**Avalon Hill Philosophy Part 60**

**COMING OF AGE**

The growing pains of the past year have apparently not come to a halt. No sooner had we gotten used to the acquisition of 3M, DIPLOMACY, and SPORTS ILLUSTRATED than we were shocked by the acquisition of yet another game company. Aladdin Industries, a big name in board games, diversified into the game business four years ago due largely to their acquisition of TRIPPLES—a fantastic abstract 2 and 4 player game of maneuver with all the inherent play qualities that made MASTERMIND and OTHERLIFE overnight bestsellers. Aladdin backed the game with national advertising which enabled them to sell several hundred thousand copies annually. Yet, without a strong line of supporting titles TV promotion proved too costly and Aladdin lost money on the venture and so wanted to divest itself of its game line. In steps AH to add it to our burgeoning line of all purpose strategy games—now 82 strong and still growing.

TRIPPLES comes in two forms; a deluxe version with smooth polished hard maple tiles which sells for $10 and a travel set made in plastic which retails for $4.50. Other games making the transition to the AH line include BARRIER ($6.00), PERPLEXUS ($9.00), TOTALITY ($6.00) and BALI ($3.00). BARRIER and PERPLEXUS are abstract games of maneuver made of molded plastic. TOTALITY is a numbers game that pits players against each other and a time limit—in much the same manner as our TUF & TUFABET games. BALI is a classic card game that has been around for 20 years and is a cross section of SCRABBLE, crosswords, cards, and solitaire.

The acquisition of Aladdin will probably bring groans of protest from wargamers who fear that our attention will be distracted from their primary interest: wargames. We've already gotten a taste of that attitude in our mail presumably sparked by an erroneous report in a competing magazine that we were utilizing our in-house design staff exclusively on non-wargame titles while turning to outsiders for wargame submissions. Not so! The exact opposite is closer to the truth: All of the design personnel at AH are working almost fulltime on wargames—12 to be exact are in various stages of development. What work we do on non-wargames is generally reserved for our off-hours get-togethers. We are fortunate in that respect, for our designers are not only historians or simulation nuts—we all share a common interest in gaming and whereas working on wargames is hard and time consuming, meticulous work the non-wargames tend to be quick, entertaining, and a fun diversion from the more serious research of a wargame. To date, our efforts in the non-wargame design field have been largely a matter of playtesting, improving and clarifying outside submissions. Get your BOXCARS, SPEED CIRCUIT, and WIN, PLACE & SHOW ready for release has been more fun than work. Indeed, BOXCARSA is the only game I can recall that the entire design staff fought to play on their own time.

The trade response to our acquisitions has been overwhelmingly favorable. We're coming off our best year ever with prospects for big gains in 1977. Wholesalers have welcomed the opportunity for "one stop shopping" that we now offer. Where they once had to place qualifying orders with 5 separate companies they now find it easier and cheaper to get the goods from one source. This makes it easier for them to place qualifying reorder to replenish the hot selling items in each line whereas before they'd have to wait until they had enough back orders to justify another order with AH. In a sense this gives us the clout of 5 combined little companies as opposed to just one. This keeps Avalon Hill games (wargames and non-wargames alike) in a better stock situation and on the shelves even during non-peak calendar periods for games. With the expanded line almost any game specialty shop can qualify for our best terms by ordering a case of each title. Each line helps sell the other thus netting a substantial overall increase in sales of wargames.

Increased sales have benefited the entire operation in turn. Our manufacturing capabilities, our warehouse, our clerical, and mail order personnel making the entire operation more efficient. R&D is likewise benefiting by added staff, facilities, and access to better quality components. In the future you'll see us doing some unheard of things with mapboards, counters and three dimensional components. We're already doing some heretofore unheard of innovations in mapboard presentation.

Most noteworthy of the new employees at Avalon Hill these days is none other than Brooks Robinson, the cinch Hall of Fame 3rd baseman of the Baltimore Orioles. Now in probably his last season with the Orioles, the 16 time Golden Glove winner and 1970 MVP, joins Avalon Hill as Marketing Coordinator—not just a licensed promotional figure. Besides autograph sessions at trade shows, Brooks will personally call on major buyers in big league cities as the Orioles tour the U.S. He'll also make guest appearances at AH outlets to autograph games and generally talk baseball. The addition of Brooks, the SH game line, and regular advertisements in the pages of SPORTS ILLUSTRATED should enable us to make big strides in the sports game field. And although Brooks isn't exactly a master game player (when asked to explain Aladdin's TRIPPLES at the Houston Hobby Show he quipped that he had more experience with... Continued on Page 26, Column 2
As a fanatical fan of both science fiction and wargames, I pant a little whenever a promising SF game is announced. With STARSHIP TROOPERS I was even more impatient than usual—SST is one of my favorite novels and tactical land games are my cup of tea. As SST was delayed again and again my impatience grew; I think I was the first one to buy SST at ORIGINS II. It was certainly worth the wait. SST doesn't flaunt an array of innovative mechanics, but it does blend a lot of familiar concepts to produce a balanced battle challenging to each side, and does remain remarkably faithful to Heinlein's novel.

BACKGROUND

STARSHIP TROOPERS is a Man-to-Alien level tactical game of surface and subsurface warfare in the 22nd Century. The belligerents are the Terrans (that's us), the Humanoid "Skinnies" and the Pseudo-Arachnid "Bugs". The scenarios cover primarily seize and hold actions. Terran Mobile Infantry and Engineers are dropped or ferried from orbit to a planetary surface. The Skinnies or Bugs are the defenders. The Skinnies are very similar to Terrans in physiology, technology, and sociology; they live in cities and exist as individual personalities. The Bugs, on the other hand, are hive insects who live in deep tunnel networks. Several Warrior and Worker Bugs are controlled by an immobile Brain which remains securely below ground.

The Terran Mobile Infantryman wears powered armor, which makes him far stronger and faster than an unsuited man, as well as providing short distance flight (jump) capability and a sealed environment. The M.I. are dropped from orbit in capsules which burn off as heat shields, then parachute to the ground. Weaponry consists of side arms (hand flamers), rocket launchers (HE and nuclear), demolition charges and nerve gas.

The Skinnies fight with infantry small arms and armored vehicles firing missiles and energy beams. Strongpoints are vital to humanoid defensive tactics. The Bugs deploy in a secret underground tunnel system. The Warriors, often screened by decoy Workers, fight with personal beam weapons and armored beam vehicles, while HE and nuclear mines are used to a great extent. The Bugs in the game are defense oriented, with limited counterattack capability.

TERRAN UNITS

Marauder: The Marauder is the basic infantryman, the doggie, or the proverbial grunt. His defense strength is the highest for a personnel unit in the game, his personal attack strength healthy and his speed with extended jump thrice that of the fastest enemy unit. He can take on a single Skinny Warrior with ease, although against a Bug Warrior unit a duel is risky. A Marauder's two biggest advantages are defense strength and the extended jump phase: he can jump into an enemy's hex, burn it down, and pop three hexes out of range before the bad guys can react.

Scout: The Scout doesn't have the hide or the personal arms to last long in close combat. He does have the ability to run like hell when he runs into trouble (presuming trouble doesn't burn him first). Fifteen hexes is a long way to go in one turn. The Scout's job, as one might suppose, is to scout; to act as point man in an advance. A trigger-happy Bug player may pop some units out of the tunnels to prematurely burn a Scout. If he survives he can escape; if he dies the loss is minimal and the enemy is suckered into the open. The Scout units can also serve as a quick-response reserve, if armed with ranged weapons, delayed action charges, and nerve gas and held in 'safe' areas.
Command: Because there is no Command Control system in the game, the Command units are especially valuable only by way of the victory points they represent. Possessing the defense strength of a Marauder and the speed of a Scout, a Commander can take care of himself. He still can't fight Bugs alone, but he has the armor to last a little longer and the speed to make a graceful exit. A Commander is a good man to give heavy weapons to, as his weak attack strength becomes meaningless and his superior speed means he can move from trouble point to trouble point, acting as a "fire brigade". He can serve as a Scout but is much less expendable due to victory point value, not to mention psychological reasons.

HE Rocket Launcher: This is the standard M.I. heavy weapon. About a third of the M.I. normally carry them. It is probably the best heavy weapon because it has no ammo limitations. Don't think the increase in firepower is all that counts; the six-hex range means an M.I. can cover 126 hexes without moving, keeping the enemy at a comfortable distance. An HE Launcher attacks a Bug Warrior at 3-1, the optimum attack.

Nuke Rocket Launcher: Devastating firepower notwithstanding, nuke launchers are of limited use because of their four-shot ammo limit. The Nuke is best saved for the nastiest enemy units, the heavy weapons, or against a stack of Bugs. It affects all units adjacent to the impact hex, so a single Nuke shot can break up any Bug concentration.

Delayed Action, Proximity: The DAP is much like a satchel charge. It is dropped in a hex and attacks any enemy unit in the hex. The best way to use it is to pop into the enemy hex, drop the DAP, and hop out while the DAP mops up the enemy. It affects any Bug unit except the beam AFV. It is very effective in its element, but useless above ground.

HE Demo, Nuke Demo: Functionally similar. They're useful only against subterranean units, and they destroy all tunnels. The Nuke affects seven hexes and also destroys Bug Brains. The Bug tunnel system can be dislocated by a few charges, though seldom will Bugs be killed by the charges; they have two turns to run. But Brains can't run.

Listening Device: Carried by an M.I., the LD is the most common means of detecting Bug tunnels. An LD detects the nearest tunnel within four hexes. A single LD by itself is not too useful. Several LD's, working together, however, can yield a surprisingly clear picture of a complex tunnel pattern. The LD is best carried by a Scout or Commander, so it can be shuttled around quickly.

Special Talent: The game's weakest—and sometimes most important—unit is the ESP Special Talent. Carried by an Air Car, he can detect any and all tunnels within ten hexes, but must be exposed and on the ground to operate. He should be very closely guarded. His life expectancy will be short when playing an experienced opponent. Yet, his presence places the Alien player in jeopardy. If left alone, the Talent exposes the tunnels, breaches and Brain. Queen and prisoner cells in painfully exact detail. If the Talent is attacked, the Alien player will probably lose all of his attacking units to a Terran ambush. The Special Talent is the only Terran unit whose mere presence in an area demands an immediate and absolute response from the Arachnid player.

Retrieval Boat: The Terran attack has failed. Casualties are mounting as pressure from the enemy increases. Bugs are bursting out all over. Then a beautiful sound crackles over each M.I.'s radio: "To the everlasting glory of the infantry, shines the name, shines the name, of Rodney Young!" A rocket beacon plows into the ground, and the retrieval boat soon follows to pick up the survivors. The retrieval boat is used to evacuate the invasion force. Its approximate landing location is decided before the game, subject to drift during its descent. In most cases men not retrieved by game's end are considered captured, which is worse than being dead. The Bugs have only one shot at the Boat before it lifts. Likewise, the Terrans have only one turn to reach the Boat after it lands; those who don't make it are left behind.

SKINNY UNITS

Warrior: Oh, well. It's easy to see why the Skinnies lost their war with the Terrans. On the face of it, the Humanoid forces are weak. They require the utmost skill in deployment and stubborn tenacity in combat. In the hands of an expert, resourceful player, however, they can be surprisingly effective.

Worker: The Worker is much like a decoy, at least that's how it is most effective. Until a Terran enters a hex, Workers and Warriors are indistinguishable. A Worker can look and act like a potential threat, forcing the Terran to divert some attention to it. Superficially meaningless, they can be very effective "misdirection" units in the hands of experienced players.

Heavy Weapon, Beam: Hefty attack strength, good armor, speed of sorts and a six-hex range makes this an effective unit. Against M.I. or Engineers the Beam AFV has little to worry about. Against rocket launchers and DAP's, the Beam AFV is dead. But it'll take somebody with it . . .

Strongpoints: An indispensable unit. It uses its defense strength for any units stacked in the hex; if it is destroyed, however, they are too. Only Missle AFV's and Warriors should be protected by Strongpoints. The Beam AFV is best not tied down to such a static position.

ARACHNID UNITS

Warrior: This is a good unit. ("It takes a minimum of a year to train a private to fight and to mesh his fighting with his mates; a Bug warrior is hatched with this ability . . .") It can beat a single Marauder most of the time. It can't move quickly above ground, but in its tunnel element it can outmaneuver and outfight the M.I. The Warrior's main problem is that it carries no heavy weapons and lacks the speed to close with the enemy. Once it loses the advantage of surprise it has from popping
Worker: It serves the same purpose as the Skinny Worker. Yet, more importantly, its effect is greater than the Skinny "misdirection": hoards of Bug Worker units popping-up out of the ground very suddenly can cause panicly "over-response" by the M.I. player thus setting him up for the kill with heavy weapons.

Heavy Weapon, Beam: A very effective weapon, though it tends to draw fire. It still can't catch a Terran, but it can outrun a Skinny. Alone, it can launch a 3-1 attack on a Marauder. The problem is that there are so very few of them. WHEN and HOW to commit heavy weapon units is the most critical decision for the Arachnid player. They should only be used when the pay-off consists of killing at least three Terran units AND chances of survival are at least 60%

HE Demo: Call it a land mine. Emplaced adjacent to tunnel hexes, it is used like the DAR to attack enemy units as soon as they enter the hex at the Bug's discretion. It is powerful, but the Terran has to enter the hex for it to be used; it can't be moved. On the other hand, it can't be detected, either. Whenever ANY Terran unit enters an HE Demo hex, blow the demo charge. An unexploded demo charge at the end of the game is a wasted charge. Also, emplace them in "clumps" and not in lines. Also, if positioned linearly, exploding one charge gives the Terran player a safe route through the line of charges.

Nuke Demo: Available in several sizes. More powerful than an HE Demo charge, it has the advantage of killing nearly all Bug units and gamers. An occasional Scale 3 or Scale 6 Nuke charge can be used for "nasty" surprises, but a general mix of sizes is recommended. The great thing about Demos of all kinds is that there is very little the enemy can do to avoid them.

Engineer: This is THE most important Arachnid unit! It is used to repair destroyed tunnel hexes and, most importantly, to build new tunnels. Expanding new tunnels is vital to the Bug tactical arsenal. By expanding tunnel systems, the Bug player increases his ability to CONCENTRATE forces. If the Terran player is only expecting to face two Combat Brain cells in a certain area and the Bug Engineers build new tunnel hexes for more cells, the Terran player could be zapped real good. In practice, this makes it possible to have ALL FIVE cells tunnel into the city in scenario four by turn three! Use the Engineer unit aggressively. Use it every turn. Never let its abilities go to waste.

TERRAIN

Most of the map is clear terrain, dubbed savannah. In the clear, the Terrans have the biggest advantage, for they can jump around to their hearts delight. There is no cover, therefore everyone has a clear field of fire for heavy weapons. Better yet for the M.I. is barren terrain (presumably strewn with boulders, ravines, lava flows, etc.) which costs aliens 2 movement points. Bug Warriors and Workers cannot move in barren terrain.

Rough terrain, which represents deeply ravined hills & mountains, costs 3 MP for everybody.
... AND NOW A WORD FROM YOUR LOCAL PLAYTESTER...

STARSHIP TROOPERS EXPANSION
by David Frail

There are good jobs and there are bad jobs, but playtesting must be characterized as 'bittersweet.' To an avid wargaming fan, it is invigorating to be involved with a game on a very close and personal level from the roughest beginnings to a finished product. While inobvious to other wargamers, a playtester can see the fruits of his labor in many small refinements in the finished game. Playtesting is also a lot of hard work. In the Avalon Hill development system, the emphasis in playtesting is on TESTING. That's quite a bit different from simply playing the game. And for the most part, except for a small mention in the game's credits, it is thankless work. But playtesters make games work. For that, gamers all over the world owe them a generous tip of the hat. Let us go better than that by shedding some limelight on one stalwart playtester, Dave Frail, a displaced Interest Group Baltimore veteran who did yeoman service in developing SST. Let's see what Dave would have added had he been the designer of record.

Rules Addition for Scenario Tourney-3:

"III. C. 4. (optional) Final Fire for Alien Heavy Weapons Units:

a. During the Terran movement phase or extended jump phase, if the Terran player wishes to move into a hex which contains an Alien Heavy Weapons unit, he must stop and announce his intentions before completing his movement for that unit. The Alien player has the option to fire on that unit about to enter its hex.

b. If the Alien unit has fired in the previous turn's Ranged Weapons phase, before it fires, it must roll a single die on the H. W. Final Fire Chart to determine what happens to the Heavy Weapons. If disruption is indicated, the unit is disrupted before it undergoes any type of Terran attack. If undisrupted, it may attack the Terran unit normally. If the unit did not fire in the previous RW phase, it may always fire normally.

c. If the Alien player can fire in the Terran movement phase, he may then attempt to fire again in the next Alien Ranged Weapons phase, with the following addition: The Alien player must subtract one from the die roll for every additional consecutive Terran Movement of Alien Ranged Weapons phase he attempts to fire that unit. Thus, the Alien player may try to fire in succession for as many times as he thinks his luck will hold out. Note, though, that the Alien player may only fire once per phase for any one Heavy Weapons unit.

H. W. Final Fire Chart

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Die Roll</th>
<th>Effect</th>
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<tbody>
<tr>
<td>H.W.-Beam</td>
<td>1-2</td>
<td>Disruption</td>
</tr>
<tr>
<td>H.W.-Missile</td>
<td>1-3</td>
<td>Disruption</td>
</tr>
<tr>
<td>H.W.-Armchair</td>
<td>1-4</td>
<td>Disruption</td>
</tr>
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</table>

Disruption Effect: The Disruption lasts until the end of the next phase that could possibly allow Ranged Weapons fire, i.e. if an Alien fires in a Ranged Weapons phase and also succeeds in firing in the following Terran movement phase, then attempts to fire again in the next RW phase, and rolls a '3,' it will be disrupted until the end of the succeeding RW phase.

Scenario Tourney-3:
Harassment of the Skinny

2157.09.07 (UC): After 'Baghouse', the Terrans decided to mount an offensive against the Humanoïds (see Scenario 3: Skinny-3). While the main attack came against the inner home planets, several platoons were detached for raids to stir up communications and possible reinforcements. Terran intelligence discovered that the Humanoïds had started a pair of bases in a system which was uncomfortably close to Sanctuary during the Terran hiatus following 'Baghouse.' Since Sanctuary was of such importance and secrecy, the High Command decided that both bases must be destroyed, but with a minimum of force, for any excessive force might alert the Humanoïds that they were close to something very important to the Terrans. It was decided to use the coming offensive as a cover for Operation Clean-up. The plan was not easy, it required that one section of a platoon be soft landed out of sensor range of the first bases planet, with the M.L.'s 'legging' it in to attack at the same time as the other section dropped on the other planetary base. As H-Hour approached, the 1st Section, 3rd Platoon, F Company, 3rd Battalion, 3rd Regiment, 2nd M.I. Division (McFarland's Highlanders) prepared for the most strategically important (and secret) "diversionary" action of the First Interstellar War.

AVAILABLE FORCES:

<table>
<thead>
<tr>
<th>Terran:</th>
<th>NUC Launcher x2</th>
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<tbody>
<tr>
<td></td>
<td>PLUS: HE Launcher x8</td>
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SET UP:
Humanoid: Set up first, within the restrictions of the special rules, move second.
Terran: Set up second, as per Initial Drop Procedures. Move first.

GAME LENGTH: 10 turns.

SPECIAL RULES:
1. The Heavy Weapons Final Fire optional rule is in effect, along with all regular and optional rules which are pertinent.
2. Critical Installations and City/Space Port hexes may be destroyed by firing a NUC launcher into the hex.
3. Only the following hexas are City hexas: 1J 9-13, 1J 5-9, 1K 3-10, 1L 2-9, MM 3-5, 8, 9.
4. At least one Power Installation must be placed in Rough terrain with a clear LOS to any City hex which must be designated after the Terran player has completed his Drop procedures. (This power station is a geo-thermal unit which is temporarily supplying the power of the small base while a fusion plant is being built. It transmits its power by way of a high power laser which is collected at a special receiving complex in the city.) Within an area of 6 hexas from the receiving hex, the Humanoïds may use the power plant as a Heavy Weapons unit, with these characteristics:
   a) The Range is unlimited.
   b) The Attack Strength is 20.
   c) The following die rolls are necessary to destroy the unit:

<table>
<thead>
<tr>
<th>Attacking Weapon</th>
<th>Die Roll</th>
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<tbody>
<tr>
<td></td>
<td>Die Roll</td>
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<tr>
<td></td>
<td>Die Roll</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Unit type</th>
<th>HEVY/WIA</th>
<th>KIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scout</td>
<td>1 pt.</td>
<td>3 pts.</td>
</tr>
<tr>
<td>Marauder</td>
<td>2 pts.</td>
<td>4 pts.</td>
</tr>
<tr>
<td>Command</td>
<td>3 pts.</td>
<td>6 pts.</td>
</tr>
</tbody>
</table>

*NOTE - A controlled hex is one which is occupied or last occupied by a friendly functional unit.

THE GENERAL

Besides immobilizing the Bugs and Skinny, rough terrain blocks ranged fire. The mountain belt tends to do little harm to the two area maps as the terrain makes for longer reinforcement between the map sections difficult.

The Bugs don’t have this problem, as they can move the whole length of their tunnels each turn regardless of terrain or distance. (It’s only above ground that they move torpidly.) The aliens get a minimum of battle bonuses, presumably because they can stick close to the ground and take advantage of crags and outcroppings.

The northeastern corner of the map is dominated by the city and spaceport, used only on Skinny planets. (In one scenario, though, Bugs fight on a Skinny planet.) The Bugs can slip through alleys at 15 MP, while the M.I. move at 3 MP per hex; their jump ability is decreased due to the height of the buildings. In city hexes, Skinny actually outmaneuver the M.I.! Ranged fire is allowed only into adjacent hexes, which for once gives the Skinny a chance to close and use their personal arms, such as they are. Skinny and Terran both get a slight defensive advantage, substituting buildings and roofs for crags and outcroppings.

TACTICS & STRATEGY

Strategy depends on the mission, of course. A Terran raid on a Skinny industrial complex should not be conducted in the same way as a seize & hold strike against a Bug complex. This section outlines only basics to keep in mind in different situations.

INITIAL PLANNING AND SET UP

For the Terrans, the first problem concerns handling the heavy weapons. An M.I. platoon consists of 42 Marauders, 6 Scouts, and 6 Commanders. The number of heavy weapons is doled out by scenario, but a typical figure would be 12 HE Launchers, 6 Nuke Launchers, and 6 each of DAP’s, DAR’s and HNG’s. Normally, HE and Nuke Launchers are assigned to the Commanders for the reasons given earlier; they’re as tough as marauders and 67% faster. The other Launchers are doled out to Marauders. Marauders without Launchers are given DAP, DAR, and HNG charges; one each to minimize losses. It can be argued that giving one Marauder a Launcher and four charges (maximum load) would make him a SuperMarauder, capable of taking on a whole Bug cell alone. But Marauders who fire ranged weapons immediately become priority targets. It is always better to “spread the wealth”. Keep the Scouts light in SW&E and use them as sacrifice units. Their weak armor means very high attrition in any case. Listening Devices are assigned to Scouts and Commanders because they have the speed to cut out if they detect more than they bargained for. Once the equipment is distributed up the Rog, the M.I. enter their one-man capsules to be dropped on the planet surface. It is here that drop order is established, i.e., who is to be with what when they land. Usually (repeat, actually, predictability can be factored in), one M.I. is dropped in the middle of the nine-man stick, with the Scout and Commander on opposite ends. This places the mobility on the flanks. The Marauder next to the Scout should be armed with a Launcher, putting fire power on both flanks, with the third Marauder being given to the Marauder in the center of the stick. Approximately five hexes should separate each parallel stick; far enough away to avoid overcrowding, close enough to form up quickly. Of course, the scatter process usually runs these tidy patterns, so plan flexibly. And one more thing: units that scatter off of the map edge are KIA; place units no closer than seven hexes to any board edge.

Skinny set-up is basically the same against Bugs or Terrans. Their poor mobility requires that the Skinny fight a basically static battle. Here, weapons and strong points should be placed in mutually supportive positions. Position Warriors three-high in those strong points containing Heavy Weapons. Form-up Warriors into killer groups of six units in close proximity. Warriors should be positioned at dead ends of network tunnels with weapons where they can benefit from supportive fire. Placing personnel in the mountains is a waste of energy. In scenarios where the Skinny defend installations from Terrans, putting a Warrior near a dummy installation and having him reveal his identity may draw extra attention.

The Bug set-up is a more complicated problem. The sample Bug Complex in the Examples of Play diagram gives the advantage and the approximate surprise Strongpoints. Against the hidden Bugs, more preparation is required. A defense-in-depth is necessary. Front lines? There are none; the Bugs could be anywhere. Forming a “safe area” (i.e., rear area) is the second priority. Initially, however, the Terran player must be concerned with distributing Launcher-held men to cover his entire force within a 360° perimeter. An extra-strong contingent should be located in the center of the perimeter (heavily armed Command units can do nicely) where it can reach any area of the perimeter in one turn. After establishing a perimeter, it’s time to locate the “safe area”. This is the area where the engineers will enter the action via the Retrieval Boat, a Beacon will be dropping for final pick-up, and casualties will be collected; it would be unfortunate to have a swarm of Bugs popping up in the middle of the aid station. To secure the area, the Terran Player must have three LD’s to triangulate to find a tunnelless area near the Beacon’s recovery hex and set up shop there. The LD’s will probably find tunnels, which will determine the first offensive activities.

While the Terrans are assembling their formation, the Bugs should be readying a strike. The Bug player has a basic advantage of a perfect intelligence capability; he always knows the Terrans’ location and condition. Even when on the surface, he has Worker units to confuse the enemy. Deciding how and when to strike requires supreme discretion and a deft sense of the unexpected. There are a few things to keep in mind. From the detonation of demolition charges will cause casualties, instill confusion, and inhibit movement. They should be used lavishly whenever a Terran unit occupies a demo hex. Next and most importantly, the Arachnid player should plant the M.I. in the middle of the nine-man stick, with the Scout and Commander on opposite ends. This places the mobility on the flanks. The Marauder next to the Scout should be armed with a Launcher, putting fire power on both flanks, with the third Marauder being given to the Marauder in the center of the stick. Approximately five hexes should separate each parallel stick; far enough away to avoid overcrowding, close enough to form up quickly. Of course, the scatter process usually runs these tidy patterns, so plan flexibly. And one more thing: units that scatter off of the map edge are KIA; place units no closer than seven hexes to any board edge.

Skinnys’ poor mobility requires that they fight a basically static battle. Here, weapons and strong points should be placed in mutually supportive positions. Position Warriors three-high in those strong points containing Heavy Weapons. Form-up Warriors into killer groups of six units in close proximity. Warriors should be positioned at dead ends of network tunnels with weapons where they can benefit from supportive fire. Placing personnel in the mountains is a waste of energy. In scenarios where the Skinny defend installations from Terrans, putting a Warrior near a dummy installation and having him reveal his identity may draw extra attention.

The Bug set-up is a more complicated problem. The sample Bug Complex in the Examples of Play diagram gives the advantage and the approximate surprise Strongpoints. Against the hidden Bugs, more preparation is required. A defense-in-depth is necessary. Front lines? There are none; the Bugs could be anywhere. Forming a "safe area" (i.e., rear area) is the second priority. Initially, however, the Terran player must be concerned with distributing Launcher-held men to cover his entire force within a 360° perimeter. An extra-strong contingent should be located in the center of the perimeter (heavily armed Command units can do nicely) where it can reach any area of the perimeter in one turn. After establishing a perimeter, it’s time to locate the "safe area". This is the area where the engineers will enter the action via the Retrieval Boat, a Beacon will be dropping for final pick-up, and casualties will be collected; it would be unfortunate to have a swarm of Bugs popping up in the middle of the aid station. To secure the area, the Terran Player must have three LD’s to triangulate to find a tunnelless area near the Beacon’s recovery hex and set up shop there. The LD’s will probably find tunnels, which will determine the first offensive activities.

While the Terrans are assembling their formation, the Bugs should be readying a strike. The Bug player has a basic advantage of a perfect intelligence capability; he always knows the Terrans’ location and condition. Even when on the surface, he has Worker units to confuse the enemy. Deciding how and when to strike requires supreme discretion and a deft sense of the unexpected. There are a few things to keep in mind. From the detonation of demolition charges will cause casualties, instill confusion, and inhibit movement. They should be used lavishly whenever a Terran unit occupies a demo hex. Next and most importantly, the Arachnid player should plant the M.I. in the middle of the nine-man stick, with the Scout and Commander on opposite ends. This places the mobility on the flanks. The Marauder next to the Scout should be armed with a Launcher, putting fire power on both flanks, with the third Marauder being given to the Marauder in the center of the stick. Approximately five hexes should separate each parallel stick; far enough away to avoid overcrowding, close enough to form up quickly. Of course, the scatter process usually runs these tidy patterns, so plan flexibly. And one more thing: units that scatter off of the map edge are KIA; place units no closer than seven hexes to any board edge.

TERRA N:
- Remember the pop-drop-hop map. It has a dumb name, but great tricks. The extended jump phase means the M.I. don’t have to stick around to pay for their mistakes. Jump!
- Avoid stacking at all costs. Retreat wounded M.I. with care.
- DAP’s are more effective when dropped than when emplaced. The enemy can avoid them otherwise.
- DAR’s are best placed on breaches to discourage Bug movement or make them pay for it.
- Don’t use a Demo charge or a Nuke Launcher where a hand flamers can work.
- Don’t be afraid to attack Workers. Better safe than sorry.
The story of the First Interstellar War, 2158-2161. A.D. (also known as the "Bug War"), is actually many series, not all of them told in the book or game STARSHIP TROOPERS. It is the story of Grand Strategy, of great troop movements and competing societies, and it is the story of individual mobile infantry troopers such as Juan Rico, all within the context of a clash of alien races.

One of these stories is the story of the Mobile Infantry platoons, the story of the teams of troopers that had to win the war in thousands of small actions—victories and defeats. This story is one of the major themes of the book STARSHIP TROOPERS, and is the basis for the same game. In the book, however, the story is told as the platoon evolves during the course of the Bug War, losing troopers in combat, developing new leaders and officers, and adding recruits to make up their losses. The Mobile Infantry platoon is a living entity that loses efficiency with its casualties but gains it back with experience, new leaders and transfers.

This variant is designed to simulate these fluctuations and follow a platoon—"the Roughnecks"—through the course of the Bug War, using the scenarios in STARSHIP TROOPERS together into a campaign game, with the "Roughnecks" progressing from scenario to scenario, and with new rules that cover the problems of losing leaders and troopers and having to replace them with new leaders and untried recruits.

VARIANT RULES

I. THE CAMPAIGN GAME

The players play Scenarios 1, 2, 3, 4, 5A, 6 and 7, in that order, with the same player playing the Terrans for all seven scenarios. Scenario 5B is skipped. (I know, I know, the “Roughnecks” were not at Scheol nor Skinny-5, but these battles represent the battles the “Roughnecks” did take part in but which are not described in the book.)

A. The Victory Conditions of each Scenario are used to determine the winner of that Scenario, as usual. The player who wins a majority of the Scenarios wins the Campaign Game.

B. Between Scenarios, the Terran players must replace all his KIA and WIA losses with recruits, as explained below.

C. All rules and Scenario Addenda are in effect and, in addition, Special Variant rules have been included, as explained below.

II. CASUALTIES AND RECRUITS

At the end of each Scenario, the Terran Player must replace all of his WIA and KIA casualties with "recruits," representing the addition of new untried Starship Troopers fresh from training camp.

A. When making out a new Terran Control Sheet for the next Scenario, indicate with an "R" each unit that was KIA, WIA, or non-retrieved during the last Scenario. Thus, if Marauder F7 was WIA, an "R" would be written in the "F7" location on the Terran Control Pad for the next Scenario.

B. If a SCOUT is KIA or WIA, place an "R" in the box of any other non-recruit Marauder in the Scout's squad, instead, never place an "R" in a Scout's box (it is assumed that Scouts are elite troops, and that losses among Scouts will be made up by shifting a Marauder into the Scout slot—but then a recruit must replace the transferred Marauder). If there are no non-recruit Marauders in that squad, then use any non-recruit Marauder in that squad. If there are none in the Section (boy, are you in trouble!), any non-recruit Marauder in the platoon.

2. Similarly, if a Command unit has been KIA or WIA, place the "R" in a Marauder's box in the appropriate unit: within the Section for a Section Commander (if possible), or any Marauder in the Platoon if a Platoon Leader is lost. It is assumed that the new Commander has been made available either by promotion within the ranks, or through transfer, but at the expense of a Marauder who must be replaced. (However, changing Commanders has an important effect in other ways—see the next section of the rules.)

B. When a recruit "first attacks" or is attacked in any way, the Terran Player must roll a die and consult the table below:

<table>
<thead>
<tr>
<th>Roll</th>
<th>Combat Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>4-6-6 (full value)—use no recruit counter</td>
</tr>
<tr>
<td>4-6</td>
<td>5-4-5 (full value)—use no recruit counter</td>
</tr>
<tr>
<td>7-9</td>
<td>6-5-4 (full value)—use no recruit counter</td>
</tr>
<tr>
<td>10-12</td>
<td>7-6-5 (full value)—use no recruit counter</td>
</tr>
</tbody>
</table>

1. It is assumed that he attacks or is attacked, the unpredictable quantity that is the recruit will have a "moment of crisis" that will determine how well he will fight for the rest of the Scenario. For the rest of the Scenario, that recruit will have the attack, defense and movement allowances indicated above under "RECRUIT VALUES"—these values are also used in the attack which triggers the "moment of crisis."

2. When a recruit undergoes his "moment of crisis," place a "RECRUIT" counter on the die roll on top of theTerran Player's die roll. The recruit has been "recruited," and is the basis for the same game. In the next Scenario, the recruit is a new recruit, as explained below.

C. All rules and Scenario Addenda are in effect and, in addition, Special Variant rules have been included, as explained below.

III. ELITE CLUB

Elite Club $1.00 discounts are now eligible for the following games only:

<table>
<thead>
<tr>
<th>Game</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caesar's Legions</td>
<td>15%</td>
</tr>
<tr>
<td>Anzio</td>
<td>20%</td>
</tr>
<tr>
<td>Chancellorsville</td>
<td>25%</td>
</tr>
<tr>
<td>Stalingrad</td>
<td>30%</td>
</tr>
<tr>
<td>Jutland</td>
<td>35%</td>
</tr>
</tbody>
</table>

Discounts are applicable only to those members of the Elite Club who staple their 1977 calendar year Elite Club ticket to their order. Used or lost Elite Club tickets are not replaced under any circumstances.
THE GENERAL

RECRUIT counter is removed and he is a full-strength Marauder again; no “R” is placed in his box subsequently unless he is lost again.

3. Marauders remain “recruits” until they reach full strength; an “R” cannot be placed in a box if there is already a circled “R” in that box.

D. Each Marauder is at full strength the first time it is used in the Campaign Game.

E. Recruits cannot be transferred between Squads and Sections except as required to replace Scouts and Commanders.

F. In Scenario 4, the Terran player may choose either of his sections as his strike force; similarly, the Terran may select any of his Squads to be “Forces B” in Scenario 5A.

G. In addition, the Terran player should keep track of all the WIA he manages to recover (retrieve) during each Scenario. For every WIA he retrieves, he gets one full-strength Marauder, instead of a recruit, to replace a vacancy between Scenarios.

III. COMMANDERS

A. The Terran player must roll one die every time a Leader or Assistant Leader must be replaced. If a “6” is rolled, the leader is “incompetent,” and this is noted on that Commander’s box on the control sheet for the next Scenario. This is done at the same time that new recruits are being brought into the Platoon.

1. At the end of each Scenario, the Terran player may turn one of his “incompetent” Leaders into a normal, competent Leader; the Terran player may choose which, if he has a choice.

B. EFFECT OF LEADERS:

1. As explained for recruits, above, a recruit must add one to the die roll for each incompetent (or KIA or WIA) Section Commander in his Section and 1 for each incompetent (or KIA or WIA) Platoon Commander in his Platoon at that recruit’s “moment of crisis.”

2. In addition, each turn that ALL of the Command units in a Platoon are KIA, WIA, “incompetent,” or captured, the Terran player must roll a die for that Platoon. The number he rolls identifies the Marauders in that Platoon that CANNOT MOVE THAT TURN! For example, if he rolls a “6,” counters A6, B6, C6, D6, etc. in that Platoon cannot move in that turn. These counters may still attack normally. (If they couldn’t move anyway, then there is no penalty; he does not have to roll again.)

IV. SPECIAL RULES

The above rules will affect play balance drastically, so the following rules have been added to aid the Terran player— and, incidentally, to introduce a little more of the Terran Weaponry mentioned in the book.

A. NEODOGS

Add the “NEODOG” counters to the Terran forces in Scenarios 3, 4, 5A, 6, and 7.

1. NEODOGS move through terrain paying the HUMANOID terrain penalties; however, NEODOGS may travel on AIRCARS at no cost, in addition to normal AIRCAR capacities.

2. NEODOGS land using the INITIAL DROP procedure; each NEODOG must land with a M.I. unit specified before the start of the Scenario (example: the Terran player indicates that one of the NEODOGS will land with Marauder F3; during the drop, the NEODOG lands in the same hex as Marauder F3).

3. NEODOGS cannot destroy Critical Installations, but they do cause enemy units in the same hex to be turned face up at the end of the Terran turn.

B. THE HEAVY WEAPONS BRIGADE

Lacking any firm descriptions in STARSHIP TROOPERS about the “Heavy Weapons Brigade,” we can only guessimate:

1. HEAVY TANK. Treats terrain like Humanoid infantry. May not enter tunnels.

2. ARTILLERY. Ranged weapon; moves through terrain like Humanoid units. May not enter tunnels.

3. BORER. This unit may move on the surface or through tunnels. On the surface, it pays terrain movement costs like Humanoid infantry. The BORER enters and moves through tunnels like Mobile Infantry except:

a. A BORER may move through enemy-occupied tunnels at the normal rate—it does not have to stop; and

b. A BORER can move through and re-open collapsed tunnels at its normal movement rate. When a BORER enters a new tunnel hex, the Arachnid player must announce the orientation of all open and collapsed tunnels entering that hex; the BORER can move through either open or collapsed tunnels, but once the BORER has passed through a collapsed tunnel, that tunnel is open for all subsequent Terran and Arachnid movement.

4. BREACHER. This unit pays terrain costs like Humanoid units while moving. It cannot enter tunnels, but it can make breaches exactly like Combat Engineers: in effect, it is a heavily armed Combat Engineer unit.

5. Each Heavy Weapons Brigade comes equipped with two retrieval boats. (Use blank counters for these, if required.) Heavy Weapons units must land via the “soft landing” technique, no more than four units per retrieval boat; the retrieval boats need not land in the same hex nor at the same time.

6. The Heavy Weapons Brigade is available for Scenarios 5A, 6, and 7 only.

C. SPACESHIPS

1. This rule re-creates the effect of spaceships in orbit passing over the battlefield during the battle.

2. Before the start of the Scenario, the Terran player must write down the path and turn number that the spaceship will use when passing overhead.

3. The path must be a straight line directly along the grain of hexes, crossing each hex side at a 90 degree angle like tunnel segments. The route must be a straight line extending from one edge of the board to another edge; the route may be in any of the six directions that follow the grain of the hexes. The player should draw this route on his control pad map.

b. The Terran player must also indicate the turn the spaceship will pass overhead, and which end of its route it will enter the board.

c. The spaceship may enter the board one turn, stop along its route, and then finish its pass the next turn. (This indicates that the turn ended before the spaceship actually completed its path; the spaceship does not actually stop in orbit.) If the Terran player wishes for this to happen, he must indicate the hex the spaceship will stop in on his control sheet before the start of the Scenario.

3. Effects of spaceships:

a. Each enemy unit in a hex the spaceship passes through or passes adjacent to is turned over at the end of the Terran turn (orbital reconnaissance).

b. Each spaceship may fire nuclear rockets that attack like Arachnid demos into any hex along their path or into any hex adjacent to their path, as they pass overhead. Each spaceship has a total of 3 Scale-3 nuclear demos and 3 Scale-6 nuclear demos; they must be fired while the moving spaceship is in or adjacent to the hex to be attacked. These demos may be used regardless of the presence of Terran units in the hexes affected.

4. The spaceship enters the board and moves and attacks at the end of Terran movement that turn, but before combat or extended jumps.

5. The Terran player gets one spaceship pass in each of the following Scenarios: 1 (no nuclear attacks from space allowed), 4, 5A, 6, 7.

D. BUG SPACESHIPS

1. Bug spaceships must be pre-recorded like Terran spaceships. They enter the board, move and fight at the end of all other Arachnid movement, before Close Combat.

2. Arachnid spaceships reconnoitre from orbit like Terran spaceships, only on the Arachnid turn.

3. Arachnid spaceships may NOT fire nuclear demos; they execute their attacks in a different fashion.

a. Each Bug spaceship carries 6 “scrambler” missiles, which it may launch in any hex it moves through, one or more per hex.

b. The “scrambler” missiles do not move nor attack on the turn they are launched.

c. On every turn after they are launched, each “scrambler” missile moves during Arachnid movement. It must always move towards the closest Mobile Infantry unit on the board, (with the Arachnid player choosing directions in case of ties), and as soon as it enters a hex with a non-KIA Mobile Infantry unit (Marauder, Scout, Leader, or Assistant) it must stop.

d. If the “scrambler” missile enters the board during Close Combat, the “scrambler” missile must execute an attack against the top Mobile Infantry unit in its hex (if any).

e. A “scrambler” missile may be attacked normally by Ranged Combat or Close Combat. Ignore “DISRUPT” results—they have no effect.

f. Each scrambler unit is removed from the board when it attacks or is eliminated by enemy attack. Otherwise, it remains on the board.

4. The Arachnid player gets one spaceship pass in each of the following Scenarios: 2, 4, 5A.
THE VIIPURI DEFENSE

By J. Richard Jarvinen

The article below is just the first of what we expect will be a multitude of strategy articles pertaining to THE RUSSIAN CAMPAIGN. Following the rich tradition of STALINGRAD enthusiasts it is likely that analysis of TRC will be with us for many years to come. We've already heard the first groans of protest over many of the points addressed by Mr. Jarvinen's article from our own resident TRC expert, Richard Hambright.

We should point out that the ability to attack Minsk and a general characteristic of the game referred to below was quite illegal in our first edition as units may attack only units stationed in the particular Military Districts they are allowed to strike on the first impulse. However, this restriction has been rescinded in the Optional rules of the 2nd edition making the commentary quite timely and appropriate.

Perhaps the greatest obstacle for the Soviet player to overcome when defending in the RUSSIAN CAMPAIGN is the morale problem created by the loss of more than fifty per cent of his forces in the first two turns. The sinking sensation that occurs deep within a player's bowels as he helplessly throw up their hands in despair and suggest a game to 142, the Russian soon finds himself outnumbered steppes by the seemingly invincible Germans is watched with such horror as the game referred to below was quite illegal in our first edition as units may attack only units stationed in the particular Military Districts they are allowed to strike on the first impulse. However, this restriction has been rescinded in the Optional rules of the 2nd edition making the commentary quite timely and appropriate.

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ment should be a 3-5 armored unit. Thus, should the Russian receive an A1 result, he can eliminate the 7th Infantry and use both armored units to attempt another attack on the Finnish 2nd during the second impulse. This tactic gives the Russian a 66.7% chance of isolating the Finns on A-9.

If the results of the original German attack against the Russian 23rd was a Contact or DR, a 1-1 attack can be made against the Finns on A-9 directly, giving a 38.9% chance of eliminating them and a 2.8% chance of isolating them. Granted, all these counterattacks use units that are needed elsewhere, but if they are available, the benefits of such attacks far outweigh the risks involved.

And you thought the Finnish front was dull!

The Baltic Dilemma

The immediate objective in the Baltic Military District is to prevent the Germans from opening a gap in the Russian line in the first turn and pouring behind the Russian defenders in the Western Military District or reaching the Dvina River. A secondary objective is to keep Russian losses to a minimum as well as preventing their being surrounded.

For his opening setup, the Russian player has four units available to cover a three hex front (see Diagram 3). In one extreme case, the 1st Armored (the weakest unit) can close the entire front line, but in appearance only. Easily overrun in the first impulse, the German can attack the second line which can be exploited during the second impulse. The other extreme case would be to place all four units on the front line (the 11th Infantry and 1st Armored on I-19 and the 8th Infantry and 3rd Armored on H-20 or I-20). This presents the most formidable front line, but can be pushed back easily with the aid of Stukas, again allowing exploitation during the second impulse. The answer to this dilemma must lie somewhere between these two extremes.

As the German has only 35 factors available in the first impulse for Army Group North, I prefer to put units totaling only 5 factors in the front line. These 5 factors can be overrun, but only at the expense of all 35 German factors and a Stuka, a tactic that few German commanders are willing to execute, given the restrictions on the overrunning units. Using five factors on the front line, there are three possibilities for initial deployment: 1) 8th Infantry on H-20; 2) 1st Armored on G-19 and 7th Armored on H-19; 3) 1st Armored and 7th Armored on H-20. Some minor variations are possible, but these three cases represent the basic defenses available. The following calculations were made based on these premises: The Germans use all 35 factors for his attack, Stuka is used, and the 35 factors can be allocated against the split defense (number 2) in a manner most favorable to the German player.

Defense #1

8th Inf. on H-20

Killed 81.3%
Retreat 17.7%
Expected Loss = 4.17
Expected DS = 1.67

Defense #2

1st/7th Split (G-19/H-19)

Both Killed 69.4%
One Killed 27.8%
Both Live 2.8%
Expected Loss = 4.17
Expected DS = 1.67

Defense #3

1st/7th Stacked on H-20

Both Killed 66.7%
One Killed 16.7%
Both Live 16.7%
Expected Loss = 3.67
Expected DS = 1.67

What is somewhat surprising (at least to me) is that the 1st/7th Split yields the same results as the 8th Infantry by itself, whereas the 1st/7th Stacked yields a result of a half point less (note that the DS loss Expectancy is the same for all three attacks). The answer to his anomaly becomes apparent, however, if one examines the CRT. The result of D1, not found on standard CRTs, is of no help to a defender when only one unit is in a hex, but is a lifesaver if two or more units are stacked together. Thus the third strategy indicates the optimum one to use.

There are some disadvantages to using this particular deployment. One is that it creates more pressure for the units defending in the Western Military District, as they become responsible for control of the J-row. Another disadvantage is that you are placing your armored factors in the front line and thus are more likely to lose these mobile and hard to replace units. The third disadvantage, and possibly the most significant, is that it virtually ensures that the Stuka unit assigned to Army Group North will be used elsewhere.

The remaining infantry units form the second line of defense (see Diagram 3). I suggest placing the 11th Infantry on G-18, as it gives this larger unit a better chance to reach either Riga or the Dvina River line on the first turn. The German Infantery is placed in the gap in the Finnish line. Since no Stukas are available in the second impulse, this line is virtually impossible to overrun. Thus both of the objectives stated for the Baltic Military District are fulfilled by this defense.

As an exercise, the reader should take one of the armored units on H-20 (it doesn't matter which one) and place it on one of the rear hexes (G-18, H-19, or I-19). Then as the German player, try to force a German armored unit to the Dvina River on the first turn. With proper technique it can be done in every case. The lesson is very instructive, particularly if you like to play the Russians.

The Uneven Western Front

The Western Military District is undoubtedly the most difficult area on the board to defend. Only seven units totaling 23 combat factors are available for a front eight hexes wide against a German force of 35 armored factors, 46 infantry factors, and Lord knows how many Stukas. The one Russian plus for this region is the terrain. The swamps and forests in the south can severely restrict the panzer advances, and must be used to advantage if the Russian is to hold at all. The recommended defense is shown in Diagram 3.

Note that unless the German overruns the 3rd Cavalry, the 5th Armored, and the 8th Armored, they cannot attack Minsk on the first impulse. The infantry cannot start close enough to the border, and the presence of the 8th Armored denies the hexes N-20 and O-20 to the German armored. Thus these three relatively weak units are able to contain the Germans in the southern sector quite effectively, allowing the stronger units to be used in the north, where the terrain is more open. The 4th and the 10th Infantry are placed on J-21, respectively, in order to protect the Baltic flank. Allowing the German to reach I-20 in the first impulse would cause a quick collapse in that area. However, with the given placement, the German would be forced to waste 36 factors in overruns to reach this critical hex. Few commanders are willing to give up this much punch in the second impulse for the sake of a positional objective.

The 3rd Infantry is securely placed on L-23. Even if overrun, the panzers are denied any penetration because of the forest. It's also unlikely that a German commander would risk less than a 5-1 attack against this unit, as a Contact result would tie up the attacking factors in the second impulse that could be used elsewhere. Generally this unit will not be attacked but instead finds itself surrounded and forced to fight its way out of isolation.

The two armored, rather than the cavalry units, are placed on M-21 and N-22. If by some chance these units are not attacked, they can easily reach Minsk, whereas the cavalry units would find themselves lost in the forests just outside of Minsk. The Western Military District has such a large front to defend with so few units, as well as face the largest German Army Group, the Russian commander should consider any units that survive the first turn in this area as bonus factors. So don't be discouraged if the Kiev army simply disappears. Just hope they have done their job, which was to prevent a significant German breakthrough.

Chicken Kiev

After the painstaking analysis of the Finnish border and the Baltic front, and the scrounging for units in the Western district, the Kiev Military District appears almost trivial to defend. With mountains, swamps, and a plethora of units, one can almost throw down the units randomly and still the German would have difficulty securing the pass.
along the Dnestr River. The problem is not how to stop the Germans but how to get the Russians out through the same terrain that is so frustrating to the German. Because it is difficult to penetrate this area, many German commanders will allocate the bulk of Army Group South to the Rumanian sector and attempt to trap the Kiev group with a pincer movement.

With the above thoughts in mind, I have devised the defense as pictured in Diagram 4. The small armored units are placed in the mountains, making them costly to overrun, but still able to withdraw in good order due to their ability to move in the second turn. The major part of the infantry force lies on the two major rail lines in the north, allowing them virtually unlimited movement, assuming the German fails to cut the rail lines. The 9th Cavalry secures the southern flank, and should have good access to either Kiev or the Bug River on the first turn. The 12th Infantry is positioned so as to reach X-22, assuming the German is unable or unwilling to push to X-24 or X-25 through the Rumanian sector.

While placement of a unit on W-25 seems to strengthen the Kiev southern flank considerably, in reality it does nothing more than weaken it. Assuming a unit from the Odessa front is on Y-25, the German is severely restricted as to where he can place units in Rumania if he wants to make a pincer movement with Army Group South. The hexes X-27, Z-27 and CC-25 seem the most likely choices, but with no overruns, units from Army Group South can advance no further in the first impulse. However, if the Russian places a unit on W-25, the German is allowed to advance his units to X-26 and attack the "K" unit on W-25 in the seam, allowing more "S" German units to advance to X-27 (see Diagram 5). The German attack shown is not necessarily the most optimum attack available, but is shown solely to demonstrate the weakness of such a placement. With the recommended defense, only three units are able to advance effectively, and then not until the second impulse (unless he is willing to overrun the unit on Y-25).

The Odessa File

The Odessa Military District is another area where a lot of interesting things can happen. Although there are only three units mobilizing eleven factors in this area, they face a rather small, and primarily infantry, force of twenty-three factors. However, if the German concentrates some of his armored strength from Army Group South in this sector, he may produce some spectacular results.

The standard defense is shown in Diagram 4. While this defense leaves Odessa vulnerable, it secures quite effectively the southern flank of the Kiev district, which is important for the escape routes of the units on the rail lines and in the mountains. Preservation of the Kiev army group is more important than one tired little seaport. Note that even if the 4th Cavalry is overrun, the Odessa line is still secure. There does exist an alternate defense which can be used when facing a cautious or inexperienced German commander. This defense (shown in Diagram 6), however, has one serious flaw. While it does give considerable protection to Odessa, an aggressive German can make you wish you never heard of overrun. The majority of the Rumanian army overruns the 4th Cavalry on AA-25, allowing the Rumanian Cavalry to reach W-22, completely closing both railways into the Kiev district. By placing most of Army Group South on the hexes indicated by an "X," the German player can run wild. The 32nd Panzergrenadier can walk unopposed into Dnepropetrovsk, while the German infantry can reach any of the shaded hexes. The German armored now has several options, all good. First, he can advance to the Dnepr River, threatening all three southern production centers. Second, with some help from Army Group Center, he can attempt to trap the entire Kiev army in an elaborate pincer movement. Using the second strategy, some units from Army Group Center should advance into the swamp hexes R-22 or S-22, closing the jaws. However, this plan is not without its dangers. The German supply line must be closely watched, as this rapid advance can easily outrun the eight hex limit. Also the Russian player, desperate to save his Kiev units, will indulge in many 1-1 and I-2 attacks, particularly against the German armored units. The firewalls involved are truly something to watch. I will leave you with a precise analysis of this plan to some other masochist. All I know is that I don't like the Russian position when faced with these German threats.

And yet a third defensive possibility for the Odessa District is shown in Diagram 7. This defense prevents the "Rumanian Romp," as described above, as well as provide some flank protection for Odessa. (Note that Odessa may not be attacked on the first impulse). However, the 9th Infantry can be rather easily dislodged, opening a route to that critical hex X-24. Or alternatively, the German player can launch an offensive against Odessa (see Diagram 8) with only minimal support from Army Group South. Using a Stuka, the German can achieve a combined attack against the 12th Armored and 4th Cavalry at 5-1 odds, which will assure him of dislodging those two units. In the second impulse, the attacking units advance to CC-24 and the 48th Armored from Army Group South moves to CC-23, surrounding the Odessa garrison. Also the Russian player, desperate to save his Kiev (first turn) the German has a 3-1 on Odessa. At best he will have a 4-1 attack, which virtually assures the fall of Odessa.

Thus it can be seen that Odessa will usually fall during the first turn regardless of the Russian defense. Therefore the defense given in Diagram 4 is preferred and making X-24 difficult to obtain, thus protecting the northern Bug, which is indispensable for the protection of Kiev.

The Russian First Turn

Having concluded the analysis of the entire Russian setup, a discussion of the Russian first move is appropriate (reaping the rewards, so to speak, of a successful defense).

An armored or cavalry attack presents itself along the Finnish border, the Russian should hold the river line by placing units on B-10 and C-10, if possible. If the Finn won his 2-1 attack against the 7th Infantry, the Russian should fall back to D-10 and not into Leningrad. If the German commander has been enterprising enough to place a Headquarters unit in E-18, the Finns, with the aid of a Stuka, can attack Leningrad at 4-1! It would be embarrassing, to say the least, to lose Leningrad and its valuable production center in July. Furthermore, the force on D-10 shouldn't be just strong enough to prevent a Finnish offensive at E-21. If available, a cavalry unit on C-6 can be an effective deterrent against the Finns.

Be stingy with your rail movement allocation. Don't use them for units that can reach defensive position without rail movement, as in the defense of the Dvina. The 2nd Armored in Moscow can reach H-15, a particularly good defensive hex, as the German infantry can seldom reach it by July or August and few Germans would want to risk an exchange without rail movement, aiding in the defense of the Dvina. The 2nd Armored can consist of putting units no smaller than three combat factors in only the hexes of Riga, H-15 and L-14. It is seldom necessary to have a unit on L-13 for the first turn. A common mistake along the Dvina River line is to garrison it too heavily. By doing so you are inviting nearby, the German can usually break through and surround the stronger points, who no longer have the benefit of the river. Extra units should be placed in E-14 and H-14, protecting the approaches to Leningrad, and just out of the reach of any German infantry units who may have assaulted the Dvina in the first impulse. Also stacking large units together just invites attacks from the dreaded Stukas.

If an armored or cavalry unit has somehow survived in the Baltic Military District, it should be moved to the corridor between the Dvina and Dnepr Rivers, just out of reach of the German. The Odessa Military District has survived the first turn and can garrison Riga. The two Riga units would then be released for duty along the Dvina River. A successful (meaning non-oversized) defense of the Dvina can consist of putting units no smaller than three combat factors in only the hexes of Riga, H-16, J-15 and L-14. It is seldom necessary to have a unit on L-13 for the first turn. A common mistake along the Dvina River line is to garrison it too heavily. By doing so you are inviting nearby, the German can usually break through and surround the stronger points, who no longer have the benefit of the river. Extra units should be placed in E-14 and H-14, protecting the approaches to Leningrad, and just out of the reach of any German infantry units who may have assaulted the Dvina in the first impulse. Also stacking large units together just invites attacks from the dreaded Stukas.

THE GENERAL
Barring some fantastic die rolls by the German, the Russian should have enough units to fill most of the deployments mentioned above. Judicious use of rail movement should provide the necessary mobility to get the units where you want them. And with a little help from the weather, you might find most of your production centers intact when spring rolls around.

One Final Example

The Viipuri Defense comes with no guarantees whatsoever, but it should provide the player with basic system and set of tactics that will aid the Russian cause. Modifications are encouraged, but extreme care must be taken when doing so, as subtle changes can have drastic results in unsuspected areas. For example, consider the Russian defense in the Odessa district (Diagram 4). Some Russian commanders may be tempted to shift the 12th Armored one hex, from Y-24 to Z-24. After all, the Odessa line would still be secure even if the 4th Cavalry is overrun, and this slight shift provides the 12th Armored with the benefit of the river line, should it be attacked in the second impulse. Seems harmless, right? Well, this particular defense (which I call the Odessa Triangle because of the pattern of the three units defending in the district, and also because of the strong association with the Bermuda Triangle, where ships, or units if you will, are lost and never seen again) has one weak point which the German can exploit if he is willing to use two Stukas.

The initial placement for the German units in this attack is critical, because the mountainous terrain is restrictive to most units (see Diagram 8). The 4th Cavalry is overrun (they really seem to suffer in my examples!) by the Rumanian Army Group, allowing the 52nd Panzergrenadier and the 49th Mountain to reach X-25 on the first impulse, where it can now attack the 12th Infantry at 4-1. If an exchange results the mountain unit is eliminated, allowing the 52nd to reach W-22 in the second impulse. This move defeats almost every objective that we had for the Kiev army, as it cuts both rail lines, as well as severely retarding movement for those units. Not a comfortable situation for the Russians. Also the attack shown only utilizes two units (the 52nd Panzergrenadier and the 49th Mountain) from Army Group South, as well as leaving the Rumanian Cavalry as a small reserve. Depending on the whim of the German, he can add as much pressure as desired in Rumania, starting units on X-28 or in front of Odessa. And all you did was move one unit one small hex!
PANZERBLITZ

GERMAN: Robert Chiang
RUSSIAN: Kyle Bolar

One of the most frequent criticisms of the Series Replay is that the players involved are "turkeys"—not at all possessed of any considerable amount of expertise. This sort of complaint always draws a smile here as we recognize more than the critic that hindsight is 20/20. Having one's play laid bare for all the world to see takes a certain amount of intestinal fortitude and perhaps questionable intelligence, but it is doubtful whether 98% of those who complain could do any better and play the "perfect" game. After all, taking advantage of an adversary's mistake or faulty strategy is what wargaming, and oftentimes war, are all about. Nonetheless we asked leading AREA competitor Robert Chiang to lay his expertise on the fine in this Series Replay and he responded in fine style. Mr. Chiang brought us a four-page victory on PANZERBLITZ victories and is recognized here as the master of his craft (PANZERBLITZ), in much the same way the name George Phillips is synonymous with expertise in STALINGRAD; Tom Oleson in ANZIO; or Dave Roberts with the classics in general.

Chiang's comments are so comprehensive and instructional that we've foregone the customary neutral commentator and opposition comments in favor of a clinical approach by the acknowledged master of the game. All of which is not to brand Kyle Bolar as a "turkey"—he's a 1600 rated AREA competitor and is one of the few who can boast of a win over Chiang; a select fraternity which may be added to now that Robert has bought ANZIO for a head to head confrontation with the No. 2 rated AREA performer, Tom Oleson.

This game was played by mail with combat resolved on the FTF CRT. The real space LOS determination optional rule was used and the Russian player was allowed to use the optional ammunition rule in exchange for a fourth halftrack in the German OB. Most important of all, the game itself is the Mark Saha modification of Scenario 4 as it appeared in Vol. II, No. 1 of the GENERAL. The modified victory conditions follow:

The Russian attempts to reach Board 1, NOT Board 3 as stated on the Situation Card.

GERMAN VICTORY CONDITIONS: Marginal—German losses are held to less than 15 and not more than 30 Russian units on Board 1 (not #1!), Tactical—German losses held to less than 10 and learn on #1 board, Decisive—German losses held to less than 5 and not less than 10 Russians on #1 board.

RUSSIAN VICTORY CONDITIONS: Russian gets a Marginal if German does not get a Decisive, Tactical—Russian gets a Tactical if German does not get a Tactical or better, Decisive—Russian gets a Decisive if German does not achieve Marginal or better.

No draws—highest Victory Condition wins!

RULE INTERPRETATIONS USED IN THIS GAME

It is recognized that many of PANZERBLITZ's rules can be interpreted in more than one way. At the same time, one of the prerequisites of any potential series replay game is that it be "legal." Potential controversial rule interpretations thus should be written out before the game begins. This not only helps the players, but serves the third party judge, in evaluating each player's moves and tactics. The following interpretations concern only some of the more relevant rules of particular importance to this scenario modification.

TERRAIN

All units are assumed to be able to move at the full road movement rate onto the board through road hexes on the board edge. For purposes of entry onto the board, 2G10 can be considered a full road hex.

The outer edge of the pond on board three, consisting of the six hexes adjacent 3V4, cannot be interpreted as a continuous gully for movement purposes around the pond edge. For example, a unit moving directly from 3V4 to 3W3 must expend the movement penalty for leaving a gully.

MOVEMENT

The road bonus is not negated in a town hex, if that hex is occupied by a wreck or a friendly unit. All units expend only 3MF per hex when traveling through town hexes, regardless of whether traveling individually or with a stack. The only exception is for units executing QVRs or CATs during the current turn. Such units expend 1 MF per hex when traveling through town hexes.

Wrecks affect movement for German and Russian units without distinction to the nationality of the moving unit (unlike in the case of stacking). Units of both sides may move through double or triple wreck hexes (although Soviet units may not end their movement on such a hex, of course). This in effect renders redundant the purely gamesmanship German tactic (with no basis in realism) of creating double wreck hexes simply to prevent Soviet passage through such hexes (while having no such similar effect on German units).

There is no "time/space ratio" factor pertaining to any movement in this game. Given two vehicle units starting from the same road hex, and moving individually in the same direction along the road, each unit may expend up to its maximum printed movement factor.

COMBAT

When executing a normal combination attack versus a mixed stack of armored and nonarmored targets (in a non-town hex, of course), predominance of target type is determined by the number of units of each type, not by the total number of defense factors of each target type.

VICTORY CONDITIONS

Soviet units on half-hexes between board one and the off board (but not board three) count toward Soviet victory condition fulfillments.

Preliminary Comments

Scenario four is one of the most widely played situations in PANZERBLITZ, and consequently much has been written about the situation. From my experiences, I have never had any doubts about the play balance of the scenario—an experienced Soviet player could not lose. This is in direct contrast to the opinions expressed by Richard Plock and Roy Easton in the Vol. 12, No. 2 series replay. Yet my view is shared by all the many PANZERBLITZ players that I've faced in FTF and PBM games. Similar opinions concerning the play balance of the situation have been expressed by Mark Saha (Vol. II, No. 1) and Carl Hoffman (Vol. 11, No. 6), in recent issues of the GENERAL.

Basically, the flaw is the victory conditions—the Germans have no room to execute a mobile defense, without giving up victory. They are forced to conduct a static defense around the Grabyosh—Golad region for most of the game. Hence, their only advantage, greater firing ranges, can be nullified easily and quickly by an aggressive, experienced Soviet player (especially one who can crack the vulnerable German defensive line, before the SPAs can reach the hill 107 positions). Once the hill 107 positions are forced (usually by the Soviet fifth turn, at the latest, if the Soviet player knows what he's doing), Grabyosh must be evacuated by the defender, and any German victory is unattainable.

Mark Saha's modification was intended to rectify the imbalance of Situation 4 by drastically modifying the victory conditions of both sides. Mark's modification, unlike most variations produced by players, has turned out to be spectacularly successful in my PBM circles at least. The victory conditions are very demanding on both sides, and the modification requires a very high level of expertise to play well. The Soviets must sustain a continuous, aggressive offense across the entire length of board three, yet must protect their precious armor early in the game. The Germans, on the other hand, must execute a near-flawless mobile defense, containing the Russian advance to a minimum, yet avoiding a decisive engagement, until the end of the game.

I favor the Russians, (even with one halftrack added to the German side) mainly because they have a larger margin of error—German mistakes are usually more costly to the German player, than similar mistakes to the Russian player. Any German mistake on the first few turns can usually be exploited by an experienced opponent, into a Soviet decisive victory. And most German players usually make that mistake.

FIRST TURN COMMENTS

The Germans are most vulnerable on the first turn. The only advantage the defender has is his longer ranged units. Yet, there is no real good firing place to put the SPAs on the first turn. Hill 107 is out of reach until turn two, and Hill 129 is obviously too far forward, and thus unsuitable for any firing units, let alone the important SPAs. Therefore the
SPAs usually go in Golad (and to 3F8 on turn two), or to say 3C5 (and to 3J9 on turn two). However, if the SPAs are to attain a safe dominating position on hill 107 on turn two, the first turn German defensive forward screen must stop any and every potential Soviet threat on the Russian second turn. Hence the Germans must construct a near-perfect opening defense, or pray that his Soviet opponent is too inept to see his opportunity.

The German player must unload rifles on 2G3 and 2H6 if they intend to safely hold the 14 forest on the first turn. If I put a HT (halftrack) on 2F4 and leave the 2G3 gap open, Kyle can blast the unit off the map with a 4-1 shots from the combination of the double-firing mortar and 821. 821 would be subject to German counterfire, and slow down following Soviet units moving on the road. However, with the HT wreck on 2F4, 822 could unload 147 on slope 2F3, or 2E3 and 2D3—if the German player didn’t put a truck on the 2E3 gully hex to block further movement. Likewise, if I only put a HT on 2H6, Kyle can 4-1 that unit with 955, 956, and triple 85, allowing the town (Golad) to be threatened on three sides by 822 (147), 821 (184), 951 (144), with the passengers unloaded. (The Soviet player in the Vol. 12, No. 2 series replay could have smashed the German first turn defense and won the game easily through such a move.)

The Hummel needs to be placed in Golad on the first turn, to prevent, or rather deter the Soviets from firing 821, or moving 741 to N6 on turn two. 444, which unloaded 144 on 2G3, is open to fire from the mortar and 821. If the Germans pull the Hummel back to 3C5 on German turn one, the defender could only hit 821 with 3-1 odds. That’s the best possible odds, assuming the attacker doesn’t drop a truck on 821’s hex, so as to "dilute" the German direct fire (forcing a multiple attack, and reducing basic odds on 821). 631’s presence should convince 821 to move along, and give 444 a chance to survive. If 821 didn’t stick around, the Russians could bring the SU-152 all the way up to the slope 2N6. If Hummel wasn’t in Golad to add to the defender’s forward firing power, the Soviets could get away with such a move, dumping say a recon also on the hex, and diluting German counterfire to at best 1-1 odds on the SU-152 (the recon also must be hit in a multiple attack at 1-1 odds). This would probably create a hole on 2D3 in the German second turn defense. Hence the vital importance in keeping one SPA in Golad on turn one, to deter such a move.

SECOND TURN COMMENTS
The German second turn move is usually predictable—a solid wall of screening units along the C, D, and possibly E rows across the width of board two. Due to the presence of 86, I put 961 on 2D3, rather than a HT (a truck wouldn’t do for obvious reasons). This has a disadvantage of forcing 961 to stay in the Grabovshy region on turn three, as it can’t reach 3H3 or 3J3 on the next turn. As a result, I put 840 on 2D7, so it could reach either of those two hexes on turn three.

This screen is not as “economical” as it could be, as 421 could go on 2D8, 422 on 2D7, and 840 on 3F8. However, I want to keep my option of dumping a sacrificial truck on 2D8 next turn, should I wish to slow down the Soviet threat at infiltrating along the long gully on board three on subsequent turns.

The SPAs predictably went to 3F8. Some people would place 621 and 41 on hill 107. But this is the Saha modification, not Scenario 4. Those SPAs are going to have to defend Opustochenia and the environs for the second half of the game. If I put 621 on hill 107, that could cause problems later in the game, with possibly the SPAs not being far back enough to deter early Soviet infiltration in the V, W, X, Y row gully on board three on Soviet turn six or seven.

441 could be successfully surrounded, but it would probably be too unit consuming to the Russians and it would play into the German hands of exposing Russian tanks to SPA fire on non-slope terrain. The Russian player will undoubtedly unload some infantry from tanks on adjacent slopes: 2E5, 2E2, and 2F8, with possibly an infantry on 2E3. Infantry aren’t worth killing—only tanks,
as far as the Germans are concerned. There will be easier targets—infantry passengers—in the second half of the game. An SPA should either shoot a tank, or move farther back every turn, at this early stage.

THIRD TURN COMMENTS

As I expected, Kyle was no fool; there are no easy tank targets in sight. Every Russian tank is either out of sight, or on a slope. And tank targets are the only thing worth shooting at. I could flame 821 or 953 by firing both 850 and 631, but that would be a weak move, when taking the entire game situation into perspective. If 850 and 631 fired, they must retreat next turn, and can’t contribute to the immediate defense of the forward screen of HTs and trucks. Hence, the defender will have very little long-range support, should the Russians decide to simultaneously cut the main road from Grabyosh and Opustoschenia, and assault the former town. (The purpose of such a move would be to disrupt the orderly German retreat on the subsequent turns.)

Besides the immediate tactical disadvantage of firing 850 and 631 this turn, the move has detrimental long-range effects in the future. Those units could not contribute at full effectiveness to the defense of Opustoschenia, should the Russians attack the town on their sixth turn move (a good bet). 850 and 631 could only reach 3W8 by the German fifth turn. And 3W8 would be within range of the attacking Soviet tanks, when Opustoschenia is assaulted.

The basic point about using SPAs in the early part of the Saha modification, is that they should, optimally, fire at tanks, and then only when one unit is needed to kill a single tank (firing at half range or less). That’s because the long-range killers are vital to the defense of Opustoschenia. They need to be in safe positions on the far side of the V-W-X-Y-Z gully when the great Soviet assault on the town occurs. Any firing SPA or Nashorn obviously cannot move that turn, and runs the risk of getting caught too close to the Russian tank guns around the time of the Opustoschenia battle.

The positioning of the Soviet infantry, and the close proximity of the Soviet armor to 2D3, necessitates a “safe” withdrawal of the German screening units back to Grabyosh. The hole on 2D3 can only be filled by an infantry unit this turn, and there are none left. Hence a hole on 2D3 is inevitable. Any units on the crucial hexes 2C2, 2D4, 2C4 and 2D8 risk CATS, and probable dispersal and consequent destruction. Yet, if I wanted to move my 850 and 631 to 3J9, I would have to sacrifice units on the first three hexes. Otherwise, the Russians could reach the lower slopes of hill 107 next turn, and force the big artillery units off of 3J9.

Kyle’s move illustrates the ease with which a good Russian player can crack any defense based on the hill 107 positions.

With my SPAs back in Opustoschenia, I must withdraw my forward screen to defend the approaches to the town: the 313 forest, Grabyosh, and the forward slopes of hill 107. The Wespe on 3W8 covers the gully and the back of Grabyosh, while 850, 840, and 631 cover the front of the town (the side facing Opustoschenia). Two HTs and 961 garrison Grabyosh itself. The 443 and four trucks simultaneously cut off the central road (making it difficult for the Soviets to make a banzai type attack along the road), and deny 3G7 and 3H8 to the enemy.

A more risky move would be to position three additional units (probably two HTs and one truck)
on 3C6, 3B6, and 3B7, with maybe 850 on 3J8. The Germans would have to either leave the central road open or leave 3G7 and 3H6 open to occupation by Soviet armor. Such a move is vulnerable to a possible disruptive Soviet fourth turn move. The Russians might counter with something similar to: 444-3X6, 444-3G6, 444-3F5, 132-3F6, 144-3E5, 131 and 443 on 3E6, 951-3C4, and 432 on 3B4. Such a move would make it difficult to execute an effective German screen on the next turn, even though the defender could extract his units from Grabyosh, firing his long-range units. Control of the game might swing to the Russians, and the Germans would be in the soup on later turns.

FOURTH TURN COMMENTS

Kyle has taken advantage of 631 and 850's positions on ground level by advancing rapidly along the gully near 3H2, and infiltrating behind hill 107. Simultaneously, he has effectively assaulted Grabyosh, with a minimum of effort, by unloading 181 on 3B7 and bringing up 821 behind the town, protected from overran. I suppose I could leave a HT or truck on 3D5, and hope it might mess up his plans to assault Opustoschenia on turn six. However such a unit could not be easily extracted at such a long range, after the Soviets inevitably surounded it. Besides I think Kyle is capable enough to let such a unit appreciably delay the attacker's advance.

621 fired this turn, and this caused me to rethink my positioning of 631 so as to be able to cover the north-south gully on the Soviet sixth turn from a nonexposed position. I would have preferred not to shoot with 621, but Kyle offered me 956. It may have been a deliberate ploy on his part, to make sure two non-exposed positions on ground level by advancing rapidly might swing to the Russians, and the Germans would be in the soup on later turns.

My considerations for a strong gully defense on future turns, has caused me to weaken slightly the Opustoschenia defense. A better defense of the town is a continuous screen of seven HTs on the central road hexes (303, 3P4, 3P5, 3P6, 3P7, 3P8, and 3P9), leaving a single spotter HT for 3M9. (Such a defense is not possible if the leading Soviet tanks are within ORV range, which is why I had to prevent Soviet occupation of 3H8 last turn.) The positioning of the HT on 3M9, but the vacinity of the two other forest hexes, concedes 3L10 to the attacker. (The forest can either be defended by occupying 3L9 and 3L10, leaving 3M9 vacant, or as above. Occupying only 3L10 is not a good idea in PBEM, as the German unit can easily be pinned and trapped by a good Soviet move.) And any Soviet units on 3L10 can reach the gully on turn six. For this reason, I declined to use the long screen in front of Opustoschenia. I opted for a fully occupied 3L9 forest, relying only on the screening action of 423 and 424 in front of the town.

Another reason for the short screen defense, rather than the long screen, is that the Soviets have only armor and a few trucks to assault Opustoschenia on turn five. All the available infantry is out of range, delayed by the rear guard action of my rifiles, or still in the loadiong process (caused by the need to unlim the great deal of infantry to collar the German line on Sov. turn three). I believe 850, 621, 931, 940, and 31 should be enough to deter the Russians from launching a tank attack on the town this coming turn. True, if the Russians sent all seven available tanks (951, 953, 954, 955, 821, 938 and 939), the exposed SPAs would come under fire. But those SPAs on slopes stacked with, say trucks) are hard to even disperse by tank fire at anything more than half range. And 953, 954, and 951 will not even be able to advance past the "O" row, due to 423 and 424. In the event of such an all out attack, 631 would fire also, with 421 going to 3P7 to prevent 631 from being OVRRed. The Soviets would very likely suffer severe tank losses, so such a radical attack is not likely, unless Kyle can be sure of killing the SP As or forcing their retreat.

My two rifiles on 2H4 and 2H5 (latter now deceased) have succeeded in tying down a sizable number of Soviets, including the all important JSU-372. Also by blocking the north road, they have slowed down the progress of the Red trucks, and made it easier for me to defend board three on these turn. I didn't expect the two rifiles to get a decent shot at a passenger, but I'm happy to see the Soviet rifle (144). As an added bonus, Kyle miscalculated the short fire odds on my 144, enabling that unit to survive, and probably delaying 741 another turn (which will in turn slow down the six trucks behind 741). All in all, I got what I wanted from my two rifles, and their sacrifice was not in vain.

FIFTH TURN COMMENTS

I have executed the standard ring-defense around Opustoschenia this turn. The outer ring around the back of the town is designed to make it more difficult for the Soviets to assault that area of the town. It also prevents the Russians from surrounding Opustoschenia very easily. Without the outer-ring, Kyle could dump 131-443 on 3T7, 132-445 on 5S, and 147-822 on 5S. Simultaneously 184-442, 181-939, 146-432, and the pesty AT guns could be dumped on the other seven adjacent hexes around the town. True, I could bust out of any enencelment by firing 621, but why waste a shot on such a target at this time? The rule that SP As should only fire at only tank targets still holds. As it is, I think Kyle can take the town on turn six, with his available units, no matter what the German defense.

The ring defense just makes it tougher for him, and eases my task of extracting my units, should it be necessary.

Assuming Kyle kicks me out of the town next turn, I must be able to retreat my Opustoschenia units to a safe position on turn six. Only HTs and the Panther can make it from the town to Zabvenia on turn six. Hence any other units in Opustoschenia will find themselves hung-up in some place in between. At least one truck is needed to execute a ring-defense usually; I used two. Since Kyle can't dump an 81mm on 63 next turn from his present position, I could put my two trucks, 423 and 424, on say X7 and Y7. Of course, if Kyle neglects to dump his mortars in the right places around P7, I could use the trucks to help erect a wall of non-OVRable positioned units in front of Zabvenia. 840's position on W8, although relatively exposed, would be used to anchor such a defense. 840, of course, could be used to add firepower to the threat of an ORV attack against any Soviet tanks fouling around Opustoschenia. And if it was forced to retreat, 840 could always go to 3CC6.

The gully should be pretty well botted up this turn. At least partly due to my turn four defense, Kyle can only reach the gully with 953 and 954, 441, 422 and 421 will limit any penetration to only the three outermost gully hexes: V4, V5, and V6, 631, and if necessary 840, are ready to greet any Russian units coming that way.

The main blind spot in virtually any Opustoschenia defense is the southern flank. This garnet is no exception. 31 is positioned to provide a minimum of counterfire against HTs or tank
THE ARAB-ISRAELI WARS

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Contest No. 76

A problem in deduction, if you please.

It is early in a game of STARSHIP TROOPERS, you're the M.I. player, and the Bugs have already made a number of breaches. In the diagram below, "B" indicates breaches made by "B"-cell arachnids, "C" indicates "C"-cell breaches, and "D" indicates breaches made by "D"-cell units. Suddenly you realize that you can figure out the entire Bug network for these cells! Assuming that the cells are lettered in a clockwise fashion (as in the example at the end of the SST rulebook), and assuming that arachnid engineers have not constructed any new tunnel segments (i.e., using only the 10-, 5-, and two 3-length segments each cell starts with), reconstruct the tunnel network and answer the following questions: Which cell's unit can reach each of the following hexes?

1. Hex "1"
2. Hex "2"
3. Hex "3"
4. Hex "4"
5. Hex "5"
6. Hex "6"
7. Hex "7"
8. Hex "8"
9. Hex "9"
10. Now draw in the arachnid brain "complex" on the diagram.

Ten winning entries will receive certificates redeemable for free AH merchandise. To be valid an entry must be received prior to the mailing of the next GENERAL and include a numerical rating for the issue as a whole as well as list the best 3 articles. The solution will be announced in the next issue and the winners in the following issue.

ISSUE AS A WHOLE:.....(Rate from 1 to 10, with 1 equating excellent, 10 terrible)
passengers riding behind the slope. And in the extremely unlikely case that Kyle doesn't assault the town on turn six, 961 could also cover part of that region. I was forced to put 850 on 3Y9 last turn, to cover that area. Hence it cannot reach 94. This turn, which could be reached from say W8. But then a unit on Y4 is far out on the limb, and vulnerable to potential CATS from unloading infantry in the gully on turn seven. And a unit on Y4 cannot reach the important 84 hex in one turn. And as positioned, 621, 631, and 850 can reach that strategic hex, should no attractive targets be available next turn.

**SIXTH TURN COMMENTS**

Predictably, the Soviets attacked Opustoschenia in force. Kyle took maximum advantage of the ground-level positions of most of my big guns, by positioning his most potent attacking units directly behind the town. 41 and 621 cannot fire at 181, 822, 184 and 821, and my Nashorn can't hit the latter two Red units. 631 cannot use its maximum attack factor against those infantry-armor stacks. Additionally, 184 and 821 are not OVRable, due to the double armor stacks on 305 and 306 (both of the latter hexes invulnerable to most German fire). Therefore, I cannot hope to disperse 184 and 821, unless I want to fire 961 at 821 (with 631 hitting 184). 961 would be subsequently lost, as the stack 181-822 could not be dispersed. In conclusion, I see no way to hold the two eastern-most hexes of Opustoschenia (3Q9, 3Q6).

I could probably safely hold onto either one (but not both) of the two western hexes of the town. However, I would have to use most of my firepower to kill or disperse 147 and 181 (I can only disperse one of the SMGs with 631). That would be necessary to give the triple German stack on 3R6 or 3R7 a decent chance to survive the seventh turn CAT by the remaining Soviet SMG. And since I cannot put more than 23 defense factors on 3R7, there is a 33% chance of that stack being dispersed by the I-CAT. And a successful dispersal means eventual annihilation for the defending units, as the Russians will be able to hit the stack at 4-1 odds on the subsequent Soviet turn. It is not worth the risk. Accordingly, I'm abandoning Opustoschenia without further resistance.

There is another danger in defending Opustoschenia too heavily: the Russian forward units can infiltrate the German defenses through the gully. The defender simply cannot afford to let any Soviet units get behind his forward defense. And if the German SPAs are putting a maximum effort into holding onto one or two hexes of Opustoschenia for a turn or two, those T-34s may successfully penetrate past the screen of HTs and trucks west of the gully. Needless to say, any Russian unit in the German's backyard will hamper efforts to construct an organized German defense later in the game. Kyle, undoubtedly had that in mind, when he pushed 953 and 954 into the gully, while Opustoschenia was under assault.

I have erected a screen of trucks and HTs in front of Zabvenia. Kyle left the ford hex free from Russian fire. Ordinarily 741 goes on 3P7, during the Soviet assault on Opustoschenia, so as to act both as a spotter, and to cover the ford. However, the JSU-152 was delayed by the task of exterminating my rifles. I don't think it makes too much difference in this particular game, as 822's LOS on X8 prevents me from constructing a screen based on 3W9 and 3W10 (3W8 is almost always within shooting distance of the T-34s). And the Russian units are far enough back, so that even if 329 was covered by the long range mortars, the Soviets could not exploit any hole there. I would only have to change the positions of two of my units, from their present positions: 421 goes on 3D7, instead of 329, and 443 goes on 320, instead of 3Y9.

I could have constructed a much more effective Zabvenia defense if I hadn't opted for using the ring defense last turn. (But then if I hadn't used the ring defense, Kyle would not have needed to unload so many units in the assault!) If 423 and 424 had not been used in the defense of the town, I could have made the following change: leave X7 and Y7 unoccupied, and occupy instead 3W9 and 3W10. Those three slope hexes control the approaches to Zabvenia, and are a good position to mass armor for attacking the German defenses late in the game.

**SEVENTH TURN**

The time of reckoning is fast approaching. Up to this time, I have conducted a mobile defense. Due to the close proximity of board one to my present position, I may be forced to execute a more rigid type of defense on the last few turns, as I cannot afford to concede much territory on board one. Of the remaining German objectives in this game is to kill large numbers of Soviet units. I have constructed a deep forward screen of light German units covering all major approaches to board one. My German HTs and trucks perform the dual role of acting both as spotter units, and blocking access to other covered terrain hexes. Every unoccupied hex in the 3DD6 and 3FF10 forests and Zabvenia is covered by interlocking fields of fire from several German units. My only regret is the 95's position. Undoubtedly 186 is a superior position. However the 88 was loaded on 621 previously, and it was necessary for me to consider whether it was worth it to keep the 88 loaded until 621 reached 186 this turn. I unloaded it a few turns back, so that not only could it participate in the battle of Opustoschenia, but the 88 would act as a further deterrent against a rapid Soviet advance past the town. I expect to lose the unit on turn nine.

It is necessary to place 441 and 421 in front of 186 so as to deny the Soviets the opportunity to possibly dislodge my units from that key hex. 631 could use an SU-85 in its sights, and took advantage of it. Consequently only 621 and 850 were on 186. And Russian units 951, 955 and 821 can reach the adjacent forward slopes. And in such a position, I could not safely disperse all three units with only 621 and 850. (I'm assuming 961 will be busy firing elsewhere, or retraining.) Hence, blocking units must be placed on 1A5 and 1A6.

I conceded the Y-Z forest, even though I could have held onto 3Z4. I just didn't have the extra unit to spare. Kyle has no tanks loaded with infantry. Thus every infantry passenger (and its carrier) will have to endure a turn of fire to reach that area. No HT can travel in one turn from 3Y3 to say Y7 in one turn. And if Kyle chooses to hide his tanks in the Y-Z forest, I can concentrate on annihilating his HTs full of infantry next turn. Undoubtedly these units will be clawing along the gully, probably out of 840's LOS.

**EIGHTH TURN**

The Germans will win this game, regardless of what the Soviets do on turns nine and ten. At the end of the Soviet eighth turn, the Russians had a maximum of 34 units capable of ending up on board one at the end of the tenth turn. Those units included six tanks (or assault guns), four HTs, two loaded infantry, fourteen trucks, four loaded infantry, and four loaded artillery (or AT guns). Kyle can attain a tactical victory (mandatory minimum level of victory needed to win), only by pushing at least twenty of those 34 units onto board one at the end of the game. He certainly isn't going to get the win by killing off German units, as I have
only lost three units so far (the 88 is on the waiting list). The size and positioning of the German firepower on the dominating hilltops should make it a task for the attacker to get even a marginal victory.

Kyle's double assault on the DD6 woods and Zabvenia convinced me to abandon the town. I had to decide whether it was worth the risk to the occupying screening units to attempt to hold onto these areas. The Germans must occupy AA9 and one other town hex, if they are to be effective in blocking the Soviet steamroller at Zabvenia. One way to do this would be as follows: 840 wipes out 441, 621 hits 145 at 2-1, and 961 OVRs 143 and 444 at 1-1 odds (no OVR possible if I flame 444 beforehand). But I need 621 to eliminate 132 and 445, as the best odds I could get with 850 or 41 firing at those units in a combination attack are 1-1. And I need somebody to kill 442 (nice wreck on the road which will slow down Kyle's trucks, come turn ten), as 631 is obviously in no position to fire. Of course, I could imagine 145, but then the rifle would probably CAT my HT on 3AA10 (with my Panther of course on AA9), and the HT would eventually be lost if dispersed. Also, any Zabvenia German units would have to be extracted on turn nine—which something which may not be easy to do, if Kyle draws my fire with potential spotters adjacent 1B6. So I'm leaving town.

With Zabvenia falling, it becomes important for me to hold onto the DD7 forest. I don't want Kyle using the place as a staging area on turn nine for his trucks, HTs, etc. If I can hold onto the terrain, I can minimize the penetration of the Soviet truck units against the Adski flank region on turn ten. If I don't occupy DD7 this turn, 423 would dump 182 on 1A3, where it could CAT any number of German units on the tenth turn, again assuming spotters around 186 draw my H class fire away. If I put a HT on DD7, 132 could disperse it with a CAT, eventually leading to the German unit's demise. Of course, I could put my Panther there, and ignore the recon but then I would lose a potential firing turn by 961, as I would undoubtedly be forced out of the hex on turn nine. Besides, the 88 could be saved for another firing turn, so why not just eliminate 132 and 445? That would probably force Kyle to unload an infantry unit to kill off the 88 on turn ten, and that infantry could be on the road, further slowing down the Soviet trucks on turn ten. The Panther goes to 1D7, which is not only a good firing position, but it prevents 445 from occupying the hex, should my 4-1 combination attack versus the forest target fail.

One of my main tasks is to ensure that Kyle doesn't get a decent chance to kill that fifth German unit, assuming the 88's days are numbered. So, I'm using my 840 and 850 units to pick off the two remaining HTs, rather than the more valuable 435, 437, and say 432 (146) targets. If I choose the latter targets, Kyle could easily get 4-1 odds on four sides. He could position spotters maybe as follows: 932, 933 on 1B5; 441, 95 on 1A3; 444, 955 on 1A6; and 821 on 1B7. I could, at best, have only a 57% chance of dispersing or killing all seven spotters (one 4-1 shot, two 3-1 shots, and a 2-1 shot). That would draw the fire of 840 and 33 also. And if at least one of those stacks successfully spotted 1B6, Kyle could easily get 4-1 odds on any unit in the hex (remember 741 will probably go to AA9, and it does have triple fire capacity if needed). So by killing off the HTs, I can appreciably improve the odds against Kyle getting anyone to successfully spot my 1B6 units, should he attempt it.

NINTH TURN

I cannot afford to lose another unit without conceding a marginal victory to the Soviets, as my 88 unit is living on borrowed time. But the 88 did its
job, killing five units. Equally important, that unit
tied down a disproportionate amount of infantry,
which might otherwise have reached board one
next turn. The Soviet truck movement on both forks of
the road has been hampered by the wreck on CC5,
and 142 on CC7. And both of those occurrences are
the result of the 88.

I decided last turn in effect not to contest control
of the northern road around the slope region, as
the risk of losing a unit was probably unavoidable. Kyle
sacrificed three tanks to draw my SPA fire. This
allowed 822 and 955 to escape serious counterfire,
and to cover the slope road hexes with tank fire
from 1C3 and 1B3. I could have put my Panther on
1C4 last turn, but Kyle could have positioned two
units to force the Panther from the hex this turn
anyway. And I'm not going to risk a 2-1 shot on the
Panther this turn, even if it is only a 17% chance
of losing the unit. In another game under more
difficult circumstances, such a tactic would possibly
be necessary.

The Germans should have just enough firepower
on the hilltop hexes to kill off enough Soviets on
turn ten, to attain a decisive victory. The Soviets
have only 18 units capable of reaching board ten, so
at least a German tactical victory is assured. And
of those 18 Soviet units, only the two tanks (the SU-85
and T34/85) can reach positions immune from the
devastating field of defensive fire on board one. The
prime targets of the remaining 16 units will be the
ten trucks and three artillery pieces (two 45mm
doorknockers, and an 82mm mini-mortar). And
one of the trucks, 426, can only reach one hex on
board two, B19. So scratch that unit, and we are
dealing with 17 units. Can the Germans kill off 8
units, using only hill 126’s firepower? I say yes,
regardless of the Soviet move. It is pretty much
mandatory for the Russians to unload at least four
of his five passengers and their tanks on the following
slope hexes: B3, B4, C3, and C4. A wreck
is on B5, and no carrier with passengers can reach
D3, or the hilltop, or C5. 437 and 428 both can reach
D3 or C2, so assume one truck on each of those
hexes. One of the two remaining single trucks (429,
434) goes to B5. The last single truck and the
remaining truck-passenger probably will stack up
together on forest hex E3, and hope for a six on the
last 4-1 shot of the game. For the Soviets to get that
tenth unit over, they’ll have to have that attack miss.
The German tenth turn attacks will go something
like this: 621 and 631 each wipe out a stack of
artillery and truck units; 840, 850, and 961 then
extinguish a truck apiece (so far all targets are on
slope hexes); and finally the two HTs combine to
exterminate one of the trucks on D4. Final result: 9
Soviets over: the three armor, two infantry, one
artillery, and three trucks.

TENTH TURN AND CONCLUSION

One of the major decisions of the Soviet player is
whether to go after German units, or just to get as
many Soviet units on board one as possible. When
facing a defender who constantly withdraws, and
gains in battle only on his own terms, an attacker
in the Saha modification must be aggressive to the
extreme, in attempting to both disrupt the enemy
defense, and force the maximum withdrawal. The
Soviet player lost sight of his objectives in the
second half of the game, torn between the desire
to kill enemy units, and the necessity to advance.
The Russians have concentrated on
achieving geographical objectives, since the German
player could choose the time and place to sacrifice
his own units. Time and time again, the attacker
unloaded two, three or even four infantry and
artillery units to kill immobile German AT guns.
This could only serve the German player’s objective
of keeping as many Soviet units as possible off
board one. Every Soviet unit unloaded, means
another unit which will not make board one.

The attacker, by expending only the minimal
amount of time and infantry on capturing Opus-
toschelnia and the 3D66 woods, could have made it
very close at the end. The trick is to be aggressive
with the innumerable trucks (keeping all artillery
always loaded up), and exposing armor (tanks) only
on slopes and in covered terrain. It’s loaded with
infantry, and similar tanks should keep out of the
LOS of enemy guns to prevent “double jeopardy”
giving the enemy player two important kills with
one shot. The 3M10 forest, the area west of the 3W9
slopes, and the 3Y4 forest are excellent hiding
places. The Soviet player, unfortunately, never took
proper advantage of them, but engaged in exposing
his precious armor in clear terrain time after time.
Without his tanks, the Russians have no potential
for bursting through onto board one. The exposure,
and consequent loss of such units, was the last
hurrah for the attacker.

IT Continued from Page 25

I saw that it was too late, Bruce was far gone in
the grip of IT! and I could do nothing to help him. It
was time to save myself while I could. After all, I like
gaming but the prospect of doing nothing, and I
meant nothing but gaming for however many years
this monstrous project would take was unbearable.
Besides, I rationalized, maybe after a few years he’ll
get bored with IT! I began making excuses as I
edged toward the door.

“Well, Bruce, you know I’d love to get into this
with you but what with Christmas coming up and
the convention in July and all my commitments . . .
He cut me off. “Of course I don’t expect you to
play IT! out with me. After all, you don’t have a
copy. I’d be glad to buy another one,” he began
hopefully but the instant terror which I felt must
have appeared unmistakably on my face for he
continued on. “Anyway, the company people tell me
they’ve only sold two other copies so far. One to a
guy in Texas and the other to some Post Office Box
number in Argentina. Argentina is a little far for
correspondence so I’ll have to be the guy in Texas,
I hope that he’s a good player though.”

“You don’t mean . . .

“Of course,” Bruce replied. “Play-by-mail.
It was only when I had reached home after a
frenzy of savage, high-speed driving that I realized
I had left my copy of STARSHIP TROOPERS at
Bruce’s house. I haven’t gone back for it yet and I
never will.

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made payable to DIPLOMACY WORLD and sent
to the editor’s Indiana address.
The Ultimate Wargame

Charles Starrs' satiric look at recent trends in the hobby makes for amusing reading and is not all that far fetched if one pauses to consider what has transpired in the past year, and the still more grandiose plans announced by publishers for the coming year. The playability/realism debate seems to have been refined to its purest form and wargamers will soon have to seriously consider whether they are game players or simulation enthusiasts.

Last Saturday I went over to my friend Bruce's house. With me I had the new STARSHIP TROOPERS, which I had pretty much figured out, and a new game as his Christmas present. With every anticipation of a full day of high-quality gaming, and Bruce and I are just about evenly matched, I took the last corner before his house only to gape at three huge tractor-trailer moving vans pulled up in front of his house. Two were in the street and the third had backed up to the garage.

Getting into the driveway was hopeless, so I too pulled up in front of his house. Two were in the street and the third had backed up to the garage. Two were in the street and the third had backed up to the garage. Only one could have come up. Not that he was the type who might need to leave town suddenly, as he was pretty well off. He had retired three years ago at age 28 to live off the proceeds of a decade as a Wall Street Whiz Kid, or such like. Since then he had done almost nothing but gaming; he was one of the Old Guard, first seduced by the now-primitive intricacies of TACTICS and from then on only getting more and more ensnared until today, when he owned virtually every game published (making it very hard to buy Christmas presents for him) and had the entire basement converted over for the game, or Richie's, as well as an uncountable collection of books and accessories of all kinds. A Super-Gamer, in other words.

The van totally blocked the garage door, so I went around to the front and rang the bell. His wife Mary opened the door and let me in. Mary was also a good friend of mine, although in the past year she had developed the habit of constantly carrying two dice in her hand and rattling them. What was worse had developed the habit of constantly carrying two dice in her hand and rattling them. What was worse had developed the habit of constantly carrying two dice in her hand and rattling them. What was worse had developed the habit of constantly carrying two dice in her hand and rattling them.

But entering the library only made it worse. Previously the library had been the boardgaming center of the house. Crammed with game-related books and magazines. In the center had stood a beautiful table just the right size for most game boards and it was here that Bruce and I usually spent Saturday. But now everything including the table had been taken out and the shelves were totally filled instead with a uniform set of books, each about the size of the Encyclopedia Britannica and stamped with the game company's logo. Bruce reached over, pulled out a volume and handed it to me. "Open it." As I turned to the first page I was filled with a nameless fear (as H. P. Lovecraft would have described it) and in that single glance at the page it was confirmed. For the title read: IT!—The Individual, Man-to-man Combat Game of World War II, 1939-1945. "IT!" I had heard vague rumors of the existence of IT from friends of mine in the gaming business, but had dismissed them as somebody's idea of a joke. After all, the concept was impossible; nobody would even be crazy enough to dream about an IT! But here in my hand was proof that IT! existed, though in what form I could not imagine. Accurate to the last detail, yes, but playable? I doubted it, although you can never be certain until you've actually tried the game.

Bruce was standing there smirking at me with the same expression on his face as the time that he had defeated me in the final round of the Greater Western Berkshire County Napolionics miniatures tournament. I was, I must confess, a trifle dazed, and picked another volume at random from the shelves. Number 263, I noted dully. Opening it to page 1939-1945. "IT!" I had heard vague rumors of the existence of IT from friends of mine in the gaming business, but had dismissed them as somebody's idea of a joke. After all, the concept was impossible; nobody would even be crazy enough to dream about an IT! But here in my hand was proof that IT! existed, though in what form I could not imagine. Accurate to the last detail, yes, but playable? I doubted it, although you can never be certain until you've actually tried the game.

Penetrating the library with my gaze, I continued, indicating the library with an expansive wave of his hand, "and I stayed up until 2 AM getting the room cleaned out and the boxes unpacked. When I got up this morning I went right to work on the errata sheets in those two boxes, but the vans came and I had to leave them.

Did you notice how the rules are in ring-binders so the errata can be inserted right in the rules? It's a big job, but I enjoyed it."

"Sure," Bruce replied. "As in 'This is it!' The design team thought it would be a nice touch; they explained that in the introduction. The rules came yesterday," he continued, indicating the library with an expansive wave of his hand, "and I stayed up until 2 AM getting the room cleaned out and the boxes unpacked. When I got up this morning I went right to work on the errata sheets in those two boxes, but the vans came and I had to leave them.

"Well, you have to expect some oversights in a game of this scope."

"I've never heard of a game box of this size?"

I moaned, saying the first thing that came into my mind. "What about the errata?"

But as I turned to the first page I was filled with a nameless fear (as H. P. Lovecraft would have described it) and in that single glance at the page it was confirmed. For the title read: IT!—The Individual, Man-to-man Combat Game of World War II, 1939-1945. "IT!" I had heard vague rumors of the existence of IT from friends of mine in the gaming business, but had dismissed them as somebody's idea of a joke. After all, the concept was impossible; nobody would even be crazy enough to dream about an IT! But here in my hand was proof that IT! existed, though in what form I could not imagine. Accurate to the last detail, yes, but playable? I doubted it, although you can never be certain until you've actually tried the game.

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THE GENERAL

"Oh yes, down to the last 75-year-old in the Volksturm. The same with all the civilian counters, weapons counters, vehicle counters, ship counters and planet counters. The first two volumes of the rules deal exclusively with identification. I've only glanced through the rules so far."

I couldn't stand it any longer; I had to get out of the room. I went into the living room and gazed out and planed troners. The first shell went through a repetitious series of automaton-like weapons counters, vehicle counters, ship counters. I only glanced through the rules so far."

Volkssturm.

dollars. Shipping charges bring it up to almost a similar acquisition combined that I have seen. It would be worth it, even on $8.99...

"No, no, I meant eight hundred and ninety-nine dollars. Shipping charges bring it up to almost a like situation."

The next volume came in, and I decided to take it. No more actual space than the entire yearly supply of office forms used by the New York City government. But the board! God no, that I just could not conceive of."

Bruce prattled on. "The board is coming tomorrow, by truck. It's printed in 4" x 8" sections on heavy stock in 194 distinct shades of color. They say it's the most accurate game board ever printed."

I was starting to get a little hysterical. Somehow I had to make Bruce see the craziness of this entire operation. His whole life hung in the balance; I mean, if it took uncountable numbers of people six years to conduct the war the first time, how long would it take one person to recreate it, even on such a reduced scale?

"If you don't have room to store all the counters, where are you going to set the board up?" I screamed at him.

"That's all set already. I just bought 31 acres of that old farm two streets down; 30 acres for the board and I for the administration building. My architect is working on that now. He still hasn't come up with a definite design plan, since we can only estimate the amount of filing space it will take to sort out all those counters and keep them separated. Plus we'll have to have a room for the rules and another room for record keeping. Then once we get that finalized he has to start work on the building to cover the game board; I've bought enough clear fiberglass to provide both a backing and a cover for the board, but the counters will still be exposed. He's going to get a schematic of the board together so that he can put the supporting pillars in the least used spots and at the same time use them as the back wall of the game setup."

Very few of the elements added to the game were 'cold' in the sense of having no logical basis in the novel. Justification were demanded by SST playtesters throughout the developmental period. For example, since 'command communication' and 'chain of command' played such an integral part in the book, playtesters wanted to know why it had been ignored. It hadn't. Heinlein made special efforts to show that the M.I. was put together in such a way that it would be a real fluke or a very large disaster for the chain of command to be shattered to the point where no one could give orders. In most cases, an NCO or lance corporal would step up and fill the gap. If any position or platoon leader survived, the platoon would still function normally. In regards to 'command communication', the M.I. enjoyed all of the advancements of a technological society. There were very few limits placed on intra-platoon communications. In both of these situations, the absence of any inhibiting rules better represents the situation that occurred. Limiting rules are unnecessary since the game player's point of view (and his 'role' in the game) is that of platoon leader. He will always be in control of whatever functional units he has left. It wouldn't make much sense if he was out of the game whenever the platoon leader unit was eliminated; the Alien player never would attack anything else.

Painful as it was, certain elements were excluded from the game due solely to their lack of impact on the game system. 'Neodogs', hybrid canines used for scouting, were ignored because they were essentially a failure and operated only on the periphery of a conflict, beyond the scope of the game. The various personal armaments of Mobile Infantry and Aliens alike were ignored because they were lumped into a 'Close Combat attack strength' because of the relatively large scale of the game. Specially patterned Mobile Infantry ground maneuvers, often described in the book, were ignored because players would optimize their own methods of ground tactics that would fulfill the same purpose within the scope of the design, very little was left out.

On the other side of the coin, certain new elements, outside of the book, had to be added to make the game system work. These additions were minimalized as much as possible, but they were not totally ignored. "Designer's license" resulted in the Heavy Weapon units for both the Archonids and the Humandoids; they needed something with which to oppose the Mobile Infantry! The Archonid tunnel system became highly stylized and simplified to prevent the game mechanics from becoming a distraction into solving maze puzzles. Arachnid Engineers were introduced as a bookkeeping device to monitor a host of tunnel capabilities and functions. Considering their impact on the basic game system, the above mentioned additions had little effect on the scope of the game.

An historical event has its own sources of information and analysis. With STARSHIP TROOPERS, however, there existed the possibility that a game player who had not been exposed to the novel could have difficulty in anchoring the game into some sort of reality. From a marketing standpoint, there was a danger that the game would be without foundation, "off-the-wall"; an in-joke lost on the uninformed. Avalon Hill could have included a paperback copy of the novel with every game, but there were a host of economic and business problems that mitigated against it. Besides, if the game could not stand by itself, there was little wrong with the game. The solution was
to treat the novel as "history" and include as much background/introductory information as able within the pages of the rules manual. To this end, illustrations, excerpts, summaries, and thumbnail sketches were interspersed throughout the rule book to give the game player an approximate idea of the 'events' being modeled. As an extra measure, the rules table through the game presented at the end of the rules became an important tool in creating an aura of reality and familiarity.

Robert Heinlein's military/political universe was not without its faults, however. We are still not sure whether a Mobile Infantry platoon's TO&E should roster fifty men or fifty-two. (His arithmetic says 50, contextual clues say 52.) That is a minor glitch and does not in any way detract from the system. There is another rather odd problem that was not without its faults, however. We are attempting to interdict the tunnel systems. Terrans did nothing, the Arachnids could do very little. If they approached from two directions.

The solution to the interaction problem was approached from two different ways. The least preferred method was to alter a scenario's victory conditions. In scenario two, for example, the victory conditions artificially promote conflict by requiring the Terrans to maintain an eleven hex perimeter for no other reason than the player is instructed to do so.

The Arachnid player uses victory points by penetrating this perimeter. Voilà! Instant conflict. But is is not derived from the game system rules; it is artificial. The second and by far the better solution involves giving each side weapons or tools in the form of rules capabilities which they can direct towards their own end in a variety of different ways. Coupled with a set of victory conditions that generally award points for destruction of enemy units or occupation of key installations, players formulate rationale strategies based on the strengths and weaknesses of their own weapons systems. One side or the other can cause the enemy previous injury in its home environment by the proper applications of these weapons. Passive defense is impossible; the defender must fight or die. Comparing scenario 2 with scenario 5A, it is clear that by adding Combat Engineers, Demolition Munitions, Listening Devices, and Heavy Nerve Gas, the Terran player possesses the tools to effectively interdict the Arachnid's subterranean environment. If left unchecked, the M.I. player maps out the Bug tunnel layout, uses his Combat Engineers to blow HE and Nerve Gas into brain cells, and ultimately destroys the entire Arachnid complex. The Bugs must fight, or die in their holes. No special rules are needed to initiate the conflict, it is inherent in the general rules of the game. This is not a problem in the book where the author prescribes his own plot and action, but only surfaces when the game designer is depending on two opposing players for the 'plot' of his game.

In reading STARSHIP TROOPERS, one is struck by the notion that the Bugs would have been better off hiding in their holes. After all, the main Terran strategy was to cause the Bugs to come to the surface and fry them with superior weaponry. The interception of the Bug tunnels was only moderately effective. Mapping out the tunnel system was more of a defensive measure than an offensive tactic. Why, then, would Heinlein require that the Bugs come up and slug it out? Because of the strategic situation. Richard Hamblen, production assistant for SST, explains that the Arachnids, like the Terrans, are space-faring entities. The presence of the Mobile Infantry on the surface of a planet would represent strategic interaction between a subterranean Arachnid colony and deep space that threatened isolation. Besieged in their complexes, the Bugs would be faced with breaking the siege or being starved into ineffectiveness. The more that idea is examined the better it looks and the more Heinlein's genius is appreciated.

Why a game on STARSHIP TROOPERS? Personal biases, really. I still get chills when I read the last couple of pages of the book. And that's after about 30 readings. Mr Heinlein projected a military/political situation of surprising depth and logic. It was due to his brilliance that SST, the game, worked so well.

A. H. Philosophy . . . . Continued from Page 2

A. H. Philosophy . . . . Continued from Page 2

A. H. Philosophy . . . . Continued from Page 2

THE GENERAL

The response to the tear out counters of Vol. 13, #5 has been overwhelming. Regardless, this magazine will not add to the game glut by changing its policy on printing games in the magazine. War games is beginning to make itself of existing games from time to time, and include the tear out counters as a matter of convenience. One such project in the works now is a Pacific version of WAR AT SEA by Richard Hamblen which is scheduled for the July edition. We were tempted to produce this issue on its own right but felt that despite the added sophistication being built into it, it was too much of a trade off of WAR AT SEA to offer as a new game system. Although that issue will come with a foldout map and tear out counters it should not be mistaken as a trend towards a game of the month publication philosophy.

Elsewhere in this issue we advertise two new games (ARAB-ISRAELI WARS and THE COLLECTOR) plus the revised rules to THE RUSSIAN CAMPAIGN. As usual, we are highly pleased with all three and trust they'll be favorably received. Next time we'll give you the rundown on the SIX new titles to be released at ORIGINS III. And you thought we were leaving!

Lastly, mail order customers will be happy to hear that we now accept major credit cards. Just list your MASTERCHARGE, BANKAMERICAN, or AMERICAN EXPRESS number and expiration date with your order. There will be no additional delay in processing your order and you can expect the same quick service you've come to expect from Avalon Hill.

factory outlet

Whenever in the Baltimore area feel free to drop in at our design offices at 900 St. Paul Street. As a convenience to those of you that use our Toys House design offices, a wide selection of the latest games are available for sale to the public at full retail (sorry, no discounts given here . . . the half-price table discontinued as of April 30) Games, only will be for sale. No parts or issues of The General: they must be ordered by mail. Please bring your checkbook or be prepared to make exact change. Saturday visitors are invited to stay to playtest new titles or simply play their favorite games in the 1GB game room.

Hours: Mon.-Fri. 9 A.M. to 5 P.M.
Sat: 10 A.M. to 5 P.M.
TIRPITZ & THE DIE-ROLLER

Or, At Sea With the Binomial Distribution

By Craig Ransom

The Axis player has just received his seventh U-boat, and the Allied player is concerned about the fate of a convoy currently occupying the North Atlantic and scheduled to enter the Barents in order to be fairly sure of eliminating the U-boat menace. How many ASW factors should the Allied player allocate to the U-boat to port (kills take precedence over returns). How certain is "fairly sure"? The Tirpitz enters the North Atlantic in the face of a force of Allied BBs and BCs. In the past, the Tirpitz has always been disabled and returned to port instead of being sunk. The German gunnery has eliminated several Allied ships. Does the Allied player have enough combat factors to eliminate the Tirpitz once and for all? Will it only be disabled as before? How certain are the players as to the outcome of this engagement?

These questions and others are common to any combat simulation. What is the chance of "success" and "failure", which take on two possibilities out of six. The only important qualification to all this is that the probability formulas must be rewritten to incorporate sums of die rolls and the probabilities of scoring so many points when rolling a given number of damage dice.

The hook comes when damage must be scored. No simple table here; each "6" is rerolled and the total score becomes the damage inflicted on the target. The probability formulas are incorporated as damage against the defender's defense factor. Undamaged German surface craft receive a bonus on their combat rolls, but not on their combat shots. ASW works a little differently: dice equal to the number of ASW factors are rolled; each "6" destroys one U-boat, and each "5" returns one U-boat to port (kills take precedence over returns).

### Table 1: U-Boats

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<th>SHOTS DISABLED</th>
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| BASE PROBABILITY: THE BINOMIAL DISTRIBUTION

Referring to a basic probability text, we find a ready method of handling the above combat system in the form of the Binomial Distribution and associated formulas. The theory states that, given something which takes on two states (called "success" and "failure") and we know how often "success" occurs relative to all tests of the somthing, which we call "p", then, if we do an experiment of N trials by sampling our something N times, we can calculate the probability of having exactly x successes! Now, if we know the probability of "x" successes, we can also find the probability of having "at least x" successes by summing the probabilities of having x, x+1, x+2, etc. successes up to x equal N. The only important qualification to all this is that each sample be independent of the rest of the samples in our experiment of N trials.

### Table 2: Normal Fire (Allies, U-Boats, Airstrokes, Damaged Germans, Italians)

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| BASE PROBABILITY: THE BINOMIAL DISTRIBUTION

The probability of "removing" a U-boat from a sea zone (a "success" from the Allied standpoint) is determined by the number of shots and the probability of scoring so many points. The only important qualification to all this is that each sample be independent of the rest of the samples in our experiment of N trials.

From these, by summation, I vainly turned to determine the probability of removing "at least x" U-boats. This is what was done in table I. It shows the probability (represented as a percentage) of removing one to seven U-boats for ASW strengths of one to thirty. As one might expect, the more ASW you have, the healthier it becomes for U-boats!

### Table 3: Damage Rolls and Complications

The hook comes when damage must be scored. No simple table here; each "6" is rerolled and the total score becomes the damage inflicted on the target. The probability formulas must be rewritten to incorporate sums of die rolls and the probabilities of scoring so many points when rolling a given number of damage dice. Again, there isn't more than a few successes in each "success" event. The sum of all "successes" is equal to the number of ASW factors, 1 can determine the probability of having "at least x" successes by summing the probabilities of having x, x+1, x+2, etc. successes up to x equal N. The only important qualification to all this is that each sample be independent of the rest of the samples in our experiment of N trials.

The binomial distribution is a method of predicting the possible outcomes of a binomial experiment. In this case, the experiment is a combat round, and each sample is independent of the rest of the samples in our experiment of N trials. The hook comes when damage must be scored. No simple table here; each "6" is rerolled and the total score becomes the damage inflicted on the target. The probability formulas must be rewritten to incorporate sums of die rolls and the probabilities of scoring so many points when rolling a given number of damage dice. Again, there isn't more than a few successes in each "success" event. The sum of all "successes" is equal to the number of ASW factors.
(DIS column) is given. On the same line, under DAMAGE, the first line is the probability of rolling exactly that number of damage points, given the initial number of shots. The line beneath is the probability of inflicting "at least" the amount of damage.

**USING THE TABLES**

Now that we have them, we must use the tables for them to have any practical advantage. One thing we might do is to compare the relative effects of German bonus fire vs. normal fire. For 4 factors firing, the Allied player can "expect to cause" point of damage on a target. In statistics, the "expected" value is the value associated with the 50% level. The German can expect closer to 4-5 damage points for each 4 factors that he fires! That +1 bonus can really kill you as the Allied player unless you play to damage as many of his ships as you can as quickly as you can in battle. This means that firing single cruisers on enemy ships is no good-the probability of hurting him is too poor. You can as quickly as you can in battle. This means that the Allied player can "expect" to cause four factors is about the minimum the Allied ships should ever fire on a target. Inspecting the German fire (and expect to do damage) is two factors. Cruisers are good for upfiring smaller ships, and in groups of four, are quite useful.

I am sure that, with a little thought, other uses of the above tables will come to mind, particularly if used in conjunction with Richard Hamblen's excellent "FUZZY-WUZZY" article printed in Vol. 13, No. 3 of the GENERAL.

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>GERMAN SURFACE BONUS FIRE DAMAGE POINTS</th>
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<tr>
<td>SHOTS DISABLE</td>
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<td>19</td>
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<tr>
<td>20</td>
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</table>

**AREA TOP TEN**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
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<th>Rating</th>
<th>Previous Rank</th>
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<tr>
<td>1.</td>
<td>R. Chang</td>
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<tr>
<td>2.</td>
<td>T. Olson</td>
<td>KKF1972</td>
<td>2</td>
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<tr>
<td>3.</td>
<td>R. Wood</td>
<td>EEE1834</td>
<td>3</td>
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<tr>
<td>4.</td>
<td>C. Todoroff</td>
<td>CCE1973</td>
<td>4</td>
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<tr>
<td>5.</td>
<td>S. Heinowski</td>
<td>CEE1766</td>
<td>5</td>
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<td>6.</td>
<td>G. Kilbride</td>
<td>CEE1720</td>
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<td>7.</td>
<td>F. Alexios</td>
<td>CEE1714</td>
<td>7</td>
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</tr>
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<td>8.</td>
<td>D. Barker</td>
<td>DEE1680</td>
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<td>S. Packwood</td>
<td>CEE1621</td>
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<td>10.</td>
<td>D. Agosta</td>
<td>ECE1617</td>
<td>10</td>
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</tr>
</tbody>
</table>

The above players represent the 10 highest verified (11+ rated games) of the 3,000 member AREA pool. Players with an opponent qualifier less than C were not calculated among the top player ratings. The "Times on List" statistic is considered as "Consecutive" times on list. If a player slips out of the Top 10 for any length of time his next appearance is considered as his first.

The following AREA memberships have been terminated. No rating points can be awarded for games with these individuals as they are no longer members of the system.

06199-01 60641-01 91789-01
14037-01 70601-04 93555-01
45200-01 73139-01 CANAD-02
OVERS-01

**THE GENERAL**

TOBRUK X3 Continued from Page 29

expended ammo previously for various mischievous purposes. Thus, nobody enters the game with a full load.

Prior to starting the game, have each player roll a single die—in secret—for each weapon he has on the board. Multiply the die roll by 10, and this is how much ammo that particular weapon has. Thus, every weapon will have somewhere from a minimum of 10 rounds to a maximum of 60 rounds.

When playing "Duel of the Best, a separate die roll should be made for German APCR ammo. However, this die roll is NOT multiplied—it simply denotes rounds of Acquired APCR fire available for each Pr. IIIj. Since a IIIj's ROF is 4, a die roll of '1' yields 4 rounds; die roll '2' yields 8 rounds; die roll '3' yields 12 rounds; etc.

Obviously, this can result in scenarios which are highly unbalanced, and it can result in scenarios that are hardly changed at all ( Anything from 10 to 60 rounds is as good as a full load in a firefight.) But the point is that these die rolls are made in secret. No matter how low your own ammo, you can't be sure that your opponent hasn't been skunked too. If you charge boldly across the board—he just might make a hasty exit! So, although some games may be hardly be affected at all, the routine play of this rule will, upon occasion, produce some mighty queer—and interesting—desert engagements.

PANZERBLITZ Continued from Page 30

As the weather got colder, the vegetation changed. Lower ground cover first disappeared, and next the forest thinned out. Coupled with the freezing of the ground to as deep as three feet, cover became more difficult to find. Some German units were reduced to using anti-tank mines to blast foxholes.

At the same time, the effectiveness of H & M class artillery improved. Most of their killing power comes from blast and shrapnel. The increased hardness of the ground and the reduced low vegetation both helped improve the shrapnel characteristics. Just the opposite occurred during the muddy season.

On the Eastern Front, these classes of artillery used either timed air bursts or impact bursts. It was up to the Americans to develop the proximity fuse. Close assaults are adversely affected by both extremes in the weather. Rain/mud and snow/ice slow the forward movement of troops making assaults, and prolong their time in exposure to defensive weapons. What few winter assaults took place were generally preceded by heavy artillery fire. Even so, the failure rate of winter assaults was much higher than those in other temperatures.

In general, the three weather conditions called for somewhat different tactics by small unit commanders. As a rule, the worse the weather, the more important the part of the infantry. However, PANZERBLITZ does not account for the failure of equipment, and any attempt to include it in the game format results in a cumbersome situation. Thus the situations do not feel the weather more than the others.

**GAME BALANCE**

All the modifications have been playtested. This testing has shown that several situations border on the unbalanced when rain/mud or snow/ice options are used. Nos. 2, 3, 5, 6, and 8 feel the effects of weather more than the others.
DOUBLE TOBRUK:
The most crucial decision in designing any simulation boardgame is selection of appropriate time and distance scales. Almost any scale you choose will be perfect for time distance scales, then, serves to focus a game on simulation boardgame is selection elements emphasize-but
time DOUBLE which individual tanks and infantry squads are opposing units were in the same hex, because oft
to see why this scale was selected. The designer of the board. And the tight time scale was simply more realistic in terms of mandatory me
simulating weapons. For these purposes, the game scales are

However, you pay an immediate price in terms of movement (and also in terms of ability to simulate terrain, which I'll discuss briefly later). Considering the immense distance across a hex, a tank isn't going to get very far in 30 seconds: anywhere from 2 to 5 (maximum) hexes. Infantry fares even worse, covering one or two hexes at most. Now, this presents no real difficulty and is certainly not a game problem. But PANZER LEADER players always need to allow time for searching; the various rates of fire for different weapons. For these purposes, the game scales are ideal.

If this doesn't satisfy you, simply give infantry a melee Zone of Control. A melee is optional when units are adjacent (either player may declare a melee, no matter whose movement phase it is); mandatory when in the same hex. (4) Be sure to play the optional Undulating Terrain Cover rule (p. 20). Theoretically, you should now be able to seek such cover in any cluster of four hexes. But in practice you'll almost always have a "preferred" hex, so I suggest: (a) Before moving an AFV, you must announce that it is seeking hull defilade cover; (b) this halves its movement steps toward terrain; (c) denote a hex within its halved movement range, and roll for cover in that hex.

(5) Finally, any number of minor decisions regarding adjustments to this scale will have to be made. In general, I suggest you make whatever adjustments preserves the original game system intact. For example, I would retain infantry stacking at six units per hex. (You may wish to experiment with halving this to three units per hex later, to see how it affects melees). Morale range should probably be doubled to four hexes in any case.

Smoke should have a Smoke "Zone of Control" so that it retains its effectiveness in blocking Line of Sight. I would not, however, give smoke from burning vehicles such a smoke ZOC. But that's my preference.

Notice that I have only doubled, not quadrupled, the number of hedgerows, antitank trenches, and minefield counters in a scenario. This is because they are primarily linear defenses; giving them "depth" would be incompatible with the game system (and produce unrealistic results). It's as simple as that.

The main advantage of this system is that you'll get a much greater "feeling" of the range and distances of the desert. Your tank images on the counters will be closer in proportion to a hex (though still too large), while the unlimited stacking rule still (barely, I guess) can be played. And, best of all, the more mobile of your tanks can now swarm about in the desert with ease—up to ten glorious hexes per turn! While it doesn't make any practical difference—tactics on the regular game board apply here—the psychological liberation is exhilarating.

Finally, this greater area and smaller hex scale allows more varied desert terrain—depressions, etc.—being introduced to a limited degree without having them lock in the game. You must still be careful about introducing terrain. But you will gain some notion of the small hex scale and large area map needed to make practical a scenario laid in Europe rather than the desert.

If you want to test out this scale before ordering black hex sheets from AH, simply try a TOBRUK firefight using four TOBRUK board sections instead of one (assuming you know somebody else who also has a copy of the game.) Who knows, you may be pleasantly surprised—and on your way to bigger and better battles.

TOBRUK-BY-MAIL:
If I think a game like TOBRUK is impossible to PBMM, you're in for a surprise. It's not only possible, but easy and fun—and using firefight can be accomplished with ten mailings maximum. Here's how I did it:

(1) Assemble all movement and fire are simultaneous. This means a tank assigned to fire at a target will do so even if it is simultaneously destroyed by enemy fire. Delete the Dueling rule.

I strongly suggest using optional rules Undulating Terrain Cover and Best Target Aspect (p. 20, rules 4 and 6).

(2) Since play is simultaneous, you and your opponent must agree on a weekly or bi-weekly mailing date upon which you exchange moves, for example, complete "Turn".

When writing up your move, observe the following sequence:
a) Carefully plot all movement, giving hex and final facing of every vehicle that moves. Specify if it seeks undulating terrain. It is not necessary to denote Best Aspect; it's your opponent's obligation to determine whether he is entitled to an aspect superior to your final facing.
b) Now assign targets to those weapons eligible to fire. Where a tank has two weapons, be sure and assign a target for each weapon. Also, carefully note the sequence in which the various weapons will fire (for purposes of resolving combat only). Obviously, each player must keep a Target Damage Roster for both sides.

That's a complete move.

How do you resolve all those dice rolls, you ask? That's the easiest part. Simply look up Tom Olson's Hexagonal PBM CRT system described in GENERAL 11/4, p. 28. When mailing your move, you need only list one "most active" stock as Tom suggests. However, assume the stock listing is a circular drum. Continue drawing a line after every sixth stock following the "most active"—going from "Z" to "A"—until you get back where you started. This gives you quite a few die rolls—more than enough for a firefight. If playing a scenario, throw in a random stock exchange—go from "Z" of N.Y. to "A" of American—from "A" of American to "A" of N.Y. Obviously, this is where you need a strict sequence in resolving your opponent's move. I suggest:

a) Resolve all attempts at Undulating Terrain cover.
b) Resolve all weapons fire in sequence.
c) When a weapon scores a hit, resolve that hit on the Target Damage table immediately.
d) When the Target Damage table yields, a "P" result, Possibility of KILL, resolve that possibility immediately.

If a player discovers an error was made in resolving his combat he may send a request to play that move over instead of mailing a new move. If he does not exercise this option at this time, the move stands, and the game proceeds.

You may use any one newspaper in your own hometown.

LOW-AMMO FIREFIGHTS:
TOBRUK firefights are excellent little "quickie" games, as well as good proving grounds for experimental rules that would dirt up a more realistic game.

However, the restricted space and short game time of the firefights removes any realistic ammo usage restrictions a players feel. The Fire Initiation Doctrine doesn't do much at short range, and there's not enough time to spend a full ammo load even if a player wished to do so.

An interesting and fun way around this is to assume both forces in a firefight have been wandering around the desert awhile and

Continued on Page 28, Column 3
In 1812, after marching through Poland, Napoleon invaded Russia with an army of about 500,000. He defeated the Russians at the Battle of Borodino and took Moscow on September 14, 1812. Shortly thereafter, fires accidentally or purposefully set swept through the city. Lacking food or shelter for his army, Napoleon was forced to retreat across Russia during October and November of 1812. Severe weather, starvation, and Russian guerrilla tactics reduced the French force from the original 500,000 to one of less than 50,000. Russian weather won its first acclaim.

June 22, 1941 marked the invasion of another army who was to learn first hand of the attributes of Russian weather. The German army who set swept through the city. Lacking food or shelter, they couldn't outfight the Russians. Each delay waiting for the roads to dry accumulated lost time toward the ultimate failure of the strategic goals.

As summer turned to fall, the prospects for the capture of Moscow still looked good. But following the great battle for Vysma, the weather got worse. Most of the German Generals now wanted to break off the fight and retreat from a losing winter line. They remembered what had happened to Napoleon. In fact, many began to reread Clausewitz's grim account of 1812 with apprehension.

Yet the push for Moscow was again renewed on November 15 when the weather momentarily cleared. After fighting both the Russians and the weather, the advance ground to a halt. General Zhukov picked this time to begin a countermovement on a grand scale. By weight of numbers he drove the exhausted Germans back, broke their flanks, and produced critical tactical situations all along the front. From General down, the German Army was filled with thoughts of Napoleon and his unsuccessful retreat from Moscow 129 years before.

Hitler forbade any retreat other than local tactical withdrawals. The wisdom of such an order has been debated ever since. Certainly his decision exposed the men to the force of the Russian winter, for they had neither the clothes nor equipment necessary for a winter in this climate.

OKW and OKH had planned for an eight to ten week campaign. But even while doing so, they set in motion the military logistics to provide clothing for the German Army in the winter of '41-'42. At the very least they expected to have an army of occupation.

However, the logistical train they had set in motion was designed to function in a German winter, it couldn't compete with what it faced. Nobody had planned for weather so cold that motor oil froze. . . . In fact supply depots in Germany considered the first complaints about motor oil as nothing but exaggerations from the front. It then came as a shock that German steel bayonets which had worked so well in combat in France couldn't cut soup in Russia.

As the winter got worse, even vehicles froze to death. Drivers who stopped for too long found themselves infantrymen. The common method of starting light tanks became the fire under the engine.

Weather began to play as important a part in casualties as did the Russian Army.

**Weather and Wargaming**

Strategic wargames have usually made allowances for the Russian weather by limiting mobility during some or all of the months October to March. STALINGRAD, for example, gives a die-controlled weather condition. As these types of games deal with warfare on the Corps or Arm level, they do not account for topographic or vegetation changes except to consider that the rivers or lakes are frozen under certain circumstances.

Tactically the weather affects the terrain, the unit mobility, fighting capabilities, and the weapon effectiveness. Each of these is independent to some extent, but they cumulatively cause changes in the small unit tactics.

**Weather Blitz**

There are three primary weather conditions which affect the tactics in PANZERBLITZ: warm/dry weather, rain/mud, or snow/ice. Modification of the terrain Effects Chart, the Weapons Effectiveness Chart, and movement factors of selected pieces allows us to approximate the effects of weather on unit tactics.

**TEC Modification—add to the PANZERBLITZ TEC**

**RAIN/MUD:**

- Woods: Cost 1 MF to enter. Costs trucks and armor 2 MF.
- Roads: Treat as clear terrain.
- Gulleys: Wagon and 1 costs MF/hex. Others 2 MF/hex. Costs wagon and 1-1 MF to leave, trucks 6 MF, others 3 MF.
- Slopes: Wagon and 1 units 1 MF to enter, trucks 5 MF, others 3 MF.

**SNOW/ICE:**

- Woods: All woods hexes without a meeting of three solid green lines at a corner are now costs trucks 5 MF to enter. Costs trucks and others 3 MF.
- Swamps: Treat as clear terrain. May be blown of mobility, albeit.
- Ponds: Treat as clear terrain. May be blown.
- Slopes: Now costs tracks 5 MF to enter.

**Movement Factor Modification**

**RAIN/MUD:** Subtract 1 from MF of all German Armor on the Pz I/II chassis or larger.
- Subtract 2 from MF of the German SdKfz 251 halftrack C unit.
- Subtract 2 from MF of Armored Cars.
- Subtract 1 from MF of Russian SU 152, JS, and Js.

**SNOW/ICE:** Subtract 1 from MF of SdKfz 251. Subtract 2 from MF of all Armored Cars.

**Weapons Effectiveness Modifications**

**RAIN/MUD:**

- 1. H & M class add 1 to die roll when fired at I or C units.
- 2. CAT—subtract only 1 from die roll when used against I units.

**SNOW/ICE:**

- 1. H & M class—subtract 1 from die roll when fired at I units.
- 2. CAT—subtract only 1 from die roll for CAT against anything.

**Weather**

The conditions under which all the historical situations were fought can be obtained from a normal city library. For example, situation #8, relief of the Korean pocket, was hampered by the cold, rain, and snow.

Instead of presenting the actual weather for each of the twelve situations a probability chart for the three kinds of weather is shown below. In this manner, the players can let chance decide the conditions, as it does in actual life. These are rounded off to fit the six chance outcomes of a die.

They are developed from the scanty weather records available for this part of eastern Europe.

**Weather Effect Chart**

The general weather conditions were

<table>
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<tr>
<th>Situation</th>
<th>Die Roll</th>
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<tbody>
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<td>#5</td>
<td>5</td>
</tr>
<tr>
<td>#6</td>
<td>6</td>
</tr>
</tbody>
</table>

**Discussion of Modifications**

Russian soil in most of the situations cards was of a class that produces a mud somewhere between peatmoss and white glue in adhesiveness and with the viscosity of quicksand. Vehicles had their effective life shortened by the action of this material.

While the Russian designers foresaw the use of armor in this morass and designed for lower track loadings, they still suffered a loss of mobility, albeit nowhere near what the early German Pz I/II to IV did. Both armies found that wheeled vehicles became almost useless in the cross country aspects during the rain/mud season.

The horse became important, for it could go where only tracked vehicles or men could venture. And you can eat a horse whereas a tire doesn't make very good soup.

With the extreme cold, poorly balanced, overloaded chassis, or underpowered vehicles found the mobility stripped from them by the need to have traction and move slowly. The SdKfz had less power than it needed and paid for this lack during cross-country movement in the winter.

Continued on Page 28, Column 3
In its essence, DIPLOMACY is a multiplayer game, because negotiation is the major part of play. Nonetheless, the absence of luck factors in the mechanics, combined with basic simplicity, make DIPLOMACY attractive as a two-player game—especially when one can't find several opponents at once. Unfortunately, the outcome of the rulebook two-player version depends entirely on the coin flip for Italy; if Italy or another Great Power is in Civil Disorder throughout the game, it is usually a 17-17 or 18-16 draw between good players, depending on which three countries a player operates and how well he outguesses his opponent. But there are several more complex systems that may be used with DIPLOMACY to create games of considerable subtlety, to the point that negotiations are reintroduced in an abstract way. Experienced players can also add simple variations on the standard mechanics to increase complexity, but here I will only discuss the more conservative two-player systems. Formal rules are not presented below because each basic system is subject to several variables. Some of the following variants are my own, but most have been devised by others, often independently by several people. Most may be used for multi-player DIPLOMACY, for which many were originally designed.

The outstanding way to play two-player DIPLOMACY is to include some system whereby players may take temporary control of neutral countries. Each person plays one of the seven Great Powers, and uses political factors (PFs) gained from center ownership to attempt to control non-player countries (NPCs). These non-players may be only the Great Powers, or the twelve minor countries may each be given a unit and become subject to control. One may even rule the Great Powers off limits, so that only the two players and minor countries are in the game, but this requires several additional rules to avoid stalemate. Control of a non-player country usually is determined at the beginning of each game, and the combining players are all of the NPC's units for spring, fall, and fall adjustments. In some games additional rules are added to prevent unrealistic occurrences, such as a non-player country moving its unit(s) out of its center(s) so that units of the controlling player's country can capture them.

Victory criterion in two-player games is usually 19 units on the board, since an 18-16 result is often a stalemate or a temporary imbalance in a basic 17-17 draw position, and does not really prove that one player is superior to the other. On the other hand, there are several stalemate lines that are very similar to each player's center in a game with several players. An alternative victory condition is that the player who first occupies an enemy home center with one of his home country units wins.

There are three basic control systems: mercenary (or bribery), popularity index, and modified ORIGINS OF WWII. In each system, each player gains political factors each adjustment period based on the number of centers his home country (not countries controlled by him) owns. Sometimes more credit is given for a home center than for a neutral center. The amount of credit varies between two and five, but the actual number is not particularly important. Four is a good compromise. Usually each player is given about six times this basic number to begin the game, so that control of some countries can be established before the first moves.

Using the popularity method, each player secretly "bids" for control of non-player countries. The player with the higher bid subtracts that number of PF's from his total and controls the country for the next year.

Losing bids are not paid, of course. A player's bid total may be no more than the number of PF he has, but if he must pay more in winning bids than he has, a penalty is assessed. A severe example would be that the player loses all of the PF's he has accumulated, but his winning bids do not count, and the other player may choose to pay his own bid in such a country and control it, or not pay and leave it neutral. Unused PF's may be accumulated from year to year.

For example, France is playing Austria; the value per center per year is three PF's each begins with 18. France bids 10 for Germany, 4 for Turkey, and 2 each for Rumania, Italy, England, and Russia. Austria bids 5 for Turkey, 4 for Germany, and 3 each for Italy, Portugal, Holland, and Bulgaria. Successful bids are italicized. France pays 16 PF, and Austria pays 17. Though both bid more than 18, neither had to pay more because of higher bids by the opponent, so there are no penalties.

A second method is the popularity index. Instead of bidding, each player allocates his PF's to the various non-player countries. The total popularity index is accumulated throughout the game. At the beginning of each year, the player with the highest popularity index in the NPC controls it. PF's may be saved by the player rather than allocated, giving him greater flexibility in future years. Using this method, players tend to gain control of certain non-player countries early and reinforce that control, so that there is less fluidity in the control pattern. A player can continue to allocate PF's to his popularity index in an NPC, giving him the opportunity to build up the center holdings of the NPC without much fear that he will lose control the next year.

For example, the following might be a partial list of popularity indices in non-player countries at the beginning of each year in a game between France and Austria. An asterisk indicates control; a + indicates PF added for that year.

<table>
<thead>
<tr>
<th>Country</th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
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<tr>
<td>France</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Austria</td>
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The third method is a modified version of ORIGINS OF WWII. Political factors are accumulated each year in NPC, as in WWII, though not in the opponent's home country, and if one player can eliminate all of the other player's PF's in an NPC and survive with at least a specified number of factors, he may take control permanently. The required control number should vary with the number of centers the NPC controls at the time. If each player receives four PF per center his home owns at the end of each year, then the control level should be four per center owned by the non-player country. For example, if Turkey owns two centers, the necessary number of PF for control would be 8. After PF's are placed, combat may be initiated simultaneously using the ANARCHY rules. It may be recommended devising a different combat table which depends less on luck and total elimination. No one wants to turn DIPLOMACY into a dice game, nor should it be very easy to gain control of an NPC since that control lasts the remainder of the game. After PF combat, control is determined and standard play goes forward for the year.

Another two-player version is ANARCHY. The standard country borders and composition are completely ignored. Each player is assigned home centers all over the board, either at random or by simultaneous selection. All other centers are unoccupied, like the minor countries in standard DIPLOMACY. Players build one center in their home centers before actual movement begins. For example, a player might begin with home centers in Sweden, Greece, Turkey, and Austria. Six centers is a good number for a two-player game, and a few additional rules should be added if a random distribution is used in order to avoid unfair set-ups—for example, no center may be within two moves of another (counting land and sea spaces equally), as above, and each player is entitled to at least three coastal home centers in order to be able to build fleets. ANARCHY was originally devised for more than two players (with suitable guidelines it can be used with up to 34), and is much more interesting than the versions given in the rulebook for other than seven players.

Another method of play for two players involves giving each player a country fairly close to his enemy, say Germany and Austria or France and England. All the other Great Power centers are set up as usual, while minor country centers may be open or occupied, depending on whether you prefer a fast or slow game. The difference between straight DIPLOMACY and this version is that when a neutral unit is dislodged, it is not automatically eliminated, but is randomly retreated to a legal retreat space if one is available.

The final one-on-one version involves control of minor units each season without regard for neutral countries. Each season, including adjustments, each player may write one order for a neutral unit per center he owned at the end of the previous year. Thus, in Spring 1901 an English player can write three orders for neutral units. The same order may be written more than once. When orders are revealed, each neutral unit is moved according to the majority of orders, not doing anything if there is a tie. For example, England might order F Bre-Mid, F Bre-Mid, and A Mun-Tyr. His opponent orders A Mun-Bur, F Bre-Eng, and F Hol-Nih. The italicized orders are not executed. Mun because there is a tie, Bre-Eng because Bre-Mid was ordered more times.

Remember that these are only basic versions. They can be combined or added to at the discretion of the players.
In most simulation games the complete disposition of the opposition lays before you, but a feature of most naval games is the lack of such intelligence, creating an important aspect of the game—the search phase. Face to face (FTF) competition in MIDWAY can tell the opponent what regions to avoid by hearing what regions the enemy is calling out in his search patterns. In JUTLAND it's even worse in that no hex can be called out in many of the variations without something in the hex, thus telegrapthing where your forces are. By mail, however, with a third party all of these problems disappear.

I've played a number of games of MIDWAY and JUTLAND using a third party, which generates a much more realistic game—adding the problem of not knowing the other player's search pattern until you've been found. This eliminates (especially in JUTLAND) a player's ability to deduce an enemy's position from his search pattern.

In MIDWAY the third party (hereafter called the umpire) receives information from both players and informs them if anything was found. Neither side knows the whereabouts or ready condition, or what squares to avoid because of a search pattern, which approaches the real situation more realistically. The honesty problem no longer rests with the players, but with the umpire. This should be easier to control as he should have a less vested interest in the outcome, and can be checked upon later. The same things applies if the umpire conducts the die rolls. This enables a naval game to be played by mail with the player-honesty problem minimized and the game realism maximized. This is also true of the battles, as will be seen later.

Some slight rule changes are possible which makes for realism, such as:

1. Any air search is directed to a specific zone. The region searched is that zone plus all other zones adjacent thereto. This prevents one from increasing his search range falsely by merely making the edge of an area and calling out the whole area. An example: JAP player asks B4D can search (maximum range) to F4D. Instead of calling out F4, he calls F4D to the umpire where the search will be F4D and each adjacent zone: F4B, F4E, F4H, E4I, F4G, E4C, E4F, and F4A.

2. Ship search is automatic. One is normally hesitant to call many ship searches for fear of telegraphing his position to the enemy. No such problem exists with this version. Also eliminated is the possibility of two opponent's Task Forces (TF's) crossing the same or ending in the same zone without knowledge of the other's presence since neither player called out that search square. This is especially useful during night searches. Night ship search should be confined to only the occupied zones or those passed through at the same time.

3. Distribution of defensive fire from ships is assigned at the beginning of the battle and is not altered until the battle is over (or for a second wave if wave attacks have been agreed to). Many times in FTF games, if a ship on an attack order changes his subsequent gunnery assignments to save some ship of great value, in real battle all of this would be essentially simultaneous and all gun assignments would be carried out regardless of hits obtained.

A portion of attacks are permissible, but fighters must fight anyway. No portion of attacks on MIDWAY are permitted (Question 5 under "Midway" in standard rules appendix).

5. US player may leave the board only on the east side, and only after his CV's have sailed west of Midway and has undergone at least one attack on his CV Force. Sometimes the question arises as to what constitutes his CV force? If the US has two TF's operating, does an attack on one satisfy this rule to the extent that the other TF can leave also? It seems easier to allow the players to rule on this at the beginning of the game by mutual agreement rather than tangle the rules into a host of possibilities which border on the ridiculous. There's little argument if all 3 CV's are in one TF and it gets attacked, and at sometime they had sailed west of Midway that the rule for leaving the board has been satisfied. Other possibilities should be agreed upon by the players before the game starts.

A normal game would proceed in the following fashion:

1. Each player sends to the umpire his first move of each TF from his ready state, his search zones, and his ship distribution in each TF for both air or surface action so this is available to the umpire when needed.

2. The umpire then sends to each player the results of his searches and asks for each player's operation (CAP, attack, aircraft transfer, etc.). Also, he asks each player for his next move. Obviously, any changes in ship distribution, TF organization changes, and the like must be reported to the umpire at the time they are made.

3. If there are no attacks from either side during the operations part of the previous communication, the movement, ready state, and searches for the next turn are implemented; the results of which are communicated to the players.

It should be remembered that upon completion of a move, ready state, search, and operation that one of the two hour time blocks is checked off. We are trying to combine as many possibilities into one communication as possible so to speed up the game and minimize the amount of correspondence delays.

The game proceeds in the above manner until one side or the other decide an attack to be made. Then the following procedure would come into play:

AIR ATTACK:

1. The ATTACKER is given the DEFENDER's ship distribution and CAP if any. The ATTACKER then assigns his aircraft to the various targets and returns same to the umpire.

2. The umpire then sends the ATTACKER's aircraft distribution to the DEFENDER for his defensive AA assignments for his ships (and F distribution if CAP outnumbers attacker's escort), and returns this information to the umpire. The umpire then conducts the battle and informs both players the results of each individual attack.

3. Each player then sends the umpire his adjusted ship and aircraft distribution as a result of the battle, along with new move, ready, and state, and search. Procedure then follows along the initial lines until an operation involves a battle.

The umpire is duty bound to keep track of the losses on both sides but will NOT inform either player of his opponent's condition except at the completion of the battle. Each player is expected to keep track of such losses for his own intelligence. If he doesn't, that's his problem and he will have to ascertain the enemy's condition from scratch.

SURFACE BATTLE:

After two opposing TF's find themselves in the same zone:

1. The umpire sends JAP entry position on the battle board to the US player to indicate his entry position and return to the umpire. Either may try to abort, but only vessels on the last rank have the ability to abort if the right number comes up on the dice rolled by the umpire.

2. The umpire sends US distribution to the JAP. player and asks him to make his first move and remit to the umpire.

3. The umpire sends JAP. first move to the US player and asks for the first US move and any firing instructions.

4. The umpire then sends JAP. player results of US first move and fire and asks JAP. player for firing instructions and his next move. At completion of JAP. firing turn, the first move of the 4 move battle sequence is completed. The JAP. player's move is the first part of the second battle turn.

5. The umpire then sends the US player the results of his first firing turn and the JAP. firing turn and the next JAP. move. He then asks the US player for his next move and firing instructions.

The battle then continues in this fashion until one side successfully aborts, is eliminated, or end of the battle takes place. At the end of the fourth battle turn all other TF's move, ready, and search, and any group within movement range of the surface battle (if is continuing) may move in and join the battle. The next four battle turns are handled exactly like the first round—and continues until an end of the battle is reached. One must remember also that NO air attacks are permitted on ships involved in surface action. Of course, if a group aborts they are fair game to air attack.

Again, the umpire will keep strict tabs on all hits during the surface battle and informs each player, at the end of each firing turn, what happened but it's up to the player to keep track of the results for his total intelligence as to how the game is progressing.

At any time a player may ask the umpire the state of his own forces just to be sure the record is straight. However, he does NOT receive the same information on his enemy.

An obvious game plan so that all can be involved might be for players A, B, and C to engage in three simultaneous games. Game one would pit A against C with B as umpire; game two would engage B against C with A as umpire; and game 3 would pit A against B with C as umpire.
Letters to the Editor

To the Editor:

Edie: Sorry, it’s a response to the article printed in the Nov-Dec issue of "Beyond Free Range." First let me say that I agree with Mark, but I think you have taken the wrong approach. I think we are all working on the same side of the fence, with just different tactics. I think that the idea of having a "free-range" livestock system is a good one, but I think we need to be more focused on the issue of how we can make it work in practice. I think that we need to be more focused on the issue of how we can make it work in practice. I think that we need to be more focused on the issue of how we can make it work in practice. I think that we need to be more focused on the issue of how we can make it work in practice.

Thank you for your time and consideration.

Sincerely,

[Signature]

Dear Sir,

I would like to make a few clarifications on the previous letter from Edie, which appeared in the Nov-Dec issue of "Beyond Free Range." I believe that Edie misunderstood my point regarding the idea of having a "free-range" livestock system. I was not suggesting that we should simply abandon our current methods of livestock management, but rather that we should be more focused on finding ways to make our current methods more sustainable and humane.

For example, I believe that we should be more focused on finding ways to make our current methods more sustainable and humane. For example, I believe that we should be more focused on finding ways to make our current methods more sustainable and humane. For example, I believe that we should be more focused on finding ways to make our current methods more sustainable and humane.

I appreciate your efforts to improve the conditions for livestock, and I hope that we can continue to work together to find solutions.

Sincerely,

[Signature]
THE GENERAL

When a C.E. Demo charge is detonated, most of the C.E. Demo is consumed. Notice, if anything, has been destroyed?

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Q: Can Combat Engineers units exchange S.W.A.S. with each other in the same manner as M.I units?
A: Yes. In the scenario 6 addendum, are the Arachnid Combat Engineers Points for each complex or for both complexes combined?
A: Each complex receives 31 Demolition Points.

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Q: What happens if an engineer is killed by an enemy weapon before he can aid his engineer allies?
A: No. Since the engineer is not in contact with the enemy, he is not considered a target by the enemy.

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Q: What is the average score for a typical Hill RBG in the War? How much does it vary from game to game?
A: The average score varies widely from game to game. In general, it is around 2500-3000 points. However, some games may have higher or lower scores depending on the specific conditions of the game. It is important to note that the average score is subjective and can vary depending on the players and their strategies. There is no definitive average score for a typical Hill RBG, as it depends on the specific game being played and the players involved.
Vol. 13, No. 5 polled a 3.31 rating overall with individual articles faring as follows on the 1200 point maximum scoring system:

AFRIKA KORPS Series Replays 289

July 1944 268

Rules Expansion for W.S.I.M. 206

Ernie and the Pacific 236

Best Alternative to Play Balance 82

Campaign Frederick 74

Game Theory and 1797 47

A Closer Look at Richtofen's War 41

Avalon Hill Philosophy 30

Design Analysis - The Leftovers 26

Avalon Hill representatives Tom Shaw, Randall Reed, and Richard Hamblen will be attending Michi Con VI June 3rd-5th as the guests of the sponsors. In addition to manning an Avalon Hill booth andhosting several seminars, they will be in charge of tournaments in TOBRUK, WAR AT SEA, KINGMAKER, DIPLOMACY, THIRD REICH, FOOTBALL STRATEGY, RICHTOFEN'S WAR, and the AH Classics. Further information is available from William Niebling, 707 Whittier Ct., C. Saline, MI 48176.

Interest Group Baltimore and Avalon Hill will be sponsoring a charter bus to ORIGINS '77 in New York. The bus will leave the Baltimore area on Friday, July 22nd and return Sunday night July 24th. Meals and lodging must be arranged separately by each individual with the convention authorities. Those interested in this transportation should send a stamped, self-addressed envelope to Avalon Hill marked to the attention of Don Greenwood/Origins Charter Bus.

TORONTOCON will be held May 14 & 15th, 1977 at the Lord Simcoe Hotel in downtown Toronto. This will be combination Diplomacy/Wargaming convention with the major feature being a two round (6 hr/day) DIPLOMACY tournament. Admission is $5 for two days and further information can be obtained by writing: Andy Webber, 20 Graydon Hall Dr., #204, Don Mills, Ontario M3A 2Z9.

The Kaiser War Gamers Society is another group with their act together. They meet every Saturday at noon in the Kaiser Steel Recreation Center in Fontana, CA. Besides having numerous convention and athletic facilities available for their use they boast a 30' x 18' sand table for miniatures battles and a check-out game library of some fifty titles. A mammoth JUTLAND reinforcement is planned for the weekend of May 28th. Further information is available from Newton H. Wicks, 1048 Pepper, Fontana, CA 92335.

Brian Houston informs us that the “Organization of Rochester Combat Simulators” is attempting to start their own con — The Minnesota Campaign on June 4th and 5th in Rochester, MN. Interested parties should contact Brian at their P.O. Box 6603, Rochester, Minnesota 55901 address.

WARGY IV, the fourth Nebraska wargame convention, will be held in the Student Center of Pitzer College in Columbus, NE over the weekend of June 11-12. Inquiries should be directed to the attention of Chris Crawford at his 1796 26th Ave., Columbus, NE address.

The CSUN Simulation Gamers Association is sponsoring GLASS-II at the Northridge Campus of The California State University on June 17-19. Among the many board game tournaments to be held are competitions in KINGMAKER and DIPLOMACY. Admission charge is $3 at the door. For further information contact Jim Blancher, 15838 Minnehaha St., Northridge, CA 91326.

The Junior Achievement Hall of Free Enterprise on July 15th-17th is the site of the big doings in Cincinnati this year when Cinci Con VII takes place with no less than 60 separate planned events to hold your interest. Information can be obtained from the Boardwalk Hobby Shop, 1032 Delta Ave., Cincinnati, OH 45208.

The Central Pennsylvania Strategy Club meets the first, third and fourth Saturdays of every month from 10AM to 4PM at the US Army Reserve Center on 2997 North Second St. in Harrisburg. All aspects of gaming—from miniatures to sports are regularly engaged in. Interested parties should call Charlie Hickok (a charter GENERAL subscriber by the way) at 1717-5955.0603 or write Jack Thomas, 409 Cocoa Ave., Hershey, PA 17033.

John Prados, the designer of THIRD REICH, has announced plans for a formation of a Conflict Simulations Guild. This organization would be a professional organization of persons associated with the design and production of simulation games and the media pertaining thereto. Those who fancy themselves as such are urged to attend an Open Meeting on the subject at ORIGINS this July.

Rodger Mcgowan, our coveted chief illustrator, also edits a pretty slick magazine of his own entitled FIRE & MOVEMENT which covers the entire spectrum of board wargaming. AH fans will usually find an article or two dealing with AH games in each issue. Those interested should write: Baron Publishing Co., P.O. Box 845, La Puente, CA 91747 for further information.

On January 10 Elizabeth Phyllis Reed became Avalon Hill's newest release. All reviewers report the packaging to be exquisite albeit a bit messy at times. Both mother and designer are doing fine.

(Sigh) It just goes to show that puzzles are not easy to compose. Oh, the answer to PUZZLE No. 74 we printed last issue was correct, all right—just turn out that there are other correct solutions, all built around using archers to AV the 1st and 2nd Chariot and then pouring through the hole at N9 (you have to be careful to arrange it so you are moving through skirmishers when you are moving through your own fully occupied hexes, however.)

A number of rules errors came up in the solutions we received, so if you're wondering why you lost, this might explain it; the sequence of movement is crucial in Alexander, units must move in order, legally; a melee unit must stay in position and attack one of the units it is meleeing with (it can avoid attacking the other only if another unit comes up and takes over the fight); a non-missile unit cannot attack through an enemy in the front of a hex to attack an enemy in the rear of a hex—the rear enemy can be attacked only from the rear of the hex; and the skirmisher rule does not apply to hexes containing AV'd enemy units.

As a general rule, entries were rated by how many units they eliminated before the illegal moves, solutions with no illegalities got preference. Since the skirmisher rule clarification has appeared only in the GENERAL (Volume 13, No. 1), we were more forgiving with solutions that violated only this rule.

Only Randy Chambers of Philomont, Oregon, and James Stahler of Silver Spring, Maryland got 100% correct answers. Others receiving free merchandise included: R. Berry, Indiana; T. Kuk, Grand Rapids, MI; J. Crawford, Littleton, CO; R. Dushay, Fayetteville, NY; H. Hinton, Brookly, NY; W. Wagler, Vancouver, BC; A. Radlock, Waterloo, ON; and C. Rosselli of Milpitas, CA.

Contest No. 75 was a mathematician's delight. In the first two problems the largest single probability is that neither side will win—i.e., that both sides will be sunk/destroyed at the same time. However, the question was which side has the better chance of surviving at sea, so...

1. DRAW. The superior disabling ability of the HOWE balances the German's hitting power because the HOWE can take up to 5 damage points.

2. RENOWN (3-5-7). Compare with problem 1. The loss of the fire point hurts the Germans much more, because their gunnery is 80% more efficient.

In the second pair of problems the important point is that any hit or disabled result is probably enough to take care of a cruiser. A 3-5-7 causes an average of 1.5 hits/ disabled when intact, 1 hit disabled when damaged; a damaged 4-9-6 causes 1-1.3; an intact 2-2-5 causes 1—but it gets proportionally more hits, which the cruiser has a better chance of surviving (a disabled causes the cruiser to lose automatically, after all). Thus...

3. SCHARNhorst (3-5-7)

4. GNEISENAU (3-5-7)

An undamaged BISMARCK has the edge on the WASHINGTON, but as soon as it takes any damage all the WASHINGTON's superior disabling power dominates the fight.

5. ZERO (0)

6. 20. The probability of getting large numbers of U-Boats goes up tremendously with each ASW point when you get close to three times the number of U-Boats; the 21st ASW point raises the probability above 70%, but it takes 20 to get 50%.

7. 14.

The extra cruisers have an increased efficiency because the Germans can attack only one each round. These problems aren't even close.

8. The cruisers.

9. The cruisers.

10. 56.25%. To get to Russia a convoy must leave by turn 7 at the latest; if it is disabled late in the game, or if too many are sent back earlier, the British player cannot get them all to sea in time to get to Russia. The 43.75% chance of failure includes the convoys that are sent back and ultimately have to go to Britain (or stay in the U.S.)