only afterthoughts to a good network, something to fill in for SALT LAKE CITY, as that can be hard to acquire a line into. The PLAINS have three major destinations - KANSASCITY, MINNEAPOLIS/ ST PAUL, DENVER - and two lesser cities - OKLAHOMA CITY, OMAHA. The other three are minor considerations to a good network.

In addition to regional and city destinations, it is also helpful to know what the most probable city destinations are, for 18 of the 65 different cities will be the destination result almost 50% of the time — over 50% of the list is expanded to include the top 20 cities.

MOST PROBABLE DESTINATIONS

City	Rank	Probability %	Cumulative %
1. OAKLAND/SAN F	FRAN. 1	4.4	4.4
2. NEW YORK	2	4.2	8.6
3. LOS ANGELES	2 3	3.9	12.5
4. CHICAGO	4	3.4	15.9
5. BOSTON	5/1	2.9	18.8
6. PHILADELPHIA	5/2	2.9	21.7
7. KANSAS CITY	6/1	2.8	24.5
8. SEATTLE	6/2	2.8	27.3
9. BALTIMORE	7	2.7	30.0
10. ATLANTA	8/1	2.6	32.6
11. PORTLAND, OR.	8/2	2.6	35.2
12. DETROIT	9/1	2.3	37.5
13. WASHINGTON	9/2	2.3	39.8
14. PITTSBURGH	10	2.1	41.9
15. CLEVELAND	11/1	2.0	43.9
16. MINNEAPOLIS/ST.	PAUL 11/2	2.0	45.9
17. ST. LOUIS	11/3	2.0	47.9
18. DENVER	12	1.9	49.8
19. MIAMI	13/1	1.8	51.6
20. PHOENIX	13/2	1.8	53.4
21. BUFFALO	14/1	1.7	55.1
22. MILWAUKEE	14/2	1.7	56.8
23. NEW ORLEANS	14/3	1.7	58.5
24. SAN ANTONIO	14/4	1.7	60.2
25. HOUSTON	15	1.6	61.8

Obviously the rail network you build will be a success if it reaches most of the top 20 to 25 destination cities. Before a breakdown of each rail line is given, consider the rail network you are going to build. 1) It must reach important cities, *and particularly*

.8

6.9

your home city?2) The network must be contiguous, *i.e.* each line must be connected in one or more places to your other lines for maximum efficiency and ease of movement around the board, 3) Your lines should cover each region, with emphasis on the more frequent regional destinations - NORTHEAST, SOUTHWEST, NORTH CENTRAL.

Cost Effectiveness

I determined a cost effectiveness for each rail line by ratioing the percentage likelihood of all the cities it serves as being the random destination any given turn, putting this percentage over the dollar cost of the line, thousands omitted, and then added in an arbitrary factor of 10 x the percentage liklihood of destinations which are served ONLY by the railroad considered, 2 x for but one other line. Finally, I added the number of dots (stops) between cities served to come up with a final figure. Whether or not this is a valid method, it does give a useful tool for finding values of lines, for it considers all important factors - cities, locks, space - and the weighting is the only questionable factor. Each line is detailed in alphabetical order, with cities served and other lines which compete.



ATLANTIC COAST LINE	(A CL	<i>EFFECTIVE VALUE: 83%</i>
Atlanta	2.6	L&N, SAL, SOU (3)
Birmingham	1.0	L&N, SAL, SLSF, SOU (4)
Charleston	.7	SAL(1)
Jacksonville	1.0	SAL(1)
Richmond	.9	C&O, RF&P, SAL (3)
Tampa	1.2	SAL(1)
ATCHISON, TOPEKA & S	ANTA	<i>FE (A T&SF) EV: 128%</i>
Chicago	3.4	B&O, CB&Q, CMSTP&P, C&NW, C&O
		CRI&P, GM&O, IC, NYC, PA (10)
El Paso	.9	SP, T&P (2)
Ft. Worth	1.0	CB&Q, CRI&P SLSF, T&P (4)
Houston	1.6	MP, SP (2)
Kansas City	2.8	CB&Q, CRI&P, GM&O, MP, SLSF, UP (6)
Los Angeles	3.9	SP, UP (2)
Oakland/ San Fran.	4.4	SP, WP (2)
Oklahoma City	1.2	CRI& P, SLSF (2)
Phoenix	1.8	SP(1)
Pueblo	.8	CB&Q, D&RGW, MP (3)
San Diego	1.7 -	(LOCK)
BOSTON & MAINE (B&M	()	EV: 138%
Albany	1.5	NYC (1)
Boston	2.9 1	NYNH&H (1)
Portland, Me.	1.3—	– — — — —(LOCK)
BALTIMORE & OHIO (Ba	& <i>O</i>)	EV: 102%
Baltimore	2.7	PA (1)
Chicago	3.4	AT&SF, CBQ, CMSTP&P, C&NW, C&O
		CRI&P, GM&O, IC, NYC, PA (10)
Cincinnati	1.5	C&O, L&N, NYC, N&W. PA (5)
Philadelphia		PA(1)
Pittsburgh	2.1	PA (1)
St. Louis	2.0	CB&Q, GM&O, IC, MP, NYC, PA,SLSF(7)
Washington	2.3	C&O, PA, RF&P, SOU (4)
CHICAGO, BURLINGTON	~	
Billings	.8	NP(1)
Casper	2.4	C&NW (1)
Chicago	3.4	AT&SF, B&O, CMSTP&P, C&NW, C&O, CRI&P, GM&O, IC, NYC, PA (10)
Denver	1.9	D&RGW, UP (2)
Ft. Worth	1.0	AT&SF, CRI&P, SLSF, T&P (4)
Omaha	1.1	C&NW, CRI&P, UP (3)
Pueblo	.8	AT&SF, D&RGW, MP (3)
St. Louis	2.0	B&O, GM&O, IC, MP, NYC, PA, SLSF(7)
CHICAGO, MILWAUKEE	, <i>ST</i> .	PAUL & PACIFIC (CMSTP&P) EV: 85%
Butte	.8	GN, NP, UP (3)
Chicago	3.4	AT&SF, B&O, CB&Q, C&NW, C&O, CRI&P, GM&O, IC, NYC, PA (10)
Milwaukee	1.7	C&NW (1)
Minneapolis/ St. Paul	2.0	C&NW, CRI&P, GN, NP (4)
Seattle	2.8	GN, NP(2)
Spokane	.8	GN, NP(2)
1		

CHICAGO & NORTHWE	STER	N (C&NW) EV: 96%
Casper	.7	CB&Q (1)
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTPB&P, C&O, CRI&P, GM&O, IC, NYC, PA (10)
Milwaukee	1.7	CMSTP&P (1)
Minneapolis/ St. Paul	2.0	CMSTP&P, CRI&P, GN, NP (4)
Omaha	1.1	CB&Q, CRI&P, UP (3)
Rapid City	.7	————(LOCK)
CHESAPEAKE & OHIO	CEN	
CHESAFEARE & OHIO	$(\mathbf{C} \mathbf{a} \mathbf{O})$	EV: 94%
Buffalo	1.7	NYC, PA (2)
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTP&P, C&NW CRI&P, GM&O, IC, NYC, PA (10)
Cincinnati	1.5	B&O, L&N, NYC, N&W, PA (5)
Columbus	1.1	NYC, N&W (2)
Detroit	2.3	NYC(1)
Louisville	1.3	IC, L&N, PA (3)
Richmond	.9	ACL, RF&P, SAL (3)
Washington	2.3	B&O, RF&P, PA, SOU (4)
e		
CHICAGO, ROCK ISLAN		
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTP&P,C&NW, C&O, GM&O, IC, NYC, PA (10)
Des Moines	.7	(LOCK)
Ft. Worth	1.0	AT&SF, CB&Q, SLSF, T&P (4)
Kansas City	2.8	AT&SF, CB&Q, GM&O, MP, SLSF,
		UP (6)
Little Rock	.8	MP (1)
Memphis	1.3	IC, L&N, SOU, SLSF (4)
Minneapolis/ St. Paul	2.0	CMSTP&P, C&NW, GN, NP (4)
Oklahoma City	1.2	AT&SF, SLSF (2)
Omaha	1.1	CB&O, C&NW, UP (3)
Tucumcari	.7	SP (1)
DENVER & RIO GRANL	DE WI	
Denver		, ,
	1.9	CB&Q, UP (2)
Pueblo	.8	AT&SF, CB&Q, MP (3)
Salt Lake City	1.4	UP, WP (2)
GULF, MOBILE & OHIO	(GM&	&O) EV: 93%
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTP&P, C&NW C&O, CRI&P, IC, NYC, PA (10)
Kansas City	2.8	AT&SF, CB&Q, CRI&P, MP, SLSF, UP (6)
Mobile		L&N(1)
St. Louis	2.0	B&O, CB&Q, IC, MP, NYC, PA, SLSF (7)
GREAT NORTHERN (GI	V)	EV: 84%
Butte	.8	CMSTP&P, NP (2)
Fargo	.4	NP (1)
Portland, Or.	2.6	NP, SP, UP (3)
Minneapolis/ St. Paul	2.0	CMSTP&P, C&NW, CRI&P, NP (4)
Seattle	2.8	CMSTP&P, NP (2)
Spokane	.8	CMSTP&P, NP (2)
ILLINOIS CENTRAL (IC		· · · · · · · · · · · · · · · · · · ·
ILLINOIS CENTRAL (IC)	EV: 90%
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTP&P, C&NW, C&O, CRI&P, GM&O, NYC, PA (10)
Louisville	1.3	C&O, L&N, PA (3)
Memphis	1.3	CRI&P, L&N, MP, SOU, SLSF (5)
New Orleans	1.7	L&N, SOU, SP, T&P (4)
St. Louis	2.0	B&O, CB&Q, GM&O, MP, NYC, PA, SLSF (7)
Shreveport	.5	SP, T&P (2)
*** · · · · · · · · · · · · · · · · · ·	. <i>.</i>	



EV: 81%

MISSOURI PACIFIC (MP)

Houston	1.6	AT&SF, SP (2)
Kansas City	2.8	AT&SF, CB&Q, CRI&P, GM&O, SLSF,
		UP(6)
Little Rock	.8	CRI&P (1)
Memphis	1.3	CRI&P, IC, L&N, SOU, SLSF (5)
Pueblo	.8	AT&SF, CB&Q, CRI&P (3)
St. Louis	2.0	B&O, CB&Q, GM&O, IC, NYC, PA, SLSF(7)
San Antonio	1.0	SP(1)

LOUISVILLE & NASHVI	LLE (L&N)	EV: 112%	S
Atlanta	2.6	ACL, SAL, SOU (3)		A
Birmingham	1.0	ACL, SAL, SOU, SLSF (4)		В
Chattanooga	. 5	SOU		C
Cincinnati	1.5	B&O, C&O, NYC, N&W, PA (5)		С
Knoxville	1.0	SOU(1)		K
Louisville	1.3	C&O, IC, PA (3)		N
Memphis	1.3	CRI&P, IC, MP, SOU (4)		N
Mobile		GM&O (1)		V
Nashville	1.3	—————(LOCK)		S
New Orleans	1.7	IC, SOU, SP, T&P (4)		E
NORTHERN PACIFIC (N	VP)		EV. 101%	H
Billings	.8	CB&Q(1)		L
Butte	.8	CMSTP&P, GN, UP (3)		N
Fargo	.4	GN(1)		C
Minneapolis/ St. Paul	2.0	CMSTP&P, C&NW, CRI&P, GI	N (4)	P
Portland, Or.	2.6	GN, SP, UP (3)		P
Seattle	2.8 .8	CMSTP&P, GN (2) CMSTP&P, GN (2)		R S
Spokane		CMSTP&P, GN (2)	EV. 460/	S
NORFOLK& WESTERN			EV: 46%	S
Cincinnati	1.5	B&O, C&O, L&N, NYC, PA (5)		Т
Columbus	1.1	C&O, PA (2)		1
Norfold	1.3	————(LOCK)		
NEW YORK CENTRAL (NYC)		EV: 95%	I E
Albany	1.3	B&M (1)		F
Buffalo	1.7	C&O, PA (2)		N
Chicago	3.4	AT&SF, B&O, CB&Q, CMSTP		S
Cincinneti	15	C&O, CRI&P, GM&O, IC, PA (l
Cincinnati	1.5	B&O, C&O, L&N, N&W, PA (5))	
Cleveland		PA(1)		E
Detroit		C&O(1)		I
Indianapolis New York	1.1 4.2	PA (1) NYNH&H, PA (2)		r
St. Louis	2.0	B&O, CB&Q, GM&O, IC, MP, 1	PA. SLSF (7)	I
St. Louis	2.0			I
NEW YORK, NEW HAVE	EN &	HARTFORD (NYNH&H)	EV: 136%	(
Boston		B&M (1)		F
New York	4.2	NYC, PA (2)		F
		· · · · · · · · · · · · · · · · · · ·		
PENNSYLVANIA (PA)			EV: 130%	S
PENNSYLVANIA (PA)			EV: 130%	2
Baltimore	2.7	B & O(1)	EV: 130%	
Baltimore Buffalo	2.7 1.7	B & O (1) C&O, NYC (2)		5 1 () 1
Baltimore	2.7	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF	P&P, C&NW,	9 1 1 1 1 1 1 1 1
Baltimore Buffalo	2.7 1.7	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC	2&P, C&NW, C (10)	5 1 () 1
Baltimore Buffalo Chicago	2.7 1.7 3.4 1.5	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF	2&P, C&NW, C (10)	9 1 1 1 1 1 1 1 1
Baltimore Buffalo Chicago Cincinnati	2.7 1.7 3.4 1.5 2.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1)	2&P, C&NW, C (10)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis	2.7 1.7 3.4 1.5 2.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC	2&P, C&NW, C (10)	9 1 1 1 1 1 1 1 1
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3)	2&P, C&NW, C (10)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2)	2&P, C&NW, C (10)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1)	2&P, C&NW, C (10)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NY(B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1)	2&P, C&NW, C (10) (5)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NY(B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O, CB&Q, GM&O, IC, MP,	2&P, C&NW, C (10) (5)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O, CB&Q, GM&O, IC, MP, SLSF (7)	2&P, C&NW, C (10) (5)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington	$\begin{array}{c} 2.7\\ 1.7\\ 3.4\\ 1.5\\ 2.0\\ 1.1\\ 1.1\\ 1.3\\ 4.2\\ 2.9\\ 2.1\\ 2.0\\ 2.3\end{array}$	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3)	2&Р, C&NW, C (10) (5) NYC,	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington	$\begin{array}{c} 2.7\\ 1.7\\ 3.4\\ 1.5\\ 2.0\\ 1.1\\ 1.1\\ 1.3\\ 4.2\\ 2.9\\ 2.1\\ 2.0\\ 2.3\end{array}$	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3)	2&P, C&NW, C (10) (5)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIC</i> Richmond	$\begin{array}{c} 2.7\\ 1.7\\ 3.4\\ 1.5\\ 2.0\\ 1.1\\ 1.1\\ 1.3\\ 4.2\\ 2.9\\ 2.1\\ 2.0\\ 2.3\end{array}$	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3)	2&Р, C&NW, C (10) (5) NYC,	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i>	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSB	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O(1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3)	2&Р, C&NW, C (10) (5) NYC,	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIC</i> Richmond	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBU 9 2.3	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYO B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) <i>VRG & POTOMAC (RF&P)</i> ACL, C&O, SAL (3)	2&Р, C&NW, C (10) (5) NYC,	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i>	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI .9 2.3 (SAL)	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O(1) B&O(1) B&O(1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i>	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI .9 2.3 (SAL) 2.6	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O(1) B&O(1) B&O(1) B&O(2000, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i>	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI .9 2.3 (SAL)	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O(1) B&O(1) B&O(1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) VRG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SUSF, SOU (4)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i> Atlanta Birmingham	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSB0 9 2.3 (SAL) 2.6 1.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O (1) B&O (1) C&O, RF&P, SOU (3) VRG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SUJ (3) ACL, L&N, SLSF, SOU (4)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIC Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 2.3 (SAL) 2.6 1.0 .7	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIC Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI (SAL) 2.6 1.0 .7 5.5 1.0 1.8	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) SOU (1) ACL (1) 	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIO Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 2.3 (SAL) 2.6 1.0 .7 .5 1.0 0 1.8 .9 9 2.3 2.3 2.3 2.0 2.3 2.3 2.3 2.3 2.5 2.3 2.3 2.3 2.3 2.5 2.3 2.3 2.3 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) (LOCK) ACL, C&O, RF&P (3)	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIC Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI 2.3 (SAL) 2.6 1.0 .7 .5 .5 .0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 1.0 1.0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.1 2.6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) 	P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIO Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI 2.3 (SAL) 2.6 1.0 .7 .5 .5 .0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 1.0 1.0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.1 2.6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) 	P&P, C&NW, C (10) (5) NYC, EV: 81%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIC Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 CKSBI 2.3 (SAL) 2.6 1.0 .7 .5 .5 .0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 1.0 1.0 1.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.1 2.6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) 	P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington RICHMOND, FREDERIO Richmond Washington SEABOARD AIR LINE Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa SAINT LOUIS-SAN FRA Birmingham Dallas	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 2.3 (SAL) 2.6 1.0 .7 5.5 5.5 0.10 1.8 .9 2.3 (SAL) 2.6 1.0 .7 5.10 1.0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	B & O (1) C & O, NYC (2) AT & SF, B & O, CB & Q, CM STF C & O, CRI & P, GM & O, IC, NYC B & O, C & O, L & N, NYC, N & W N Y C (1) C & O, N & W, (2) NYC C & O, IC, L & N (3) NYC, NYNH & H (2) B & O (1) B & O (1) B & O (1) B & O, CB & Q, GM & O, IC, MP, SLSF (7) C & O, RF & P, SOU (3) URG & POTOMAC (RF & P) ACL, C & O, SAL (3) B & O, PA, SOU (3) ACL, L & N, SLSF, SOU (4) A CL (1) SOU (1) ACL (1) 	P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129%	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i> Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa <i>SAINT LOUIS-SAN FRA</i> Birmingham Dallas Ft. Worth	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 2.6 1.0 .7 .5 1.0 1.2 (SAL) 9 1.2 ANCUS 1.0 1.2 ANCUS 1.0 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) URG & POTOMAC (RF&P) ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) (LOCK) ACL (20, RF&P (3) 2 ACL (1) SCO (SLSF) ACL, L&N, SAL, SOU (4) 4 T&P (1) AT&SF, CB&Q, CRI&P, T&P	P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129% EV: 77% (4)	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i> Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa <i>SAINT LOUIS-SAN FRA</i> Birmingham Dallas Ft. Worth Kansas City	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 2.3 (SAL) 2.6 1.0 .7 .5 1.0 1.8 (SAL) 9 1.2 2.6 1.0 .7 .5 1.0 0 1.4 1.0 2.6 1.0 1.1 2.0 0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W N Y C (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) <i>VRG & POTOMAC (RF&P)</i> ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) SOU (1) ACL (1) CO (SLSF) ACL, L&N, SAL, SOU (4) 4 T&P (1) AT&SF, CB&Q, CRI&P, T&P AT&SF, CB&Q, CRI&P, GM&	 P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129% EV: 77% (4) O, MP, UP(6) 	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i> Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa <i>SAINT LOUIS-SAN FRA</i> Birmingham Dallas Ft. Worth Kansas City Memphis	2.7 1.7 3.4 1.5 2.00 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 2.3 (SAL) 2.6 1.0 .7 5.5 1.0 1.8 (SAL) 9 2.2 4.0 2.3 2.3 2.4 2.0 2.3 2.3 2.3 2.4 2.0 2.3 2.3 2.4 2.0 2.3 2.3 2.5 2.0 2.3 2.3 2.5 2.0 2.3 2.3 2.5 2.0 2.3 2.3 2.5 2.0 2.3 2.3 2.5 2.0 2.3 2.3 2.5 2.0 2.3 2.5 2.0 2.3 2.5 2.0 2.3 2.5 2.0 2.3 2.5 2.0 2.3 2.5 2.5 2.0 2.3 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYC B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) <i>VRG & POTOMAC (RF&P)</i> ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) SOU (1) ACL (1) <i>CO (SLSF)</i> ACL, L&N, SAL, SOU (4) 4 T&P(1) AT&SF, CB&Q, CRI&P, T&P AT&SF, CB&Q, CRI&P, GM& CRI&P, IC, L&N, MP, SOU (5)	 P&P, C&NW, C (10) (5) NYC, EV: 81% EV: 129% EV: 77% (4) O, MP, UP(6) 	5 1 0 1 2 2 2
Baltimore Buffalo Chicago Cincinnati Cleveland Columbus Indianapolis Louisville New York Philadelphia Pittsburgh St. Louis Washington <i>RICHMOND, FREDERIO</i> Richmond Washington <i>SEABOARD AIR LINE</i> Atlanta Birmingham Charleston Charlotte Jacksonville Miami Richmond Tampa <i>SAINT LOUIS-SAN FRA</i> Birmingham Dallas Ft. Worth Kansas City	2.7 1.7 3.4 1.5 2.0 1.1 1.1 1.3 4.2 2.9 2.1 2.0 2.3 (SAL) 2.3 (SAL) 2.6 1.0 .7 .5 1.0 1.8 (SAL) 9 1.2 2.6 1.0 .7 .5 1.0 0 1.4 1.0 2.6 1.0 1.1 2.0 0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	B & O (1) C&O, NYC (2) AT&SF, B&O, CB&Q, CMSTF C&O, CRI&P, GM&O, IC, NYO B&O, C&O, L&N, NYC, N&W NYC (1) C&O, N&W, (2) NYC C&O, IC, L&N (3) NYC, NYNH&H (2) B&O (1) B&O (1) B&O (1) B&O, CB&Q, GM&O, IC, MP, SLSF (7) C&O, RF&P, SOU (3) <i>VRG & POTOMAC (RF&P)</i> ACL, C&O, SAL (3) B&O, PA, SOU (3) ACL, L&N, SLSF, SOU (4) ACL, L&N, SLSF, SOU (4) ACL (1) SOU (1) ACL (1) <i>CO (SLSF)</i> ACL, L&N, SAL, SOU (4) 4 T&P(1) AT&SF, CB&Q, CRI&P, T&P AT&SF, CB&Q, CRI&P, GM& CRI&P, IC, L&N, MP, SOU (5) AT&SF, CRI&P (2)	 P&P, C&NW, C (10) (5) NYC, <i>EV:</i> 81% <i>EV:</i> 129% <i>EV:</i> 77% (4) O, MP, UP(6)) 	5 1 0 1 2 2 2

SOUTHERN (SOU)			EV: 82%
Atlanta Birmingham Charlotte Chattanooga Knoxville Memphis New Orleans Washington	. 5	ACL, L&N, SAL (3) ACL, L&N, SAL, SLSF (4) S A L (1) L & N (1) CRI&P, IC, L&N, MP, SLSF (5) IC, L&N, SP, T&P (4) B&O, C&O, PA, RF&P (4)	
SOUTHERN PACIFIC (SA	P)		EV: 102%
El Paso Houston Los Angeles New Orleans Oakland/ San Fran. Phoenix Portland, Or. Reno Sacramento San Antonio Shreveport Tucumcari	2.6 .7 1.2 1.0 .5 .7	AT&SF, T&P (2) AT&SF, MP (2) AT&SF, UP (2) IC, L&N, SOU, T&P (4) AT&SF, WP (2) AT&SF(1) GN, NP, UP (3) WP(1) WP(1) IC, T&P (2) CRI&P (1)	EV: 70%
TEXAS&PACIFIC (T&P Dallas	·	SLSF (1)	EV. 70 %
El Paso Ft. Worth New Orleans Shreveport	1.4 .9 1.0 1.7 .5	AT&SF, SP (2) AT&SF, CB&Q, CRI&P, SLSF (IC, L&N, SOU, SP (4) IC, SP (2)	4)
UNION PACIFIC (UP)		10, 51 (2)	EV: 86%
Butte Denver Kansas City Las Vegas Los Angeles Omaha	.8 1.9 2.8 1.4 3.9 1.1	CMSTP&P, GN, NP (3) CB&Q, D&RGW (2) AT&SF, CB&Q, CRI&P, GM&C SLSF (6) ————(LOCK) AT&SF, SP (2) CB&Q, C&NW, CRI&P (3)), MP,
Pocatello Portland, Or. Salt Lake City	.6 2.6 1.4	— — — — — (LOCK) GN, NP, SP (3) D&RGW, WP (2)	
WESTERN PACIFIC (WI	P)		EV:109%
Oakland/ San Fran. Reno Sacramento Salt Lake City	4.4 .7 1.2 1.4	AT&SF, SP (2) SP(1) SP(1) D&RGW, SP (2)	

A recapitulation of the railroads by EFFECTIVE VALUE, with the total number of stops (dots and cities) and cities shows the following:

Rank	Line	EV%	Stops/Cities
1.	B&M	138	5/3
2.	NYNH&H	136	4/2
3.	PA	130	27/13
4.	SAL	129	33/8
5.	AT&SF	128	59/11
6.	L&N	112	31/10
7.	WP	109	13/4
8.	NP	104	27/7
9.	SP	102	53/12
10.	CRI&P	102	48/10
11.	B&O	102	23/7
12.	CB&Q	100	45/8
13.	C&NW	96	30/6
14.	NYC	95	21/9
15.	C&O	94	24/8
16.	GM&O	93	18/4
17.	IC	90	24/6
18.	UP	86	44/9
19.	CMSTP&P	85	27/6
20.	GN	84	34/6
21.	ACL	83	25/6
22.	SOU	82	31/8
23.	MP	81	34/7
24.	RF&P	81	3/2
25.	SLSF	77	24/7
26.	D&RGW	77	13/3
27.	T&P	70	17/5
28.	N&W	46	14/3

The relative worth of each line is a useful gauge in selecting purchases in order and by region, but it is not absolute. It does help in deciding which road of several in a region should receive first consideration, and an overall total EV of 100% or more for a network indicates that it will produce income from others — assuming of course, that the lines are basically competitive with the networks of competing players. Conversely, a network which has an EV total of below 90% will generally mean that its owner will pay out more in usage fees than his or her line will bring in. The most important thing to remember about EV ratings is *their usefulness extends primarily to selection of lines in the completion of a nationwide network*. Thus, you begin with the most cost effective line in the region selected — usually that which opponents will buy first, in, NORTHEAST, NORTH CENTRAL, or sometimes the SOUTHWEST (usually the AT&SF). Thereafter, the EV's tell you which of the possible railroads which would build your network is best.

For example, the SOU has only an 82% rating, but it connects the NORTHEAST (at Washington) with the SOUTH CENTRAL (at Birmingham, Memphis, and New

desirable lines. Take out your copy of *RAIL BARON* and study the network NYC-RF&P-ACL-SLSF. It offers the options of expansion with both good and secondrate railroads to build a servicable network, and in the NORTHEAST, SOUTHEAST and NORTH CENTRAL, you have excellent chances of being able to move on your own lines to any destination. Furthermore N&W and T&P actually become valuable additions to the network, belying their low EV ratings in this case. Movement on as direct a route (thus less time consuming, with fewer usage fees to be paid, and a speedier collection of payoff) as possible to the destination city, and secondarily, regional coverage (where you areas near as possible to a destination city before having to move along competitors rails) are the keys here. It is not possible here to discuss in detail the best road combinations with four, five, six, etc. lines because of the length of the material already presented. I will leave that for a later article or someone else to accomplish. However, you now have the reference material and knowledge to do this on your own, and if you don't win every game of *RAIL BARON* you play hereafter, at least you will be a far tougher opponent!



Orleans), touching on destinations in the SOUTHEAST as well. Although the L&N is usually preferable to the SOU, the latter railroad is a good second choice due to the movement it allows.

Master Strategy

A sound *RAIL BARON strategy* includes EV factors, building of a linked series of lines which cover as much of each region as finances and selection allows for, and an awareness of serving the most likely destination cities. The tactics then consider movement and selection of regional destinations, as has already been discussed. Consider the following strategic planning.

As the most frequent regional destination is the NORTHEAST, purchase of PA, B&O, or NYC is a good first acquisition, and as soon as any one of these is bought, it is a must to buy as soon as possible. If all three have been purchased, settle for the C&O. If you are fortunate enough to get the PA, make a point of picking up the NYNH&H next, as it gives you Boston, and it leaves open the possibility of buying the B&M which then gives you a lock on Portland, Me., and Boston, and allows service to Albany. Similarly, the AT&SF is the most desirable line in the SOUTHWEST, and it serves the NORTH CENTRAL also, connecting NORTHEASTERN roads at Chicago. Second choices include the SP or the "chain", D&RGW-WP, linked by the CRI&P, CB&Q, or MP — or even the UP (unlikely) or GN only. The best network connects at both ends of the "chain", of course, and is CRI&P-D&RWG-WP-GN. Often, seemingly less desirable lines from the EV standpoint have the advantages of regional coverage, more connections in the network, and service to more *different cities*.

Now the PA serves eight of the top cities, and the AT&SF serves four, one of which is also served by the PA, the junction city of Chicago. A bit of study will show that this makes a formidable network with only a few minor additions, but of course all of the informed opponents in the game will realize this and compete heavily to gain it for themselves so it is vital to know how to form viable networks from less

Speeding To A Conclusion

One of the drawbacks to RAIL BARON, in fact the only one I can think of, is the length of the game. Play is very exciting while there are lines to be purchased and a network to be built, but thereafter it slows down. When the railroads are all bought, and the process of amassing funds to reach the \$200,000 mark is the main part of the game, it might prove interesting for you and your group to use the following "fast" ending. After each player has moved once after the last line has been bought, roll an "average" die, counting 1 as 3, 6 as 4; the result being the total number of complete turns (movement around the board from first to the last moving player) which can take place. When these turns are completed, each player totals his or her cash, adds the face value of the railroads he or she owns, adds the value of EXPRESS or SUPERCHIEF ownership, if any, and finally adds in the percentage value of each and every city his or her network has a lock on, rounding decimals to the nearest 5, expressing whole percentage points as thousands of dollars. A lock on Miami is worth 1.8% or \$2,000, Rapid City is worth 7% or \$500. From these totals must be deducted \$10,000 by each player who does not have a route into his or her home city. The highest final total is the winner, and a new game can be started!

As an afterword, I must admit that I never would have gone into such detail on my personal research and system had it not been for the Avalon Hill GENERAL article, "Strategy for the Fourth Man" by Michael L. Gray. (In fact, I submitted a brief article to Don Greenwood, where I held back most of what is given above.) As the author of that treatise allowed others the benefit of his time and effort, which I know from experience were CONSIDERABLE, I felt I could do no less, i.e. Gray let the cat out of the bag, so why not furnish all of the less ambitious players with help; besides which, my version is different and why not give readers a chance to find out which system is more correct? Meanwhile, we must all take our hats off to the publisher of *RAIL BARON*, Avalon Hill, for furnishing such a splendid game to the hobby!



Game Review: KING ARTHUR'S KNIGHTS

KING ARTHUR'S KNIGHTS Designed by Greg Stafford The Chaosium Box 6302 Albany, Cal 94706 \$9,95

This is a game of questing and adventure set in Arthur's Britain, with two scenarios. The introductory scenario puts each player in the position of questing for the Holy Grail. The standard scenario allows the players to quest (for a variety of objects) or not at their choice; victory is achieved by gaining enough Chivalry Points and treasure to be considered worthy of joining the Knights of the Round Table.

Play of the game is in many ways reminiscent of TSR's DUNGEON. Players may choose to be Knights Errant, Knights at Arms, or Great Knights, or both increasing power and obligations as to who they must deal with, and stiffer victory conditions. The player characters are moved on a board from province to province and encounter people and/or creatures by means of decks of encounter cards. Encounters may be Passive or Active, the latter being Combat, Romantic or Magical. In all cases, the active encounters are resolved by adding the character's basic strength and additions/subtractions due to magic items, blessings, curses and the like to the roll of one die. From this is subtracted the opponent's basic strength and the final sum referenced on the appropriate encounter table.

The physical components range from beautiful to poor. The map is unmounted but gorgeously colored and illustrated. It covers all of England and Wales. southern Scotland, and parts of France and Ireland. It is divided into five areas which are color coded, plus the sea: North Britain, Logres, South Britain (Scotland north of Hadrian's Wall, Ireland and Calais). The areas are subdivided into provinces and Magic Places, and some roads are shown to allow faster travel.

The rules book is sixteen pages plus covers, printed in typewriter face and illustrated with line drawings. The rest of the components include eleven decks of small cards of various colors, representing people and creatures to be encountered, treasures to be found, and adventures to be experienced. The cards come in die cut sheets, from which they must be carefully separated to avoid fuzzy corners. The final components are the playing pieces, for want of a better term. This is a single sheet of card stock printed black on white with the figures of five knights, plus instructions to color them. cut them out, fold and mount them on a weighted base such as a penny. The rules also include a suggestion that miniature figures be acquired, as they would make the game more attractive. The game itself is packed in a plastic zip-lock bag.

The game is started by placing a magical treasure and a magical guardian card face down on each of the magic places on the board. The rest of the cards are kept in decks. All pieces start in Camelot and move in turn. When a piece enters a province with no encounter card present, one is drawn from the deck for that area and the player resolves the encounter. Depending on the results, the card may be discarded or left facedown in the province for the next player along to encounter. The player characters may gain Chivalry Points, gain or lose treasures, lose some turns due to wounds, be sent on an Adventure or Quest, or even be killed depending on the type of encounter and its outcome. The winner is the first to return to Camelot with the requisite treasures and Chivalry Points.

Play is not very complicated and moves quickly. However, gathering of points and treasure proceeds more slowly and could cause an individual game to last quite a while. In addition, players may encounter each other, so it is possible for one or more to attempt to stop someone who is close to winning. However, encounters of that sort need not take place and the game played without such cut-throat intensity. It is not a complex game, but it is fun and one which can easily be played solitaire or with the wife and kids.

S. List

Olympica from page 13

compel units attempting to drop within two hexes of the generator to land up to three hexes from the original target. This tends to force the UN to drop away from the zone of uncertainty and gives the Web player a chance to organize a defense against the initial drops. Also, during the compulsion phase of any turn, the Webb player can arbitrarily move any signed UN piece three hexes (usually into disadvantageous terrain). Laser tanks are often a prime target to keep them at bay and hope for the one in six chance of avalanche when compelled into a cliff or incline.

The Webbie also have another important advantage. He may bring in up to four previously eliminated infantry units as reinforcements every odd numbered turn. Thus, Web infantry is plentiful and not really a worthwhile target for the UN, unless a counter holds a particularly valuable position. The risk of exchange is high and exchanges are disastrous for the UN player; his force is meager and every loss is felt.

In general, *OLYMPICA* is a fine addition to the MicroGame line, though not as distinctive as games such as *OGRE* and *WARP/WAR*. The system is workable and easy and the game is certainly tense as the UN strive to seek out and capture the generator. Perhaps the only criticism that could belevied is on the point of the Web generator. The concept behind it is so tantalizing that one wishes the generator would have played a little more active of a role in the game.

OLYMPICA is available for \$2.95 from Metagaming, Box 15346 Austin Texas 78761 or from your local game store.

T. Watson



Personality from page 11

10. GRUNT (commonly called "the Runt"): Ftr. Grunt acts Cha/Evil but is really Law/Evil. troll. He is a wimp who attacks anything and everything that won't hurt him (never attacks chaotics). No one in town will sell him weapons because that could make him dangerous. If Grunt is encountered he will either attack or ask to buy weapons (he can afford them). If anyone does sell him weapons or anything else that can be dangerous, all the local citizens nearby will do everything in their power to disarm Grunt and arrest the outsider . The seller will be subjected to 4-40 months of hard labor, ora 100-1000GPfine, or both. Grunt can buy armor. *Ist* 2 2 4 9 11 3 6 15 -2 -1 None

11. KURRAN: Ftr. Cha/Good. Dwarf boy (43 years old). He is a bully so he will have 1-4 companions (smaller than he is) to pick on. He fears the law, his parents, and anyone who stands up against him. If encountered he will probably ask if he can join the group. If he is accepted he will probably say he must ask his parents first (80%chance) but he is sure that it is okay. 80% chance they say no.

Ist 8 8 16 8 4 14 10 10 +1 +1 hnd. axe

12. GLEEN, PLUDLUMPER: Thief. Neutral. Hobbit. When he is in a crowd, Gleen will try to pick EVERYONE'S pockets, so he only succeeds 5% of the time. He is very adept at climbing (0% chance of fall), moving silently (80%), and hiding in shadows (85%). He is also seldom seen in crowds, being spotted about 5% of the time. He can't, however, remove traps very well(5%), or pick locks with much success (6%). If he is in the crowd, all the local inhabitants will know it and all others will know something is there but they will not know what.

2nd 4 7 5 10 14 7 16 18 -1 Ave. Dagger

13. ZILCH (named by his jovial MU motivator): Ftr. Zombie. He is owned by Rollo the Rotund (9th level,Cha/Good, MU.AC9,24Htk, 9 17 1 1 10 7 17, wand of paralization). Rollo loves good gags and jokes, and offers a large prize for any who can stump him with a riddle (he will use ESP spell if necessary). Rollo likes to send Zilch on embarrassing (to a church, a dress store, etc.) errands. Zilch has instructions to run away if seriously threatened.

2nd 20 8 10 10 8 10 10 7 Ave. Ave. 10'staff

14. VOLITIA THE SIRON: Ftr. Law/ Evil. Human female. She is man hungry. She cooks, sings, and does everything else a wife should but she is ugly and the only topic about which she can speak intelligently is cooking. If she traps a man, she will grapple to prevent his escape.

3rd 9 9 14 7 8 10 8 4 +1 Ave. dagger

15. BUNDLINE: Ftr. Cha/Evil. Mummy. He stalks the streets looking for trouble. He prefers to attack weak people so few low level people, children, women, old men etc. stay on the street when he comes near. He generally doesn't attack people over *2nd* level, but he will attack anyone slandering or insulting undead monsters, or anyone he sees fighting undeads.

5th 27 3 13 9 4 10 10 6 Ave. Ave. sword

16. SARATOGE the Shy: Ftr. Law/Good. Human. He is very shy. He walks alone, close to buildings, and as far away from other people as possible. If he is called to, he will turn quickly and walk away, or he will duck into the nearest shop and sneak out another exit. Shop owners know him and will let him through. They will then try to slow any pursuit about 15 or 30 seconds. This wil be enough time for him to escape. If he is caught in the open, 80% chance he successfully escapes into a building. 5th 28 4 17 11 10 14 9 9 +2 +2 2-hnd. sd.

17. KLUND: Ftr. Cha/Good. Troll. Never talks. If he wants something he points. If he is asked a question that he must speak to answer, he lets out a roar that clears the street for 60' in all directions. He then attacks using his left fist and his giant club (treat as a flail), aiming to subdue. After he wins he tosses his opponents onto the nearest roof (this doing 2-8 points damage), and leaves.

6th 51 7 18 7 6 18 10 6 +4 +6 club

18. PONTANCE KRYLN: MU. Neutral. Human female. She uses a phantasmal forces cloak to make her appear to bean old woman (saving throw vs. magic -4). If she is aided while in this guise, she will use an ESP spell to find out what these people need most. She will then do everything power to get if for them.

7th 11 9 8 15 16 6 13 *14 +1 fire missle 4 daggers *Charisma is 9 while in disguise

continued on page 27



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D&D Variant THAT "OTHER" DUNGEON

by Timothy Jones

The following optional rules were used at the official *Dungeon!* tournament at Gen Con XI. In the tournament, only the four new characters — halfling, dwarf, cleric, and thief-were used. The prizes were added in the second round, and the monsters were added in the third and final round. Some additional material (which is given below enclosed in pairs of double asterisks ** . . . **) was not used in the tournament, but was later playtested at several rounds of open gaming sponsored by the tournament judges. Judges were Timothy Jones, Tom Christensen, Andy Holshan, and Bryan McVeigh.

Persons responsible for the material included below are: Gary Gygax and Timothy Kask, for the material on the four character classes (which originally appeared in *Strategic Review#6*, February 1976) and two of the prizes and all of the new monsters; the judges for all of the other material; and players in the tournament and open gaming for some additions and revisions to their ideas.

NEW CHARACTERS

Note that the first two, the halfling and the dwarf, are of approximately the same strength as the elf and hero of the standard game. Similarly, the cleric can compete with the superhero, and the thief and paladin can compete with the wizard. This should be kept in mind if all are not used, i.e. do not use both relatively weak pieces or both relatively strong pieces if only two new pieces are used, rather include one of each. It is suggested that the ideal *Dungeon*! game is seven to nine players, each taking a different piece, so that no two players have the same abilities with regard to their playing piece. The new pieces are:

THE HALFLING: The Halfling piece moves only four spaces per turn. The Halfling lights as either a Hero or an Elf, whichever has the higher score to beat the particular monster (fights as the worse of the two), and when rolling on the PLT a score of 11 is treated as a 6 or 8 score. **When attacked by another character or a spell or breath weapon, the Halfling defends as the better of the Hero or the elf. When attacked by giants, trolls, or ogres, the Halfling defends as though wearing magic armor (see NEW PRICE CARDS below). ** The Halfling is able to arm himself with seven missiles. Halfling missiles are treated as spells with regard to combat, vis. there is no PLT roll if the Halfling fails to kill the monster. The missile adds +2 to the Halfling's dice score. As with a spell, he must indicate he is using a missile (any unused spell card will suffice), and missiles may be regained in the same manner as are spells, one per turn at the "Start" space. Halflings are able to open Secret Doors on a die roll of 1-3. They ignore all traps as does a dwarf. The Halfling needs at least 10,000 Gold Pieces in Prizes to win.

THE DWARF: The Dwarf fights as an Elf, so simply use that score on each monster card which applies to the Elf when combating monsters. ***The Dwarf defends against giants, trolls, and ogres as does the Halfling, see above. *** Although the Dwarf does not open Secret Doors any better than a Hero (a roll of 1 or 2), he does detect and remove Traps easily. Therefore, whenever a Dwarf enters a space containing a Trap he simply puts it in the discard pile, ignoring the results of the Trap, and freely picking up any Prize Card thereunder. The Dwarf needs 10,000 Gold Pieces to win.

THE CLERIC: It will be necessary to add three types of spells for clerical use: "Hold"- this spell causes the monster (or player, if ambush rules are used) it is thrown upon to defend at -2 (add +2 to the dice roll of the Cleric), and in addition the monster does not get a dice roll (there is no PLT roll) in the event that the Cleric fails to kill the monster when he combats it; "Remove Curse" acts to automatically remove a cursed item (see below), and only one of these may be taken at a time; "Transference"- simply used the Wizard spell of this type unless there are several playing in the game, in which case additional cards will have to be made up. The Cleric fights as a Hero except against undead (skeletons, ghouls, mummies, wights, wraiths, demons and vampires) and evil heroes, evil superheroes, witches, evil priests and evil wizards. In the latter case he fights as a Superhero. Also, although the Cleric cannot ambush others, he may be ambushed, but if he is ambushed he fights as a Superhero. The Cleric may take a maximum of four spells at any time, in any combination of Hold, Remove Curse, and/or Transference. He may replenish spells just as a Wizard does. ** Of all the magic weaponry, the cleric may only use the Sacred Mace (see NEW *PRIZE CARDS below*). ** When rolling on the PLT the Cleric treats "Seriously Wounded" results as a retreat of 1 space and a prize loss, and he does lose a turn. In all other cases he cannot be wounded or lose a turn but he can be killed or lose prizes. The Cleric needs 20,000 Gold Pieces to win.

THE THIEF: The Thief piece is able to move six spaces per turn. He fights as a Hero, but on all attacks which are nonsequential upon the same monster or character the Thief adds +1 to his dice roll score (due to stealth and surprise), and if he fails to kill the monster the Thief ignores all PLT dice scores except 2 (he hides in the shadows to escape the monster or climbs out of reach). If he ever attacks the same opponent twice in one turn or in two consecutive turns he loses all of the above benefits and fights exactly as if he were a Hero. On any attack score of 12 or more it is assumed the Thief has stolen the prize without combating the monster, and he may then take a bonus move of up to 3 spaces, but he may not engage in another combat. The Thief opens Secret Doors on a die roll of 1 or 2. All Traps, except those which transport him to a Chamber one level lower, are ignored by the Thief. The Thief needs 30,000 Gold Pieces to win.

**The Thief may be affected by spells and breath weapons normally (his defensive bonuses do not apply). He may not use Magic Armor (see NEW PRIZE CARDS below) though he may carry it, which reduces his movement to 5. **

** THE PALADIN: The Paladin fights as a Superhero, except against undead (see CLERIC) whom he fights as a Superhero +1 (add +1 to the attack die roll). He treats a "Serious Wounds" result on the PLT as retreat 1 space, drop 1 price, lose 1 turn. "all other results affect him normally. The Paladin may not initiate ambush, but if ambushed he fights as a Superhero x1. Only the Paladin may use the Holy Sword. The Paladin needs 30,000 Gold Pieces to win.**

Extensive play at the convention convinced us that these characters are all roughly equal in winning potential — the major deciding factor is the skill and luck of the player, not his piece's abilities. **The following changes to existing pieces were also made:

ELVES: Elves get 3 arrows (missile/weapons as the Halfling).

WIZARDS: Wizards cannot use *Magic Armor* (though they may carry it at a movement of 4 spaces per turn) or magic weapons (they may carry these at no penalty); they must use the Spell Option.**

NEW PRIZES

If the new characters are used, the following new prizes should be used as well. The new item is listed first; in parentheses is the original prize card which should be changed, followed by an explanation of the prize.

Special Note on Cursed Items: All cursed prizes are immediately picked up and used, regardless of the player's wishes to the contrary (even the Thief and Wizard will wear the Armor of Vulnerability!). Cursed items may be removed on a roll of 1 or 2 on one die (1-3 for the Cleric or Paladin). The player may not move or do anything else on the turn he is trying to remove a cursed item. A Cleric may cast a Remove Curse spell on himself or another player and remove the cursed item automatically. The item may be retained to be given up when a loss of a prize is called for by the PLT. The "Good Fairy" at the Entrance will also remove the Curse.

Second Level Prizes:

MAGIC WARHAMMER (Sack of Gold, 1000 Gold Pieces): Treat as a Magic Sword, with the possibility of it being +2, but only the Dwarf may use it.

BAG OF DUNG (Sack of Gold, 500 Gold Pieces): This "booby prize" is worth only 1 Gold Piece, but he player may trade it with the first level Orcs Monster Card for its Prize Card. The Orc Monster Card remains on the board.

Third Level Prizes:

BOOTS OF SPEED (Silver Ring): These increase the movement of any player by 1 space per turn.

ANTI-ESP MEDALLION (Sack of Gold, 750 Gold Pieces); This *cursed* item gives a minus 1 on all attacks until removed.

SACRED MACE (Silver Cup): As Magic Warhammer; only the Cleric may use it.

Fourth Level Prizes:

ARMOR OF VULNERABILITY (Silver Cup): This *cursed* item increases a player's chance of taking damage if he is forced to roll on the

CLT. When wearing this armor, use the following instead of the normal CLT:

7,11	Retreat 1 space, drop 1 prize
6.8	Retreat 1 space, drop 1 prize, lose 1 turn
4.5.9.10	Seriously Wounded
2,3,12	Killed !

Fifth Level Prizes:

HOLY SWORD (SILVER COFFER): This special +2 Magic Sword is useable only by the Paladin. When the Paladin uses it all spell attacks against the space he is in are negated. (Note: Breath weapons and "Remove Curse" are not spell attacks.)

MAGIC ARMOR (Gold Cup): When rolling on the PLT add +l on rolls of 2-6, -l on rolls of 8-10 and 12, and rolls of 7 or 11 are not affected. The armor has an additional value of 1500 Gold Pieces.

Sixth Level Prizes:

SCROLL OF SPELLS (Magic Sword): This prize is usable by the Thief and Wizard only. The one who has this prize gets one each Fireball, Lightning Bolt, Transference, and "Sleep" spells. Each spell may be used only once. The "Sleep" spell puts any being (monster or player) to sleep for one turn — allowing any treasure the being possesses to be stolen with or without slaying it. When the Thief uses a spell, he rolls one die. A 1 or 2 on the die indicates that the spell backfires and affects the Thief (he misread the scroll).

WIZARDS STAFF (Jade Idol): Only the Wizard may employ this powerful prize. When he gets it, the player rolls one die; this indicates how many Lightning Bolt spells the staff contains. He may only use this many from the staff, and when he throws a Bolt he must indicate whether it comes from his spell cards or from the staff. Each time the staff is used, he rolls one die; a 6 indicates that the staff explodes, dealing the Wizard a Serious Wound. All Bolts still in the staff are lost.

NEW MONSTERS

In addition, the following changes were also made:

All dragons have breath weapons, with unlimited use:

Red Dragons — as Fireball spell

Blue or White Dragons — as Lightning Bolt spell

Witches, Evil Wizards, and Evil Priests have *one* spell each; Witches — Lightning Bolt Evil Wizard — Fireball

Evil Priest — "Curse", use the numbers for a Fireball on the Spell Combat Table; a successful result means the player is transported to the nearest chamber on the same level, *without his prizes!*

When one of the above is encountered, the player rolls one die, player to his right rolls another die for the monster. Roll over on a tie. If the monster rolls higher, the player is attacked by the breath weapon or spell *before* he attacks (the player on his right rolls on the Spell Combat Table for the monster), otherwise he attacks normally and the monster does not get its special attack that turn (or ever, if it dies).

Simply amend existing monsters ad indicated below. The numbers following the name of the new monster correspond to the numbers shown on the card for Lightning, Fire Ball, Wizard, Superhero, Hero and Elf. First Level —

On Skeleton card: Zombie 3,3,7,4,5,6.

On Hobgoblin card: Orcs 5,2,6,4,6,4.

On Giant Lizard card: Anti-Magic Trap! "All magic and spells gone!" Second Level —

On Hobgoblin card: Gnolls 4,4,7,5,8,6.

On Hobgoblin card: Harpy 3,3,5,6,7,7.

On Giant Spider card: Owl Bear 4,4,9,4,6,7.

Third-Level —

On Ogre card: FIREBALL TRAP! "Roll on PLT, 7=8, 11=10. Prizes lost are destroyed!"

On Werewolf card: Evil Priest 7,7,8,6,7,8.

On Mummy card: Wight 10,5,7,6,8,9.

Fourth Level -

On Evil Superhero card: Manticore 6,6,11,9,10,11.

On Troll card: Wyvern 8,8,9,8,10,10.

On Mummy card: Wraith 6,6,8,8,9,10.

Fourth Level —

On Green Slime card: Fire mental 5, --, 12,9,10,12.

On Troll card: White Dragon 0,5,12,9,11,12.

On Giant card: Spectre 8,8,9,7,911.

Sixth Level -

On Vampire card: Demon 9, —, 11, 10,12,—.

On Purple Worm card: Basilisk 10,8,12,10,12,12.

On Blue Dragon card: Earth Elemental —,6,—,9,11,—.

ni Biue Diagon caiu. Latui Liementai —,0,—,9,11,—,

THE SILMARILLON: A Review

"There was Eru, the One, who in Arda is called Iluvatar; and he made first the Ainur, the Holy Ones, that were the offspring of his thought, and they were with him before aught else was made . . . "(from Ainulindale, *The Silmarillon*, pg 15).

Does the above passage read like a tract out of Genesis? The style and subject matter is certainly reminiscent of the Bible, and perhaps appropriately so. *The Silmarillon*. the last book by J.R.R. Tolkien, could aptly be constred as the bible of Middle Earth. *The Silmarillon* (alternately known as "the Tolkien book with the hard-to-pronounce name") is written in a thick narrative style. That is, action is merely related to the reader, actual scenes based on dialoge and action in a pure form are very rare. The King James English adds to the feel of a grand myth being retold by a knowledgeable bard. The style is quite different from *Lord of the Rings* or *The Hobbit* and some will no doubt not enjoy it nearly as well.

The Silmarillon parallels the Bible, the Old Testament more specifically, in other ways that just literary style. There is the creation of a group of higher beings, the Valar, similar to angels, and one of these, Melkor, with a lust for power, rebels. His fall from grace and the consequent battles against him are quite similar to the rebellion of Lucifer and his casting from heaven. Melkor then becomes the source of all evil in Middle Earth.

The major part of the book the *Quenta Silmarillion*, deals with the Elves and their conflicts with Milkor (later called Morgoth). The Elves are the chosen people, and like the chosen people of the Bible, they

have the differences with their higher lords, the Valar. This part of the book tells about the two magic trees that held the light of the world, the building of the home of the Elves in the west (and a subsequent explanation of why they are slowly returning there in LOTR) and, of course, the creation of the Simarils by Feanor and their theft by Melkor. This provides the main action of the book as the Elves battle to regain their treasure. My personal favorite vignette was the story of Beren and Luthien and their quest. Beren was a man who fell in love with Luthien, the Elven daughter of King Thingol. In order to have her, Beren is to steal one of the Simarils from the crown that Melkor hasset them in. The story of their love, the battle before Melkor's hold and the fate of the two lovers makes for fascinating reading.

The two remaining sections of the book are the *Akallabeth* which deals with Sauron, the fall of Numenor, and the battles of Elendil against Sauron, and *Of the Rings of Power and the Third Age*, events and themes that should be familiar to any reader of the *Lord of the Rings*.

The Silmarillon is a fascinating work, despite its "thickness" and the difficulty of keeping the characters straight at times (they often have three or four names). It is a book that need not be read straight through for maximum enjoyment. It can be picked up and read at any time, the reader picking up the action of a one subplot of a major work and following it through to a conclusion. The richness of the work allows a reader to refer back to a particular chapter or two whenever he feels in the mood for some Tolkien but unwilling to tackle one of the larger works in more detail. Serious students of LOTR, the type who want to have their facts straight, will rejoice in the huge wealth of lore that In the *Lord of the Rings*, J.R.R. Tolkien created a fascinating world; in *The Silmarillon* he gives us the legends and mythos of that world. It's another triumph.

The Silmarillon is 365 pages long plus a pull out map, is published by Houghton Mifflin Company and runs about $\$10^{90}$.

T. Watson

Dragonlords from page 7

or siege), or "Strategic" (hiring, weather and speed spells), which determines how frequently they may be used.

Unit counters provided represent various kinds of infantry (human, elf, dwarf and goblin), missiletroops (human, elf, goblin), cavalry (human, elf) and flying units (Hawk Knights, People-of-the-sky, Dragons), and special types (giants, trolls, ents). Leaders are also provided: Wizards, Dukes, Earls and Barons for land units; DragonLords for Dragons; Captains, Tribunes and Hawklords for Hawk Knights; Packleaders, Commanders and Chieftains for People-of-the-sky. There are also bookkeeping markers, ship markers for sea travel, and garrison units for minor country castles.

Play proceeds in game turns. Both players hire and place new troops, then the players alternately move and resolve combat. After this, both players calculate revenue from their holdings. Movement is normal hex-by-hex, with terrain and weather considerations. Combat is between opposing units in adjacent hexes, but there are no zones of control and combat is not mandatory. Combat proceeds in round of air to air melee, missile fire and ground melee until

The Adventures of Monty Hall MONTY STRIKES BACK by James M. Ward

We were on a winter level tonight and were far from pleased. It was Friday, one of our usual D&D@ nights and we were going down into a refrigerated level of Monty's that we had found weeks before. We had all made fur coats for our figures and most of the group was going down. Robert, Jake, and Dave (I) (Tractics boys through and through) were going down as their 20th level fighters; Brian (a tractics lover too, but a fanatic on Western Gunfight) was going down as their 20th level fighters; Brian (a tractics lover too, but a fanatic on Western Gunfight) was going as his 21st level thief/fighter/cleric dwarf; Ernie, Dave (II), and I were going down as wizards of the 18th level (just little guys); Freddie was his stupid high level sword carried by a flesh golem from Jake's golem squadron; Tom and Tim went as druids (probably because they liked all types of herbs).



The three ancient white dragons guarding the door were no problem. It was just a matter of running in the chamber hasted and invisible and throwing three hold monsters at things. They didn't have any treasure, they were just there to slow us down a bit. As we walked through the door 'Monty gave his "evil" chuckle (which always meant we were in big trouble) and we were told that we were sliding down a sheet of glare ice. We wound up pinioned against a mass of ice spears and everybody but Freddie had taken damage. He then thought it would be a great idea to use his flaming power to melt the spears away. Ernie and I, knowing the horrors Monty could think up, tried to stop him but it was too late. We were hit from above by partially melted ice stalactites and again Freddie was the only one unhurt

None of us were pleased, but we all took it in stride and started off in a southerly direction hoping for a warmer climate. That's when we met the "Wolfoids". Monty didn't call them that, he called them humanoids with wolf heads and we weren't worried (but I had a suspicion this level was turning out to be far from kosher). Robert and Tim rushed out in the lead (our Diplomacy experts) and were going to talk but the "Wolfoids" weren't in the mood. They started to glow and came in swinging big pikes while the leader of the group unlimbered a pistol of some type and burnt off one arm of the flesh golem, (the one with Freddie in it). We magic users threw out a horde of magic missiles that Monty told us bounced off the glowing shields around the "Wolfoids". The things hacked at our three fighters their round and our hacks back didn't even touch them. Then our Druids really came through and warped the wood of the pikes and the wolves sat stunned for a turn while we made a mud pond for their feet. Their glowing shields went out in their struggle to be free and they were easy meat then. We managed to get the gun away and Ernie and I had a discussion on who of us two should get it for the adventure since we were the only ones in Monty's game (with these characters) that had used pistols of any type (much to the disgust of the tractics boys and Brian.) I let Ernie have it, nice guy that I am; besides, how did I know Monty didn't have a self destruct mechanism attached for the tenth shot or something?

We traveled down an ever widening corridor and were confronted by three oval robots. All of us had

fought robots in the past and we had a healthy respect for them (especially Ernie who refused to even come close to them). Tim and Robert went out again to try to talk to them and weren't pleased with the results. Glowing tentacles went out and tapped them on the shoulder (before they could duck, of course) and caused them to fall unconscious to the ground. They both started yelling about saving throws, magical armor, and artifacts but Monty just smiled that "go and kill yourselves will ya" grin of his and told them they were out of it for awhile. The stupid things started coming towards us with those tentacles out and glowing and thoughts of running crossed our minds. Dave (II) then had a brilliant thought and told Monty he was telekenesing Freddie over to the robots. This brought large protests from the ever retreating Freddie and even larger smiles from the rest of us (it must have been all that typical Petal Throne sadistic thinking that gave him that idea). Naturally, when one of the robots reached out and grabbed Freddie the swords powers took over and he had control of the robot (something Freddie would have never thought of by himself). He used it to get the other two and we had a new flunky. When we found 17 huge gems in each robot we had to restrain Ernie from breaking Freddie's robot open for its treasure. He kept saying something about "the treasure jingling in the wrong pockets" or something like that.



Anyway, the frosty corridor ended in a metal door that we had to knock spell open, which really irritated Robert and Jake who had on girdles of Storm Giant strength. The door opened out onto a multi-roomed chamber. Brian was told by Monty that his infravision picked up some strange emanations in the room with a clear panel wall blocking it. Dave (1) charged right through it in typical *blitzkrieg* fashion and promptly received ten dice of damage with Monty explaining it as being strange painful burn welts. I felt I knew what was happening, but I wasn't saying anything untill was sure. Just in case I was right I moved my figure to the back of the group and took Ernie's with me. We didn't find anything in the rooms but some cheap steel bracelets with colored rectangles on their tops. I took one of every color with nobody saying anything about it because they all thought I was kind of greedy anyway. Freddie was able to find an ice blocked door and Dave (II) melted the ice and Monty showed us a picture of what it looked like. I noted the color band strip on the side of the door while Dave said he was opening it with a knock spell. I secretly passed Ernie a note telling him that we weren't in our relatively safe and happy D&D@ land, but in the horrible, insane world of Metamorphosis Alpha. We all had a copy of the rules, but didn't play it because it was too tame for most of us.

Ernie and I stayed back to watch the fun as Dave (1) and Tom took our figures through the door. We were greeted with a winter forest scene and Tim and Tom wanted everyone to follow them saying that only druids could truly work best in a forested outdoor. It was a minute later that the trees started grabbing for the front members of our party. Tim and Tom both cast plant control spells and went wild when they saw Monty rolling three six-sided dice for saving throws for all the trees.

"What do you mean they get saving throws?" asked Tim. "I'm a druid, I know all about plants."

Just then we all failed to make our saving throws and lost six hit points each. Ernie and I ran and all the rest followed suit. We came to a wall and an open door and Freddie took the robot in, not worried about any type of attack hurting him. He and the robot were grabbed and forced into a pressing machine. The robot was ruined (so were his gems) but Monty allowed Freddie to come out of the machine as a long strip of very flat metal, not useable as a sword, but still having its magical powers. From out of these machines came a horde of winged snakes of huge size. The fighters rushed up swinging with their swords and were greeted by batches of spat poison. Jake and Robert died (not making their minus four poison saving throw) and Dave (I) had his sword split apart by the action of the snake's acid poison. That didn't bother Dave, he just pulled out his second vorpal blade and went on swinging. Tim, Tom, and Brian all threw snake charms at the things and without rolling a saving throw, Monty said they didn't work. Those three started shouting about all snakes getting saving throws no matter what type. Monty (smiling again) siad "That's true if what you were fighting were reptiles." Everyone but Ernie and I sat there with their mouths open wondering what they had gotten themselves into. We tossed *sleep* spells and got the whole batch (making me wish I had taken lots more sleep spells). We found piles of copper and silver bars and when we tried to teleport them away they wouldn't go. This made Dave (II). Ernie, and I start to sweat, but a wish worked so we weren't worried; if we had to get out of there surely one of us had a wish spell. Robert's "Rod of Seven Parts" brought him back to life and Jake's "Ring of Gax" woke him up after we promised to sacrifice ten elves to it and we were on our way again.

As we were traveling in this outdoor section of the level, we came across a herde of blue cattle with long horns. It didn't bother us (except for Ernie and me) and Monty told us they were clustering around a thing we couldn't see. We all went closer and Monty rolled just one set of three six-siders and told us all we were down to one hit point. That was just too much for most of us. We had been spat at, plant grabbed, almost killed, and radiated and it was time for us to strike back. We unlimbered stuff we hardly ever used. Tim took out his "Eldest Worm Orb"; Jake took out his, "Sword and Eye of Vecna"; Robert took out his "Rod of Seven Parts", Brian summoned his "Servant of Leuk-O"; Dave (II) grabbed his "Horn of Change"; Dave (I) summoned his flying ("Throne of the Gods"; Tom took out his "Sabre of Kas"; just to follow suit and not be shown up by the rest of the boys; Ernie grabbed his "Orb and Sceptre of Magic", and I took out my "Stokes Co'Agulator". After we were through firing, spelling, changing, and melting there wasn't anything left where the cows had been, but a big hole in the ground. Unfortunately for us Monty started laughing.



You have to know something about Monty to appreciate this. When he is fooling us and we are stumped (which happens often), he is all smiles. When we do stupid things (which happens not quite as often, but almost) he smiles and chuckles. When we pull off great tricks and beat or are beating his prize stuff (a rare occasion), he takes it seriously and still has fun right along side of us. But when he laughs after we just blew apart one of his pet things, we all knew we were in "big" trouble. Ernie and I both looked at each other with that "shall we teleport our of this mess?" look, then the thought came to both of us that we couldn't. We both made a grab for each others spell lists to see if the 9th level wish spell was on them (they weren't). We grabbed for Dave's and we didn't find one there either! Monty told us that out of the hole we had made was

coming a batch of green vines. Tom, Tim, and Brian's speak with plants spells worked great on the first batch and they were ordered away. The second batch that came out almost immediately was pink and they ignored Tom, Tim. and Brian's spells. Robert, Jake, and Dave (I) chopped them to pieces and that worked fine. The third batch of plants were pink and scaled and ignored chops and clerical spells and the magic users had to lend a hand and that worked fine. I was all for running (I want that noted for posterity) but Ernie said "thing of the great treasure this thing must be guarding" and nine sets of greedy eyes sparkled at the thought. We all unlimbered our artifacts and again watched a batch of red and pink, scaly, plant vines come out of the hole. We let loose with the same type of blast that took out the cows and then we rushed up to the hole to go blast at its source. We were greeted by a growing batch of orange, red, and pink dotted, scaly, plant vines that seemed to be growing from huge tanks below us. We all knew that were were in trouble but we had to try, so we gave this thing a blast to no effect and we were all grabbed. I thing it was Robert who yelled "try psionics" and we all used our powers to blast it once more. Monty said we could see the new yellow, red, orange, and pink dotted, scaly, plant vines growing out of the tank. That was too much for us and we tried to leave by pouring etherial potions over ourselves. The vines grabbed our etherial bodies and that was the least we ever saw of our characters. THE END???

Personality from page 23

19. DEVEN TROSER: Ftr. Cha/Good. Retired, human buccaneer. He has very bad breath (CHA - 6 if within 3'). He tells the same stale story about how he single-handedly broke a besieged castle's defenses. The story takes about 10 minutes and all citizens near will either leave (70%), or fall asleep. Deven is found only in taverns. 8th 33 6 15 9 7 13 10 12 +1 Ave. sword

Dragonlords from page 25

all enemy units are retreated or eliminated (except for sieges, which empty only two rounds per turn). Missile fire is resolved on the basis of the number of factors firing, melee by strength differential. In both cases, loses are specified in terms of numbers of units. If a wizard is present, he may cast one Battle spell per round if he has not yet cast a strategic spell that turn and he has magical superiority over the other wizard, if present.

Taking losses in units encourages use of large numbers of weak ones to absorb the losses, but the command rules provide for an opposite incentive. There is no stacking limit (except in castles, and rules such as dwarves and goblins not stacking together), but at the end of any combat round, units which have no leaders are demoralized, which can destroy them or keep them out of later combat rounds. Leaders are limited in the number of units they can command, and a hierarchy must be observed as well. For instance, two Barons cannot be in the same hex unless a higher rank leader is also present.

The hiring of units is relatively simple. The player pays for them and places them at a friendly castle in most cases. To hire Hawk Knights or People-of-thesky, a leader unit must be in a mountain hex (that's where they live) to hire them on the spot. Ents, Giants, Trolls, DragonLords and their Dragons can only be hired after the successful casting of the proper spell. Wizards must budget their time among hiring these powerful troops, accompanying units in the field, and studying to improve their magical proficiency.

Play of the game is fast. As the initially provided armies are quite powerful, there is ample force available to both sides. Because the available leaders are barely sufficient to control the troops, and are few in number, there is a tendancy to have only a few large armies. The result is a broad open "front" with nothing resembling continuous line. This leaves plenty of room for maneuver; unfortunately, maneuver is largely meaningless. As there are no supply lines to menace, the only objectives are enemy armies and enemy held castles. Field battles should be frequent as each player attempts to destroy the other's armies in order to conduct sieges unmolested. Early military victory can result in a player winning, or at least dominating, before the wizards grow powerful enough to take the field. As the designers encourage "home made" rule changes, it would perhaps be worth it to start wizards at a Magick Level of 5 or more rather than 1. This would introduce another variable in the strategic picture.

This game is not overly sophisticated, nor is it a physically beautiful thing. But it is quite easy to learn and enjoyable to play, and it is worth acquiring.

S. List

20. DASSOL: Buffoon. Cha/Good. Human. Dassol's magnetic personality attracts crowds of 3- 18 people. While they are being distracted by Dassol's ridiculous antics, his 2 confederates (*8th* level elf thieves - 70% pick pocket) attempt to rob them. If any of the three is spotted, the thieves each use a pyrotechnics scroll to create a thick smokescreen. They then climb onto a nearby roof and throw a rope down to Dassol. *9th* 30 9 8 10 14 8 14 6 Ave. Ave. dagger





to be continued ...