Joe De Marco

Avalon Hill Philosophy Part 86

Although not all the games we mention in our annual Work In Progress reports eventually see publication, readers have shown an interest in knowing what's on the drawing boards for the year ahead. Doubtless some of the titles mentioned in the following report may rival *THE RISING SUN* as a game that was not to be, but most of them should eventually be published under the Avalon Hill banner. The list below is not all-inclusive as we reserve the right to sneak some surprises in between our annual reports, but it should give you a good idea of what you can expect from AH in the foreseeable future.

GOLD!, The International Investment Game

Finally, a financial game that combines simplicity and the feel of high finance. Designed by the same investment expert who did *FOREIGN EXCHANGE*, this one is a large drop in complexity from its predecessor. For two to eight players. Only three pages of rules and less than an hour playing time.

Game includes a 22" × 16" gameboard, 8 Prices Change/Yields Change Cards, 2 Playing Aid Cards, 450 Investment Certificates, 25 RISK Cards, 25 OPTION Cards, 8 playing pieces, a pack of money, two dice, one special die, and a rulebook.

Released at ORIGINS 81 for the princely sum of $25.00.

FLAT TOP

The long awaited AH revision is finally drawing to a close, and I think the result is a game that has been worth waiting for.

THE BATTLE OF THE BULGE

This revision of a classic game you've long awaited is the culmination of five years of intensive research and playtest. The result, we believe, will provide you pleasure for many years to come.

For you historical buffs, **BATTLE OF THE BULGE** is the last word in accuracy. Official American and German documents, maps and actual battle reports (many very difficult to obtain) were consulted to ensure that both the order of battle and mapboard are correct to the last detail. Every fact was checked and double-checked. The result—you move the actual units over the same terrain that their historical counterparts did in 1944.

For the rest of you who are looking for a good, playable game, don't look any further. **"BULGE"** was designed to be FUN! This means a simple, streamlined playing system that gives you time to make decisions instead of shuffling paper. The rules are short and clear-cut so you can get into play quickly and easily. Because important locations are clearly marked on the mapboard, set-up is a snap. The Player Aid Cards are designed to handle all the detail work, so you have more time for play.

Just because the game mechanics are easy to learn and remember, doesn't mean that **"BULGE"** is a simple game. Many special game features provide the color and that "feel" of reality that makes this an exciting recreation of the actual battle. Fortunately, these have been carefully incorporated so as to enhance the flow of play instead of bogging it down in detail.

Some of the Many Special Features:

- Tactical Air Strikes
- Strategic Bombing Effects
- German Airborne Drop
- German Infiltration
- Launching the Fifteenth Army
- Bridge Demolition
- Artillery Bombardment
- Special German Rocket (Nebelwerfer) units
- British Participation
- Several What If's Triggered by Battlefield Conditions
- Fuel Dumps

What's Inside . . .

- 22" x 28" Full-color Mapboard of Ardennes Battlefield
- Countersheet with 260 American, British and German Units
- Countersheet of 117 Utility Markers
- Time Record Card
- German Order of Appearance Card
- Allied Order of Appearance Card
- Rules Manual
- One Die

BATTLE OF THE BULGE is an operational recreation of the famous Ardennes battle of December, 1944—January, 1945.

- Each unit represents one of the regiments that actually participated (or might have participated) in the battle.
- Each hex is approximately 2 miles across.
- Each turn covers twelve hours of real time.
- Playing time averages between 3 and 9 hours, depending upon the scenario being played.
- Recommended for anyone 12 years and up.

Two Scenarios

- The Tournament Scenario covers the period of the German advance. Average playing time is two to four hours. Designed to be played at all official Avalon Hill tournaments.
- The Campaign Scenario extends the Tournament Scenario to include the Allied counterattacks. This is the ENTIRE battle. Average playing time four to nine hours.

BATTLE OF THE BULGE is available now for $16.00 plus 10% postage and handling charges (20% for Canadians; 30% for overseas) from Avalon Hill, 4517 Harford Rd, Baltimore, MD 21214. Maryland residents please add 5% state sales tax.

Black Spy Card Game

FOR SNEAKY PLAYERS

BLACK SPY is an intriguing card game for the whole family. The object is to be the player with the lowest score when one player goes out by getting 200 Points.

The **BLACK SPY** card deck is composed of five suits, instead of the regular four. Four of the suits have only one spy. But the black suit has six spys. Those are the guys you have to look out for.

The rest of the cards are other types of sneaky and shady characters: the Informer, the Interrogator, the Infiltrator, the Saboteur, the Assassin, the Agent, the Double Agent, the Code Breaker, the Deputy Director, and the Director. As with the spys, the black suited guys are the ones to look out for. All the others are on your side.

You never know what will happen when you lead a trick in **BLACK SPY**. It's not like regular card games where everyone just follows suit. You may find a spy in your midst. Or you may wind up taking the trick and leading again!

The rules to the game are less than one page. You can be playing the game within five minutes. Each game should last no more than an hour. Several variations are provided for those who want a little more strategy.

AIR FORCE ANALYSIS

by David Bottger

An Evaluation of the Planes of the New AIR FORCE

AIR FORCE is Avalon Hill's tactical simulation of aerial combat in the European theater during World War II. In its revision, Avalon Hill has preserved the best features of the original Battleline design while cleaning up the rules and adding several significant new ones. This article will examine these changes and then analyze the game and the aircraft portrayed with an eye toward the formulation of successful tactics.
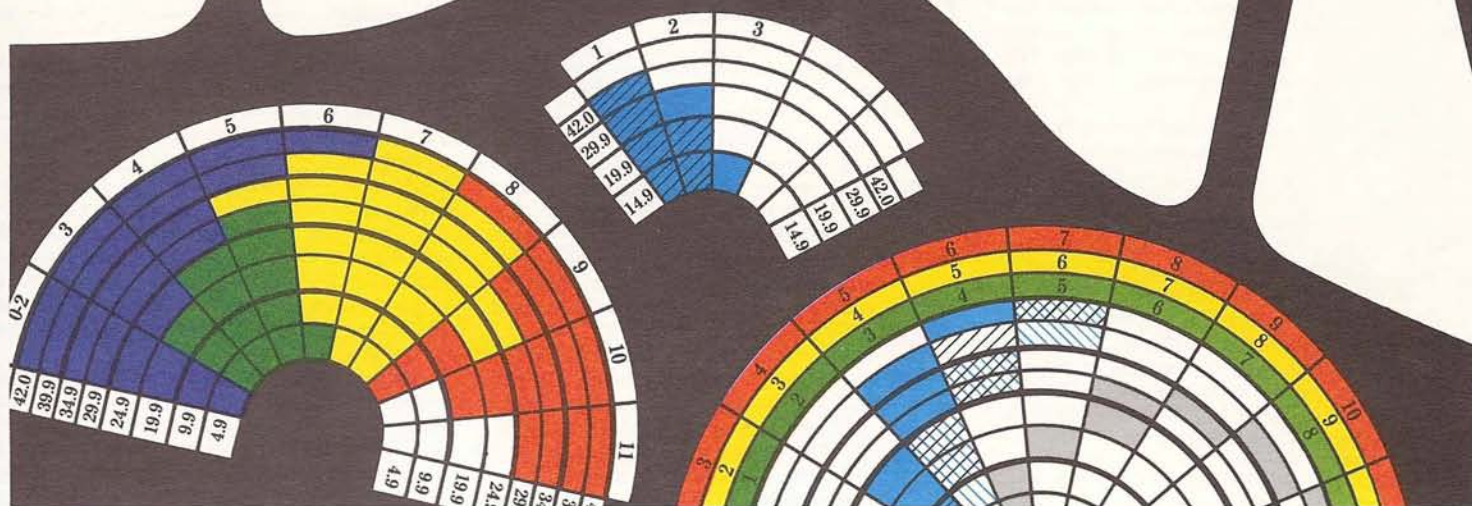
THE "NEW" AIR FORCE

For those unfamiliar with the game, Dr. Bieksza's article "The View from the Cockpit" in volume 17, number 3 of the *GENERAL* describes the *AIR FORCE* system, Avalon Hill has retained this basic system with modifications that contribute to realism or ease of play.

The most common criticism of the Battleline version centered, ironically, on the game's greatest strength, the simultaneous movement system. Since movement for an entire turn must be plotted in advance, neither player can react to his opponent's maneuvers until the following turn. The result has been analogized to a pilot flying with his eyes closed for ten seconds at a time.

Players soon discovered that there was virtually no advantage to being on the enemy's tail, since it was almost impossible to stay there. This was perceived as unrealistic, although my reading suggests that the tail position was less important than commonly believed, particularly late in the war.

Sequential movement presents the same problem to the player moving first. The second player, on the other hand, knows the final position of his opponent before performing any movement himself. As a result, the first player keeps his blindfold while the second receives an unwarranted advantage.

To resolve this dilemma Avalon Hill apparently borrowed the advantage rule from SPI's *AIR WAR*. This rule provides that an aircraft at 12 o'clock to its opponent (*i.e.*, directly in front) and no more than six hexes away and 2,500 feet higher must execute its movement before its opponent plots his, unless the opposing aircraft is itself at a

disadvantage. In essence this rule interjects sequential movement into the simultaneous movement system but it awards the advantage of moving second to the player who has earned it, rather than arbitrarily.

Two problems arise. First, as in standard sequential movement games, the advantaged player knows his opponent's final position before performing any movement himself. He also knows the final position of all other disadvantaged aircraft, including those over which he does not hold an advantage.

Avalon Hill has elegantly solved both of these problems by a single rule requiring the advantaged aircraft to follow as closely as possible the movement of the disadvantaged plane. This rule excellently recreates the historical situation of a pilot pursuing the enemy as he moves, rather than simply flying toward his final position. It also prevents the advantaged player from using his knowledge of the movement of other disadvantaged aircraft. He may, of course, choose to pursue a different enemy aircraft but must first waive his advantage.

In this regard, the Sequence of Play states that aircraft which are neither advantaged nor disadvantaged plot and execute their movement at the same time as disadvantaged aircraft and aircraft which do not take their advantage option of following the disadvantaged aircraft.

The next most significant rule change from the Battleline version imposes a 100-foot altitude loss on aircraft which end movement in a non-level bank without having performed a non-banking maneuver that turn. The actual penalty may be several hundred feet, counting the 200-300 feet which most fighters can climb without the loss of speed points. This rule discourages the common but unrealistic tactic of flying about in a perpetual right or left bank in anticipation of future maneuvers.

The combat system has undergone significant changes as well. As figure I shows, the new aircraft gunnery table reduces armament effectiveness at all levels except 16-22 gunnery factors. This is offset somewhat at lower gunnery factors by the fact that hit table modifiers have a greater effect now.

For example, under the old system a plane with five gunnery factors and a fire modifier of two on the tail of an enemy aircraft with a silhouette modifier of two gained only three hit tables as a result. Under the new system, the benefit is a full six hit tables. However, at a range of four hexes the attacker in this hypothetical situation starts with a basic (before application of modifiers) hit table of one, while under the old system he would start on table three. The net result is a gain of only one hit table with the revised rules.

Air Gunnery

Total Gun Factors	Range in Hexes					
	1	2	3	4	5	6
1-2	2	2	2	1	1	0
3-4	4	3	3	2	1	1
5-6	5	5	4	3	2	1
7-8	7	6	5	4	2	1
9-10	9	7	6	4	3	1
11-12	11	9	7	5	3	1
13-15	12	10	8	6	4	2
16-18	15	12	9	7	4	2
19-22	16	13	10	7	5	2
23-26	17	14	11	8	5	2
27+	19	15	12	8	6	3

2a Aircraft Gunnery Effectiveness

Total Gun Factors	Range in Hexes					
	1	2	3	4	5	6
1-2	-1	-1	-2	-2	-3	-3
3-4	1	0	0	-1	-2	-2
5-6	2	2	1	1	0	-1
7-8	5	4	3	2	0	-1
9-10	8	5	5	2	2	-1
11-12	10	8	6	4	2	0
13-15	11	9	7	6	3	1
16-18	15	12	9	7	4	2
19-22	16	13	10	7	5	2
23-26	18	14	11	8	5	3
27+	20	16	13	9	7	4

Figure 1: Old (top) and New Aircraft Gunnery Tables

Without calculating every possibility, it appears that generally the new combat system diminishes the firepower of aircraft in the 1-15 gunnery factor range at lower modifiers but increases it at higher modifiers; has no effect in the 16-18 gunnery factor range; and slightly increases firepower at all modifiers for 23 + gunnery factors.

The firepower effectiveness of bombers has been reduced by a rule providing that their gunnery factors must be applied in increments of no more than four, whose fire must be resolved separately. This rule dramatically affects well-armed heavy bombers like the B-17 and B-24, but not without good reason. With a minimum of eight gunnery factors in every clock sector, the B-17G was more than a match for any fighter under the old rules. This revision more accurately portrays the lack of coordination among gunners.

Of the new rules, my personal favorite involves the optional Pilot Characteristics section. First, players roll one die on the Pilot Characteristics Determination Table (figure 2) and read the results under the column corresponding to the year and the nationality of their pilot. Then they consult the Pilot Characteristics Table of effects (figure 3) to discover what benefits they enjoy from their pilot's superior vision, reflexes, training or experience. A pilot with exceptional reflexes, for example, who finds himself disadvantaged need only reveal one-half of his movement plot to his pursuer. This rule adds a needed "human" touch to a game which otherwise emphasizes machinery.

Figure 2:

PILOT CHARACTERISTICS
DETERMINATION TABLE (OPT)
Find Year on Line corresponding to Nationality
Nationality
German 1939-42 early '43 late '43-'44 1945
American late '43-'45 late '42-'43 early '42
British '39 & late 1940-early
   '42-'45 '42

Die: 1	ETTRV	ETTRV	ETRV	ETRV
2	ETRV	ETRV	ETR	T
3	ETTR	TR	T	RV
4	ETT	ET	RV	R
5	RV	RV	R	•
6	R	•	•	•

Key: E = Experience (roll again to determine ace), T = Training, R = Reflex, V = Vision, • = no characteristics.

Players may discover for themselves the few other changes incorporated into the new *AIR FORCE*. As might be expected, the graphics are better, although it is not clear that the new aircraft data cards are more functional than the old. Given the overall quality of the game, we may not see a new game on the subject for some time, and certainly not a better one.

BASIC TACTICS

AIR FORCE is a game of resource management. The resources are altitude, speed, power and ammunition. Maneuverability is the ability to consume the first three of these effectively. Victory will go to the player who can get the greatest output from his resources.

Hit Table Analysis

Table 1	Proportion of Hit Types (pct.)						Expected Hits						
Hit Tables	F	W	E	C	L	G	F	W	E	C	L	G	Total
1	17	17	0	0	0	0	.17	.17	0	0	0	0	.33
2-3	29	18	18	12	12	6	.42	.25	.25	.17	.17	.08	1.33
4-6	27	24	20	13	9	7	.67	.61	.50	.33	.22	.17	2.50
7-12	25	23	18	14	12	7	.89	.80	.64	.50	.42	.25	3.50
13-16	24	22	21	12	12	7	1.08	1.00	.96	.54	.54	.33	4.45
17-19	24	23	19	12	12	9	1.33	1.28	1.05	.67	.67	.50	5.50
20	24	24	19	14	11	8	1.50	1.50	1.17	.83	.67	.50	6.17
1-20	25	23	19	13	11	8							

Central to this proposition is the deceptively simple rule that the number of speed factors available to an aircraft each turn depends on what it did the previous turn. This rule makes each turn less a discrete unit than part of a continuum. Thus climbing and every maneuver except banking reduces next turn's speed, while diving increases it.

These principles may be illustrated by considering the common situation where enemy fighters approach each other head-on. At this point the players' goals are the same—maneuver into good firing position while avoiding enemy fire. Once they become familiar with the game players tend to employ the "slip-turn" maneuver in attempting to reach this goal. This maneuver permits a plane to perform a slip followed immediately by a turn of two hexsides. The result is a 120 degree turn which may put the enemy directly in your line of fire.

The costs of this tactic are high, however. The slip costs two speed factors and each turn another factor, for a total loss of four speed factors. Since most fighters have only one or two power factors available to counteract this loss, next turn's speed is reduced by two or three factors. This loss can be made up by diving, but then it is valuable altitude which is lost.

If serious damage can be inflicted on the enemy, the result will be worth the price. If not, several turns will be required to regain the lost speed or altitude. Meanwhile the enemy has the opportunity to climb and/or maneuver into an advantageous position. The addition of the "advantage" rule compounds the problem, since the loss of speed and altitude which the "slip-turn" entails may allow the enemy to get on your tail, a position he may be unwilling to surrender. In short, this tactic resembles the two-to-one attack on Tobruk in *AFRIKA KORPS*—a gamble sometimes worth the risk, but not to be taken lightly or used indiscriminately.

The insightful player will conclude that the proper tactic under these circumstances is to make a head-on pass and then climb. And, as students of World War II aerial combat know, this is the same conclusion reached by the actual combatants, particularly when up against an aircraft superior in maneuverability.

The larger lesson is that every choice in *AIR FORCE* has its long-range consequences. The decision to maneuver, climb or dive dictates the range of options available in future turns. The player who risks exposing his plane to enemy fire in the hope of gaining a positional advantage may find himself too damaged to use it. Conversely, the player who thinks two, three or more turns ahead will be successful. In short, *AIR FORCE* rewards the farsighted.

As a corollary, players should endeavor to end each turn with a few hexes of straight movement. These hexes "in the bank" can pay dividends in the next turn by making a maneuver possible much sooner than would otherwise be the case. Granted, this tactic takes advantage of the fact that games divide time into separate turns, but it nonetheless works.

Beyond these broad principles, it is difficult to generalize on tactics other than to advise that players know their own and their enemy's aircraft, so that they can maximize their plane's advantages while minimizing those of their opponent. The pilot of a P-47D can afford to trade shots with almost anyone; the pilot of an Me-109F cannot. The maneuverability advantage enjoyed by a Spitfire IX against an Me-109G disappears when it meets an Me-109F.

Nor is performance an absolute. Up to 19,900 feet the FW-190A is slightly more maneuverable than the P-51D, but from 20,000 to 24,900 feet the Mustang has the advantage. From 25,000 to 29,900 feet they are equal while the P-51D regains the edge from 30,000 feet up.

The bulk of this article is devoted to such comparisons. First, however, it is necessary to take a closer look at the hit tables, where superior tactics are rewarded.

Table 1 represents such an analysis. The hit tables from one to 20 are grouped according to the number of hits possible, followed by a row representing all 20 tables. The columns headed "Proportion of Hit Types" show the proportion of each type of hit in each group of tables. Thus, wing hits comprise 23% of the hits in tables seven through 12, while the percentage falls to 22 for tables 13-16. The columns headed "Expected Hits" show the average number of hits of each type for each hit table. On tables four-six, for example, one-half of an engine hit can be expected per die roll.

Predictably, expected hits in each category increase with the higher hit tables. Each category does not increase proportionally, however. From table two to 20, expected fuselage hits increase from .42 to 1.50, or about three and one-half times, while expected engine hits rise from .25 to 1.17, or almost five times.

On the other hand, the proportion of hits in each category remains virtually the same throughout the hit tables. Above table one, the percentage of gun hits varies between six and nine, and cockpit hits from 12-14.

At most levels, fuselage hits are most likely, followed by wing, engine, cockpit, fuel tank and gun hits. Thus, the fact that three fuel tank hits will down a Hurricane II may be less significant than the fact that five fuselage hits will accomplish the same result.

Figure 3:

PILOT CHARACTERISTICS TABLE OF EFFECTS (OPT)
Effects of Characteristics on . . .

	Spotting	Firing	Maneuverability	Advantage	Damage	Quality	Bombing
Vision	+1 Modif	Shift 1 col.	none	none	none	none	none
Reflex	none	inc. ammo by 2	−1 MP/Game-Turn	hide half of plot	none	none	none
Training	none	none	none	none	negate one hit	none	+1 modif
Experience	+1 modif •	none	none	hide last 2MP of plot**	none	considered "average"	none

AIRCRAFT EVALUATION
Fighters

AIR FORCE includes 15 "pure" fighters consisting of 14 single-engine aircraft and the twin-engine Me-262A. Although players will develop favorites, they should be familiar with the strengths and weaknesses of all potential opponents in five important areas: durability, firepower, maneuverability, power and speed.

Tables 2-6 rate the 15 fighters in these five categories. Each table is organized in the same way: aircraft designation on the left, followed by the "raw score" in each category, then percentage score, with the best fighter in each category rated at 100 percent.

Durability—An aircraft's durability could be represented simply by the total damage it can absorb. However, as discussed above, each hit type does not occur with equal frequency on the hit tables and thus in the game. Fortunately the proportion of each hit type remains fairly constant throughout the hit tables, so that wing hits are twice as common as fuel tank hits regardless of the firepower employed.

Durability can be expressed more precisely, therefore, by multiplying the number of hits an aircraft can take in each area by the frequency with which that hit type occurs on the hit tables, then totalling these products. The result, called the Durability Index (D.I.), is computed as follows, using the Me-109G as an example:

$$(6 \times .23) + (5 \times .25) + (3 \times .19) + (3 \times .13) + (4 \times .11) = 4.05$$

Gun hits are not included in the D.I. for two reasons: (1) elimination of all guns does not destroy the aircraft but merely results in excess gun hits becoming fuselage hits, which are already included in the formula, and (2) gun hits are so infrequent that in most cases an aircraft will be shot down before losing all of its guns.

Table 2 presents the D.I. for all *AIR FORCE* fighters. Not surprisingly, the P-47D heads the list. More surprisingly, two German mainstays, the Me-109E and F, bring up the rear, with the Me-262A not far ahead. All three are weak in the fuselage and wings, which, as Table 1 shows, are the most common hits.
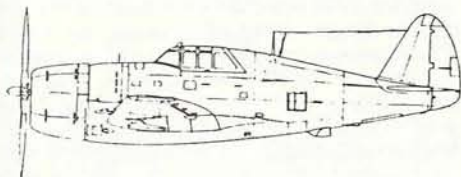
Table 2
Durability Index

Aircraft	Raw Score	D.I.
P-47D	5.28	100
Tempest V	5.03	95
P-47B	5.03	95
FW-190A	4.30	81
P-51D	4.30	81
P-51B	4.30	81
Hurri. II	4.17	79
Spit. IX	4.05	77
Me-109G	4.05	77
Hurri. I	3.92	74
Me-262A	3.88	73
Spit. V	3.69	70
Spit. I	3.69	70
Me-109F	3.44	65
Me-109E	3.44	65

TEN AIR FORCE SCENARIOS

The following historical or quasi-historical scenarios are offered for those who have exhausted the few historically-based scenarios accompanying these games and who have tired of throwing randomly selected aircraft into battle. Scenarios 1, 2 and 9 employ aircraft from *AIR FORCE*, scenarios 5, 8 and 10 aircraft from *DAUNTLESS* and scenarios 3 and 4 aircraft from *STURMOVIK*) formerly *AIR FORCE/DAUNTLESS* Expansion Kit). Scenario 6 requires planes from *DAUNTLESS* and *STUR-MOVIK* and scenario 7 requires planes from all three.

All of these scenarios were designed for two players. Scenarios 4 and 8 are well suited for solitaire play, however, and scenarios 5 and 10 would make good multi-player games.

These scenarios were selected not because they are perfectly balanced, although they should be reasonably even. Rather, in accord with the comments under "Creating Your Own Scenarios" in the *AIR FORCE* rulebook, they were picked in the hope that they will be interesting to the players.

All standard and (at the players' option) optional rules apply unless stated otherwise. All scenarios are twenty turns long.

Scenario 1—Meeting Over Metz

British: 3 Hurricane I at 12,000 feet enter along board edge 1 on turn 1
German: 2 ME-109E at 12,000 feet enter along board edge 4 on turn 1

Victory Conditions
British: Destroy at least one more enemy aircraft than own losses
German: Avoid British victory

Special Rules
Any aircraft not in the original six board sections at the end of turn twenty is considered destroyed for the purpose of determining victory.

Commentary
This scenario depicts the first combat between the Hawker Hurricane and the Messerschmitt Bf-109. On March 29, 1940, three Hurricanes of No. 1 Squadron encountered two ME-109's of JG 53 near Metz. Flying Officer Ritchey scored the only kill, downing one German. These two aircraft would meet many more times before the issue was decided.

Scenario 2—The Battle of Britain

British: 4 Spitfire I at 14,000 feet enter along board edge 2-3 or 5-6 on turn 1 (all must enter along same edge)
German: 3 loaded Ju-88A at 15,000 feet enter along board edge 1 on turn 1

Victory Conditions
German: Exit at least one loaded Ju-88A from board edge 4
British: Avoid German victory

Special Rules
Neither Ju-88A may be downed by ramming. Opposing aircraft which end movement in the same hex at the same altitude are assumed to have missed each other.

Commentary
Before being shot down on January 28, 1942, outside Boulogne, Dick Tuck, D.S.O., D.F.C., tallied 30 kills officially, 36 by his own count. He survived German POW camps until January 1945 when he escaped to Russia, then escaped from the Russians to the British Embassy in Moscow.

In August 1940 a section of 92 Squadron led by Tuck intercepted three Ju-88's eight miles north of Cardiff. Although one Spitfire was quickly put out of action by a bullet in the radiator, the remaining three destroyed the invaders, Tuck personally flaming two.

Scenario 3—The Defense of Greece

British: 3 Gladiators at 14,000 feet begin turn 1 anywhere
Italian: 2 CR-42, 1 SM-79 (loaded) at 12,500 feet enter along board edge 1 on turn 1

Victory Conditions
Italian: Exit loaded SM-79 from board edge 4
British: Avoid Italian victory

Special Rules
The SM-79 may not be downed by ramming. See special rules for scenario 2.

Commentary
No one knows how many victories Marmaduke St. John Pattle of the RAF scored during World War II. Estimates range from 28 to over 40.

In 1940 Pattle was a member of 80 Squadron stationed at Sidi Barrani, Libya. In November the squadron was sent to Paramythia in northwest Greece near the Albanian frontier to oppose the Italian invasion of Greece. This hypothetical scenario depicts a typical encounter between 80 Squadron and an Italian bombing mission.

Scenario 4—Attack on Taranto

British: 6 Swordfish armed with torpedoes enter anywhere along board edge 5-6 on turn 1 at altitude of British player's choice
Italian: 1 BB-1 each in hex IV-K4, facing direction 6 *(Caio Duilio)*, hex IV-M15, facing 4 *(Andrea Doria)*, hex IV-M7, facing 6 *(Giulio Cesare)* and hex VI-E1, facing 1 *(Conte di Cavour)* 1 BB-2 each in hex IV-I7, facing 6 *(Littorio)* and hex IV-I13, facing 6 *(Vittorio Veneto)* 1 CA-2 each in hex II-G13, facing 4 *(Zara)*, hex IV-A1, facing 4 *(Fiume)*, and hex IV-D1, facing 4 *(Gorizia)*
1 barrage balloon each in following hexes: I-M14, III-M5, V-M1, V-M3, V-M5, V-M7, III-N9, III-N15., V-N8, II-A13, II-B11, II-D10 and II-E9.

Victory Conditions
British: Sink Italian ships worth at least 2000 points
Italian: Avoid British victory

Special Rules
All Italian ships are at anchor and cannot move. For this reason, a DRM of 0 applies to all torpedo attacks from fore and aft and +2 to torpedo attacks from all other directions.

Torpedoes cannot be dropped more than six hexes from their target.

Each turn, before the fire phase, a die is rolled for each Italian ship. On a roll of one or two, that ship may not fire its antiaircraft that turn.

Commentary
On November 11, 1940, 21 Swordfish from the carrier *Illustrious* struck a telling blow to the Italian fleet anchored at Taranto. The first wave, commanded by Lieutenant Commander Williamson, consisted of six Swordfish with torpedoes and six with bombs and flares. While the bombers made a diversionary attack on shore installations and smaller ships, torpedoes struck the battleships *Conte di Cavour* and *Littorio*. The second wave hit *Littorio* again and *Caio Duilio*. As a result of this attack, *Conte di Cavour* was put out of action for the war's duration and *Littorio* and *Caio Duilio* were disabled for six months.

Of the 21 attacking aircraft, only two were shot down with the loss of only one crew member. Less than 13 months later, the Japanese naval air arm would again demonstrate the vulnerability of a fleet at anchor.

Scenario 5—The Battle of Midway

Japanese: 4 D3A Val (loaded) at 3,000 feet enter along board edge 1 on turn 1
2 A6M2 Zero at 4,000 feet enter along board edge 2-3 or 5-6 (see special rules)
U.S.:   3 F2A Buffaloes, 1 F4F Wildcat at 3,500 feet enter along board edge 2-3 or 5-6 (all need not enter along same edge) on turn 1

Victory Conditions
U.S.:   Destroy at least 2 D3A Val *and* exit at least 2 U.S. fighters from edge 4
Japanese: Exit at least 3 D3A Val loaded from board edge 4 *or* destroy all U.S. fighters
Any other result is a draw

Special Rules
Each turn beginning with turn two the Japanese player rolls one die. On a roll of one, the Zeros enter that turn. Subtract one from the roll for each turn after turn two.

On the turn of entry, the Japanese player rolls another die. An odd number means the Zeros enter along board edge 5-6, while an even number means they enter along edge 2-3.

Commentary
Accounts of the Battle of Midway rightly dwell on the successes of American carrier-based aircraft, but to a large extent these successes were made possible by Marine Air Group 22 based on Eastern Island, the smaller of the two islands comprising Midway. Equipped with seven F4F's, 19 SBD's, 21 F2A's and 17 Vindicators, Air Group 22 was ordered by Nimitz not only to defend its airstrip but to attack the Japanese carriers.

On June 4, 1942, 12 fighters of A.G. 22 intercepted 13 Japanese carrier-based bombers west of Midway but were bounced by escorting Zeros, suffering the loss of nine fighters with two more badly damaged.

Despite these losses, the tenacious defense of Midway convinced the Japanese that a second strike was necessary. This in turn led to the now-famous indecision by the Japanese which allowed U.S. naval dive bombers to catch their Japanese counterparts on the deck. The rest, as they say, is history.

Firepower—Firepower is a function of the number of fire factors, the range at which they may be applied, and ammunition supply. Table 3 lists the Firepower Index (F.I.), computed as the product of these three factors, for the 15 fighters. The earlier fighters are predictably concentrated in the lower half of the table, while the later models appear primarily in the upper half. Once again the Me-109 series rates poorly. The Me-262A outdistances the field by a substantial margin.
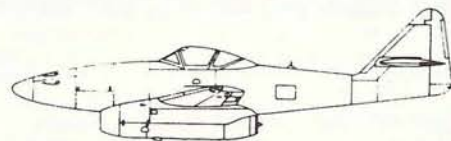
Table 3
Firepower Index

Aircraft	Raw Score	F.I.
Me-262A	768	100
Tempest V	480	62
P-47D	480	62
P-51D	420	55
FW-190A	420	55
P-47B	400	52
Spit. IX	300	39
Hurri. II	256	33
P-51B	240	31
Me-109G	220	29
Me-109E	210	27
Me-109F	204	26
Spit. V	184	24
Hurri. I	128	17
Spit. I	128	17

Maneuverability—Maneuverability is harder to quantify objectively than durability or firepower. The airplane data cards list the number of hexes of straight movement required before each of the five maneuvers at each altitude, but they cannot predict how many maneuvers of each kind will be performed in a game.

As a rough approximation, the Maneuverability Index (M.I.) is the total average costs of two banks, one turn and one slip. Experience suggests that half-loops and half-rolls occur relatively rarely in the game. Until AH added the rule requiring a 100 foot altitude loss for each turn of banked movement without maneuvering, banking was a less frequent and therefore less important maneuver. This revision guarantees that banks will occur at least twice as often as any other maneuver under normal circumstances, giving the advantage to planes with low banking requirements (*e.g.,* FW-190A, P-47D) and disadvantaging otherwise maneuverable planes like the Spitfire I and V.

Table 4
Maneuverability Index

Aircraft	Raw Score	M.I.
P-47B	2.44	100
P-47D	2.56	95
FW-190A	2.75	89
Hurri. I	2.86	85
P-51B	2.88	85
P-51D	2.89	84
Me-109E	3.00	81
Spit. IX	3.00	81
Me-109F	3.06	80
Spit. V	3.06	80
Tempest V	3.12	78
Hurri. II	3.12	78
Spit. I	3.14	78
Me-109G	3.62	67
Me-262A	5.62	43

As Table 4 indicates, many of the more maneuverable fighters saw action early in the war. This reflects a shift in emphasis rather than a decline in technology. As Allied pilots in the Pacific discovered, maneuverability is an advantage only if the enemy agrees to dogfight, while speed, firepower and durability cannot be negated.

Power—Later fighters emphasized power, as shown on Table 5's listing by Power Index (P.I.). The Power Index is the product of the total number of power factors available up to 29,900 feet and the amount of altitude gained per speed factor.

Table 5
Power Index

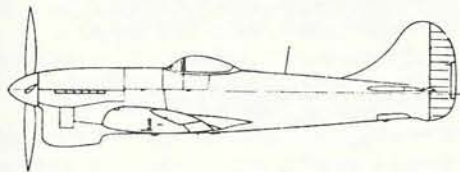| Aircraft	Raw Score	P.I.
Tempest V	3.9	100
Me-109G	3.6	92
Spit. IX	3.6	92
P-47D	3.6	92
Me-262A	3.6	92
Spit. V	3.3	85
P-51D	3.3	85
Me-109F	3.3	85
Hurri. II	3.0	77
P-51B	3.0	77
Me-109E	2.1	54
FW-190A	2.0	51
Spit. I	1.8	46
Hurri. I	1.8	46
P-47B	1.6	41

Speed—Finally, Table 6 provides an indication of the ability to get there, and more importantly, to get back. Since most movement occurs in either maneuver or level speed, the Speed Index (S.I.) is the average top level speed in each altitude band, which roughly reflects both maneuver and level speeds. As expected, the Me-262A literally and figuratively runs away from the competition.

Table 6
Speed Index

Aircraft	Raw Score	S.I.
Me-262A	10.50	100
P-51B	8.11	77
P-51D	8.00	76
Tempest V	7.75	74
P-47B	7.56	72
P-47D	7.50	71
FW-190A	7.12	68
Me-109G	7.00	67
Me-109F	6.87	65
Spit. IX	6.78	64
Spit. V	6.37	61
Spit. I	6.28	60
Me-109E	6.25	59
Hurri. II	5.62	53
Hurri. I	5.57	53

And the Winner Is—Table 7 summarizes the results of Tables 2-6. The percentage ratings of each fighter in each category are totalled, providing a measure of the relative worth of these fighters. By this admittedly subjective method the top fighter is the P-47D Thunderbolt. Of the top ten fighters, only three are German and only three entered action before 1943, surely a tribute to the quality of this

Scenario 6—Night Mission Over Hengyang

U.S.: 2 P-40C at 14,000 feet enter anywhere along board edge 2-3 on turn 1
Japanese: 3 Ki.27 Sally (loaded) at 15,000 feet enter anywhere along board edge 4 on turn 1

Victory Conditions
U.S.: Destroy all Japanese aircraft
Japanese: Score at least 2 points of damage on U.S. airfield
Any other result is a draw

Special Rules
This scenario occurs at night, so optional rule XII (visibility options) is in effect. No aircraft are equipped with radar.
The U.S. airfield consists of hexes IV-A7-A10. The Japanese bombers must make one pass over these hexes before dropping their bombs. Both the practice run and the bombing run must pass over all four airfield hexes from the same direction at the same altitude.

Commentary
On July 30, 1942, Major John R. Alison and Captain Albert T. Baumber of the 75th Fighter Squadron stationed at Hengyang attempted a night interception of Japanese bombers attacking their airfield. Flying P-40's not equipped for night combat, they nontheless succeeded in downing four of the six intruders. For their exploit, Alison was awarded the D.S.O. and Baumber the D.S.C. Alison finished the war with ten kills in the China-Burma-India theater, making him the fifth-ranking American ace there.

Scenario 7—New Guinea Sweep

U.S.: 3 P-47B at 1,000 feet enter from board edge 2-3 on turn 1
Japanese: 3 G3M Nell at 500 feet enter from board edge 1 on turn 1
1 Ki.43 Oscar at 1,000 feet enters from board edge 5-6 on turn 2-7 (see special rules)

Victory Conditions
U.S.: Destroy all three Japanese bombers before they exit board edge 4
Japanese: Destroy at least 1 U.S. aircraft.
If neither or both players achieve their victory conditions, the result is a draw.

Special Rules
The turn of entry of the Ki.43 is determined by a die roll made after the movement plotting phase. On turn two, a roll of one is required for entry; on turn three, a roll of one or two, etc. On the turn of entry, the Japanese player may then plot the movement of the Ki.43 for execution during the immediately following movement execution phase.

Commentary
On March 5, 1944 three P-47s of 348th Fighter Group, 5th Fighter Command conducted a sweep in the Wewark area of New Guinea. Colonel Neel Kearly, who finished the war with 22 victories, accompanied by captain William D. Dunham (16) and Captain Samuel V. Blair (7), flying at 22,000 feet, spotted three Nells near Dagua Strip at 500 feet. In the process of downing the bombers, Colonel Kearly was bounced by an Oscar. The Japanese fighter was destroyed, but not before inflicting fatal damage on its target.

Scenario 8—Debut of the Superfort

U.S.: 1 B-29 (loaded) at 16,000 feet enters from board edge 1 on turn 1
Japanese: 6 Ki.43 at 15,000 feet begin anywhere on boards III and/or IV on turn 1

Victory Conditions
U.S.: Exit B-29 loaded from board edge 4
Japanese: Avoid U.S. victory

Special Rules
The Japanese player may not ram the B-29 (see scenario 2 special rules).

Commentary
On April 26, 1944, Major Charles H. Hansen, piloting his B-29 over the Indo-Burmese frontier with a cargo of fuel, spotted 12 Oscars 2,000 feet below. After the Japanese pilots studied their new adversary for 15 minutes, half of their number attacked. Twenty-five minutes later, the first combat for the Superfortress was over, the giant bomber taking eight hits and damaging one Oscar. Notice was served that the B-29 would be a formidable opponent.

Scenario 9—Escape Over Falaise

British: 1 Spitfire IX at 4,700 feet
German: 6 ME-109G at 5,000 feet begin anywhere within 4 hexes of hex IV-A8, all facing same direction

Victory Conditions
British: Survive for duration of scenario
German: Destroy British aircraft

Special Rules
After the German player has plotted his movement for turn one, the starting position of the Spitfire is determined by rolling three dice. The first roll indicates the direction from hex IV-A8, the second roll the number of hexes in that direction, and the third roll the Spitfire's facing. The British player then plots his movement and play proceeds.
The fire phase is omitted from turn one.
The British player is an ace and uses the concentrated fire column of the hit tables (optional rule XIX).

Commentary

Johnnie Johnson was officially the top-scoring RAF pilot of World War II with 38 kills. A master tactician and leader, this scenario represents the only occasion on which his aircraft was hit by enemy fire.

In June 1944, Johnson and his companions had engaged the German fighters providing air cover for Axis troops in the Falaise Gap. His wingman had headed back to base with engine trouble, so Johnson found himself alone. Spotting six aircraft above him, one waggling its wings, Johnson assumed they were friendly. Only when he had climbed to within 300 feet of them did he discover his error. At the same time the Germans recognized his nationality and gave chase. Johnson finally escaped by climbing to 12,000 feet, where the supercharger of his Spitfire allowed him to outrun his pursuers.

Scenario 10—Last Blood for the Fifth

U.S.:   5 P-38G at 12,500 feet begin anywhere on board III or IV (all on same board)
Japanese: 6 Ki.84 Frank at 13,500 feet enter anywhere along board edge 2-3 and/or 5-6 on turn 1

Victory Conditions

U.S.:   Destroy at least three more enemy fighters than own losses
Japanese: Avoid U.S. victory

Special Rules

Japanese pilots are considered novices (optional rule XIX).

Any Japanese aircraft not on one of the six original board sections at the conclusion of turn 20 or which spends more than three consecutive turns not on the original six board sections is considered destroyed for victory purposes.

Commentary

August 14, 1945, marked the last combat and the last aerial victories for the 5th Fighter Command in World War II. On that date, five P-38's of the 35th Fighter Squadron providing cover for two rescue planes over the Inland Sea between Kyushu, Shikoku and Honshu were jumped by six Franks. Final score: four Franks downed, one P-38 lost.

---

trio, the Spitfire IX, FW-190A and Me-109F. Contrary to conventional wisdom, the Hurricane I rates slightly above the Spitfire I and the Hurricane II even with the Spitfire V.

AH's "advantage" rule weakens this argument somewhat by placing a premium on maneuverability as the way to get and stay on the enemy's tail. Still, if the enemy can outrun you, the advantage is lost.

Table 7
Composite Ratings

Aircraft	Total
P-47D	420
Tempest V	409
Me-262A	408
P-51D	381
P-47B	360
Spit. IX	353
P-51B	351
FW-190A	344
Me-109G	332
Me-109F	321
Spit. V	320
Hurri. II	320
Me-109E	286
Hurri. I	275
Spit. I	271

As the war progressed, maneuverability became less and less a consideration in aircraft design. To reflect the effect of this shift in emphasis. Table 8 rates the 15 *AIR FORCE* fighters without considering the Maneuverability Index. Significantly, the most advanced fighter of the war, the Me-262A, vaults to the top of the list, followed by the Tempest V, P-47D and P-51D, all advanced designs. A convincing argument may be made that Table 8 rather than Table 7 validly rates these fighters because maneuverability yielded no advantage against an opponent who would not stand (or turn) and fight.

Table 8
Composite Ratings (Excluding M.I.)

Aircraft	Total
Me-262A	365
Tempest V	331
P-47D	325
P-51D	297
Spit. IX	272
P-51B	266
Me-109G	265
P-47B	260
FW-190A	255
Hurri. II	242
Me-109F	241
Spit. V	240
Me-109E	205
Spit. I	193
Hurri. I	190

Tables 7 and 8 provide some insight into the evolution of the Me-109. The earliest model included in the game, the Me-109E, was roughly equivalent in durability and firepower to its successor, the Me-109F, marginally inferior in speed and marginally superior in maneuverability. The F model showed a marked improvement only in speed. The Me-109G sacrificed some maneuverability for durability and power and to a lesser extent firepower and speed. On the whole, the Me-109 series proves a mediocre fighter.

Single-engine Bombers

AIR FORCE includes only two single-engine bombers, the Ju-87B and D. Table 9 provides an analysis of their performance data. The data for these two aircraft as well as the twin-engine and four-engine aircraft to follow are computed as they were for the fighters, with the exception of firepower. Since flexible armament has unlimited ammunition for game purposes, the Firepower Index is simply the product of fire factors and range. And since flexible guns have varying firepower in different clock sectors, the fire factor used for these guns is their average fire factor.

As with the Me-109, the D model of the Ju-87 sacrificed maneuverability (less important for a dive bomber anyway) for durability, firepower, and speed.

Twin-Engine Aircraft

Twin-engine aircraft in *AIR FORCE* range from the Me-262A, included above as a fighter, to the He-111H, a heavy bomber by Luftwaffe standards. In between are fighter-bombers such as the Me-110 and Mosquito F.B.VI. The performance data for these planes reflect their divergent purposes.

Table 10 contains data for the twin-engine aircraft. The bombers dominate in durability while the fighter-bombers excel in the other categories. The exception is the Mosquito B.IV, designed to avoid rather than absorb punishment. Table 10 does not, of course, consider payload, a prime consideration in evaluating a bomber.

Since the Me-110 was originally intended as a fighter, reviewing its data may provide some clue into the reasons for its failure in that role. Compared to the pure fighters, the Me-110C would rank 13th overall with 313 index points. Although high in durability (89 D.I.), it falls short in firepower (64 F.I., giving the flexible gun 20 ammo points), maneuverability (61 M.I.), speed (58 S.I.) and power (41 P.I.).

Its successor, the Me-110G, fares considerably better as a fighter, totalling 362 points, placing it just behind the P-51D. With a Firepower Index of 1306 for a new high, it rates like this in the other categories: D.I. = 94; M.I. = 62; P.I. = 51; S.I. = 55.

Ignoring maneuverability for the reasons stated above, the Me-110G and C rank fourth and tenth, respectively. Based on their game ratings, therefore, the failure of the Me-110C in particular may be attributed to the way it was used rather than any inherent weaknesses in design.

Four-engine Bombers

Durability and firepower are the mainstays of the heavy bomber. Speed and power occupy positions of lesser importance while maneuverability is virtually irrelevant. For this reason, Table 11, which ranks the heavy bombers, ignores maneuverability.

The B-17G scores first in three of the four categories, second only to the Lancaster in power. The B-17G reflects improvements over the F model in all categories but principally in firepower, with the addition of a nose turret. Similarly the B-24J shows upgrading in firepower but also a marked improvement in speed over the D model.

CONCLUSION

None of this myriad of numbers will guarantee you success in your next game of *AIR FORCE*. Rather, they are intended to highlight the relative strengths and weaknesses of the aircraft as an aid in developing tactics. As in the war itself, the aircraft was only one component of the aerial fighting machine. It was and is the pilot's job to get the maximum from his aircraft. ☆

Table 9
Single-engine Bombers

	Durability (D.I.)	Firepower (F.I.)	Maneuver (M.I.)	Power (P.I.)	Speed (S.I.)	Total
Ju-87B	4.17 (94)	9.75 (85)	3.46 (100)	1.0 (100)	4.17 (74)	453
Ju-87D	4.42 (100)	11.50 (100)	3.60 (96)	1.0 (100)	5.60 (100)	496

	Durability (D.I.)	Firepower (F.I.)	Maneuver (M.I.)	Power (P.I.)	Speed (S.I.)	Total
Table 10 Twin-engine Aircraft						
Me-110G	4.97 (82)	165.5 (100)	3.92 (93)	2.00 (100)	5.83 (78)	453
Mosquito F.B.VI	4.99 (82)	116.0 (70)	3.78 (96)	1.70 (85)	7.43 (100)	433
Ju-88C	5.95 (98)	87.0 (52)	4.64 (78)	1.80 (90)	5.57 (75)	393
Me-110C	4.72 (78)	45.75 (28)	4.00 (93)	1.60 (80)	6.14 (83)	362
Mosquito B.IV	4.74 (78)	0 (0)	3.64 (100)	1.60 (80)	7.43 (100)	358
He-111H	5.81 (96)	17.75 (11)	5.00 (73)	.80 (40)	4.83 (65)	285
Ju-88A	5.83 (96)	7.25 (4)	5.11 (71)	.70 (35)	5.43 (73)	279
Wellington	6.06 (100)	12.0 (7)	5.08 (72)	.50 (25)	5.50 (74)	278

Aircraft	Durability (D.I.)	Firepower (F.I.)	Power (P.I.)	Speed (S.I.)	Total
Table 11 Four-engine Bombers					
B-17G	7.51 (100)	61.8 (100)	1.1 (85)	6.43 (100)	385
B-24J	6.92 (92)	60.0 (97)	1.1 (85)	6.33 (98)	372
B-17F	7.28 (97)	53.4 (86)	1.0 (77)	6.00 (93)	353
B-24D	6.69 (89)	52.8 (85)	1.1 (85)	5.50 (85)	344
Lancaster	6.44 (86)	20.0 (32)	1.3 (100)	6.40 (99)	317

AH PHILOSOPHY . . . *Continued from Page 2*

Adorned with one of Rodger MacGowan's best, the game gets even better once inside the box. There is a redone mounted 44" × 28" mapboard. There are 1300 counters including every ship that saw action in the Pacific in 1942. There are two log sheet pads that together form a 45% reduction of the mapboard for easy plotting of units. There are seven playing aid cards for easy reference.

The rules, though only slightly changed in content, have changed dramatically in style and organization to allow a complex game to be presented as easily as possible. The hidden movement system has been modified to allow planes as well as ships to move on the log sheets, thus creating a game with total secrecy. The observation procedures have been simplified to streamline play. More optional rules have been added. The result is the ultimate game on carrier warfare, and maybe even the ultimate gaming experience.

To be released at GENCON EAST 81.

DOWN WITH THE KING

DOWN WITH THE KING is a game of intrigue and treachery in which players compete against the King and each other. Each player takes the role of a Fandonian noble. The object is to build a powerful, political faction and eventually place a member of the Royal Family, loyal only to you, on the throne.

DOWN WITH THE KING is a game for two to six players. Assassinations. Duels. Scandals. Travel. Hiding. Romance galore, including seductions, proposals, weddings and court balls. A detailed justice system to deal with wrongdoers, including interrogations, hearings, trials, informers, evidence, alibis, banishments, imprisonments, and executions. Wars between Fandonia and foreign countries. Natural disasters. Famines. Plagues. All sorts of political problems. And more.

Basically, players must gain prestige and influence so they can recruit characters to their cause. However, the ways in which they can do so are practically unlimited. At the same time they must also attempt to gain the support of the church, the trade guild, the merchants, the army, the navy, the peasants, the townsmen, and foreign countries. But even after they have established a strong faction, they must wait till the political climate is right. Only then will they be able to usurp the King. The penalty for failure is death.

No two games will ever be the same. There are just too many different things that can happen. Players must cooperate to some extent against the King, but must always be wary of the stab in the back. A player cannot afford to make too

many enemies though, because opponents are never completely out of the game. A player who is killed just misses a turn and then returns as the former player's heir, usually with revenge in mind.

This is not a game where everyone sits around while one player takes a turn. Players can play cards, modify die rolls, and take part in many of the actions during their opponents' turns. There will be constant player interaction. A player can go from rags to riches and back again several times in the game. The winner will never be certain till the game is over.

If intrigue and treachery are what you know best, *DOWN WITH THE KING* is for you. The beloved King will not be strong enough to suppress the evil insurrections you will bring into his kingdom. You are the bad guys in this game, but then maybe that's why it's so much fun. After all, we are all pretenders to some throne or other.

To be released at GENCON EAST 81.

FORTRESS EUROPA

A PBM Kit for the game should be out in August. Eventually we will publish a revised second edition rulebook which will contain many clarifications, corrections, and additions. In addition, there will be more Optional Rules and OB Charts for the "Battle Of The Bulge" and "On To Berlin" scenarios. Although this project will be wrapped up shortly, it may not see print for quite a while. We will notify you when it becomes available.

FURY IN THE WEST

The revision of this game will be mostly artistic. The rules will be untouched except for several clarifications. The big changes will be a new, more pleasing mapboard, bookcase packaging, and beautiful new box cover art by Rodger MacGowan.

STARSHIP TROOPERS

A second edition rulebook is finally in the works. While I am coordinating this project, the work is being done by Jim Stahler and Chester E. Hendricks, both enthusiast experts. Should be done by January 1982.

CONQUISTADOR

I have also been given the AH development chores on this SPI game, which sits fine with me as it has long been one of my favorite games. The revision should be extremely minor, dealing mostly with an expansion of the counter mix. Should be done in late 1981.

NEW GAMES

I have finally been turned loose to design my own games. The first one out of the chute should be a fantasy board game, tentatively entitled *LAND*
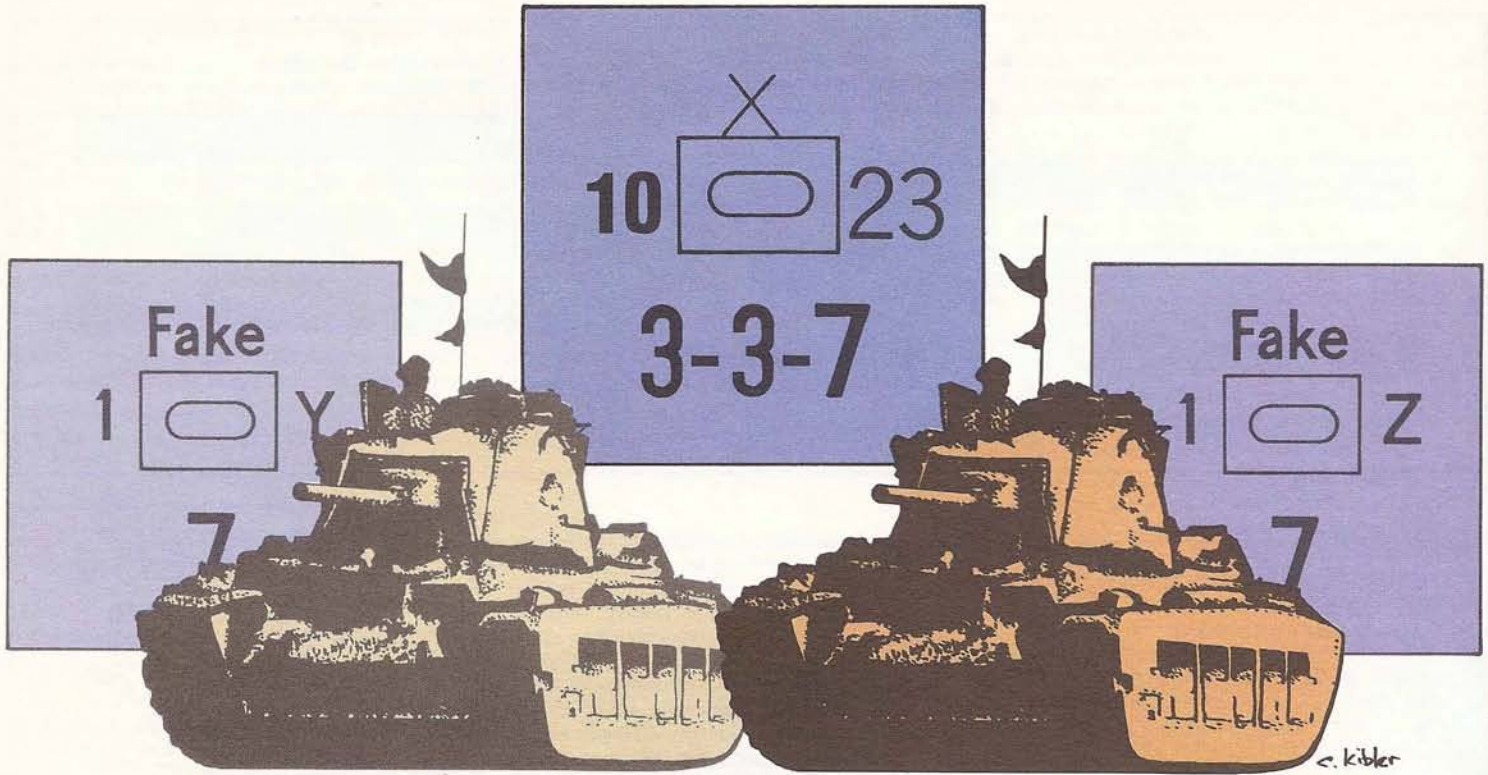
CONTEST NO. 102

You are in the midst of a dogfight in *AIRFORCE*. Both your P-47 and the opposing FW-190 have suffered damaging hits. Using only the information provided on the log sheet below determine the best move for your P-47. Assume you are using a completely simultaneous movement system instead of the advantage rules. Note that both planes have taken damage as indicated by the filled-in circles on the respective logs.

Assume that both aircraft have executed enough forward movement in previous turns to perform any maneuver. The actual versions of the aircraft concerned are the FW190A and P47D.

Merely write the winning move in the appropriate space of the contest form in this issue's insert. Ten winning entries will receive certificates redeemable for free AH merchandise.

DESERT DECEPTION by R. J. Gutenkunst

ADDING THE TRUE ROLE OF RECONNAISSANCE TO AFRIKA KORPS

Back in the days when Avalon Hill was the only wargame company in existence and non-Avalon Hill die-cut counters were scarcer than hen's teeth, Richard Gutenkunst was the only source of decent variant counters in existence—at least to my knowledge. I still remember the thrill of opening the first set of STALINGRAD variant counters from Richard with their upgunned panzer corps and German airpower in the form of stuka counters (thus explaining my deja vu feelings upon seeing RUSSIAN CAMPAIGN for the first time). Well, fifteen years later Richard is still at it—producing variants for Avalon Hill games with quality components at ridiculous prices. Not only has he shared one of them with us here, he is also going to provide you with the die-cut counters necessary to play it if you are interested. You'll find ordering information at the end of the article. Let us know if this "option to buy" aspect variant article appeals to you as Richard is just full of good ideas.

Wargamers are blessed with perfect intelligence —to the point where they're uncomfortable with the fact. We all have to be smart to play these games but I think you know what I'm talking about: you know exactly where your opponent is and exactly what his strength is. It may be no consolation, but your opponent knows the same about you.

If you're playing a historical game, that is, one which attempts to recreate a historical campaign or battle, trying to recreate the situation where the opponents didn't know what each other had and where they had it is very difficult. The World War II North African campaign is an exception in this regard. Both sides knew pretty much what formations were available to the other. However, exactly *where* they were was something else. Both took great pains to mislead each other. It's hard to hide a unit in the desert, but you can do all kinds of things to make a unit look like something else (disguise

your tanks as trucks and your trucks as tanks) and make the enemy think it's someplace else. *AFRIKA KORPS* can easily be converted to a game with the emphasis on deception and reconnaissance—with the addition of a few rules and counters of course.

THE DECEPTION COUNTERS

Note the Allied and Axis Deception Counter Cards. Each consists of six pairs of "fakes", A and B for the Axis, Y and Z for the Allies. Each fake has a corresponding board counter. To use a fake, a counter or counter stack is removed from the board and replaced with a fake counter pair. Put the real unit or units on the upper or lower fake on the Deception Counter Card. You can now move each fake counter subject to the limitations of the real unit or units.

Note that movement factors and unit types are printed on the fake counters. These are for convenience only. It is easier to use a fake counter with the same movement factor and type as the real counter, but the characteristics of the fake are governed by the real counters they represent. You can have all twelve of your counters represent infantry with a movement factor of six, for instance.

As soon as the fakes get into combat, the one representing the real unit has to be revealed. One way to do this is to write the designation of the fake counter that represents the real unit on a slip of paper, put it information side down, and turn it over when one of the fake pairs gets into combat.

However, there is another way, which I think is more fun. A commander rarely has the full control over his units that the wargamer enjoys. You can simulate this lack of control by using these deception counters. What you do is roll the die when it's time to reveal a fake. If the fake represents a German unit or a mixed German-Italian unit stack, the Axis player chooses which counter represents the real unit or units, removes the fakes from the board and replaces them with the real unit or units.

That is, if he rolls anything but a 1. In that case, the Allied player chooses which fake is real. If the fakes represent pure Italian forces, the Axis player chooses which fake is real unless he rolls a 1 or 2. If the fakes are Allied units, the Allied player chooses which fake is real unless he rolls a 1 or a 2. For those of you who want to be historical, you can vary the Allied die roll with the respective commanders in charge. For instance, Montgomery was so careful of his unit assignments that you might want to eliminate the die roll altogether when he arrives.

The foregoing assumes you are using fake pairs. If you desire, you can use your fake counters to represent a unit or units. With four fake counters standing in for your real units you put the real units at the juncture of the four fakes you are going to use (on your Deception Counter Card). You roll the die to decide if the fake going into combat is real or not. If it is an actual fake it is removed from the board. When you are reduced to two fakes representing the unit or units, go back to pair rules.

With four piece fakes, the odds have to be changed in favor of the owner of the fakes. This is because his opponent can declare the piece in combat real, thereby eliminating the other three fakes. Consequently, when using a three or four piece fake, if the owner of the fake loses the roll, his opponent must roll an odd number before he can declare the fake in question real or not. Otherwise the choice reverts to the owner.

One point needs emphasizing. A fake must be resolved as soon as an enemy unit comes in contact with it. If a fake is attacked, the attacker can bring up reinforcements if it's real. If it's a true fake the attacking piece can keep on going to the limit of its movement factor. So plan your moves carefully.

When a stack of units is represented by fakes, you can split the units between paired fakes when revealed, but when there are three or four fake pieces, one piece must represent all the units in the

stack. If the fakes get reduced to two pieces by fake elimination, paired fake rules hold and you can then divide the units. However, the player who sets up the fakes may declare them non-splittable when he makes the initial substitution. In this case, one fake must represent all the units in the stack. To indicate this put your bottom-most counter on the Deception Counter Card upside down. Your slowest counter should be on top.

If you plan to attack with the units represented by a set of your fake counters you roll the die for the counters in question before you move. If you lose the roll for a three or four fake, your opponent removes the counter he most desires to be false. You keep rolling until your real position has been decided.

RECONNAISSANCE

It is quite possible to play the game with the fake counters alone, with the victory going to the sneakiest personality, but reconnaissance adds a whole new skill.

Reconnaissance ability is limited to "RECCE" type counters. Recon counters are moved first on a turn. They perform reconnaissance by entering the zone of control of a fake. If a fake is not screened you go through the steps to reveal a fake. If its movement factor allows, the recon unit can then leave the zone of control it entered, *but it must leave by the same hexagon it entered the zone of control by*. Right. Can't have these fast characters going behind the lines destroying supply units and cutting off lines of retreat. A recon unit is only allowed one reconnaissance mission per move, but it can move into combat afterwards if it has enough of a movement factor left. This of course could also reveal a fake. To simplify this rule, consider a recon unit to have only one back-out or disengagement privilege per move.

Screening

If a fake has a friendly reconnaissance unit within two hexagons (one hexagon between the two units) it is considered screened.

You will note that a reconnaissance unit can be in position to screen more than one fake. When an enemy recon unit tries to reconnoiter a fake, the fake's owner then declares which units are screening the fake in question. After the reconnaissance attempt has been resolved, the screening units are temporarily turned upside down to indicate that they cannot be used to screen other units for that turn. To assure a successful reconnaissance against a screened unit, you must have at least three to one odds against the screening unit(s). At two to one odds, the reconnaissance is successful if an odd number is rolled on the die. At one to one odds or less the reconnaissance fails.

To have fun with reconnaissance, it can be seen that you're going to need a lot more Allied reconnaissance units. Fortunately they had scads of them. The reason they were left out of the original game was that they were pure armored car formations, with plenty of snoop ability but very little combat value. The corresponding German unit was a much more balanced force that included motorcycle infantry, engineers and anti-tank guns with the armored cars. Light AA guns mounted on halftracks (murderous against infantry) and 88's (murderous against tanks) were normally attached.

However, enter the "Jock" columns.

The Jock Columns

The Jock columns were originated by Major General "Jock" Campbell, the commander of the British Seventh Armored Division. They were fast moving ad hoc units usually consisting of a fully mobile battalion of infantry and a battery of 25 pounder field guns supported by anti-tank and anti-aircraft guns. The material and manpower was usually obtained by cherry picking the infantry brigades. One of their missions was to support

armored car units on reconnaissance. Therefore, if we consider all the Allied recon units supported by Jock columns, they have enough combat value to show up as a counter.

Perhaps the seemingly non-historical weakness of the Allied 1-1-6 infantry brigades bothers you. One reason they're so weak is to relieve you of continuously pulling them in and out of the game. Also, some of the divisions represent almost complete national armies. Historically the British had to be very careful about these. Since a nation's war effort was geared to these units, letting them take crippling casualties could knock the parent nation out of the war for practical purposes. Strength could be assigned to these units by "counting rifles", but allowing for the hindrance to their use and pulling them in and out of the battle in a historical fashion would be a nightmare. However, now that you've got the best part of some of the infantry brigades supporting the reconnaissance units, the 1-1-6's should be easier to live with. I find it so anyway.

A deception-reconnaissance version of *AFRIKA KORPS* is a new game and consequently needs new counters to make it work. The following are descriptions and arrival data for these counters.

ADDITIONAL ALLIED UNITS

2/KDG (1-1-12) The King's Dragoon Guards (Also facetiously known as the King's Dancing Girls). This unit is stacked with 2/3 (4-4-7) at initial placement.

7/11 Hussars (1-1-12) This unit can be started at the Allied home base at initial placement, brought on the board with the June 1941 reinforcements or brought on with the November 1941 reinforcements. Why the choice of arrival times? The idea is to put it on the board at its *effective* arrival

time. That is, when it best suits game playability. The 11 Hussars were available at the beginning of the game, but they were not completely equipped. They were equipped by June however, with South African Marmon-Harrington armored cars. However, they were completely refitted with the superior Humber armored cars for the November Crusader offensive. If you opt for the latest arrival, you can consider the 11 Hussars as part of the South African armored car formations to which their Marmon-Harringtons reverted upon their conversion to Humbers.

LRDG (1-0-14) The Long Range Desert Group. Use this in the main like an ordinary reconnaissance unit. The zero defense factor means it can be destroyed by any enemy unit with a non-zero attack factor, and the enemy unit doesn't have to use a supply unit to do so. The LRDG cannot be used to screen a friendly unit. It is independent of supplies except for attacks. It cannot travel by sea. If you wish, you can allow the LRDG to destroy Rommel if he is not stacked with an Axis unit. The full movement factor of this unit is 28, done in two phases of 14 each. This is so it can use one phase to get over an escarpment. This unit starts at the Allied home base at initial placement.

1/12 Lancers (1-1-12) This unit is brought on the board the first Allied move in November, 1941.

1/Royal Dragoons (1-1-12) This unit is placed on the board the first Allied move in December, 1941.

10/2DY (1-1-12) The 2nd Derbyshire Yeomanry. This unit is brought on the board the first Allied move in August, 1942.

10/HCR (1-1-12) The Household Cavalry Regiment. This unit is brought on the board the first Allied move in October, 1942.

ALLIED DECEPTION COUNTER CARD

Fake 1 ▭ Y	Fake 2 ⊠ Y	Fake 3 ⊠ Y	Fake 4 ⊠ Y	Fake 5 🚚 Y	Fake 6 RECCE Y
7	7	6	6	10	12
Fake 1 ▭ Z	Fake 2 ⊠ Z	Fake 3 ⊠ Z	Fake 4 ⊠ Z	Fake 5 🚚 Z	Fake 6 RECCE Z
7	7	6	6	10	12

AXIS DECEPTION COUNTER CARD

Fake 1 ▭ A	Fake 2 ⊠ A	Fake 3 ⊠ A	Fake 4 ▭ A	Fake 5 ⊠ A	Fake 6 ⊠ A
10	10	7	6	6	4
Fake 1 ▭ B	Fake 2 ⊠ B	Fake 3 ⊠ B	Fake 4 ▭ B	Fake 5 ⊠ B	Fake 6 ⊠ B
10	10	7	6	6	4

AXIS ORDER OF APPEARANCE

MARCH 1941

AGHEILA

| XXXX ROMMEL 0-0-12 | 21 / 5 7-7-10 | 21 RECCE 3 2-2-12 | It XX Ariete 4-5-6 | It XX Pavia 2-3-4 | It XX Brescia 2-3-4 | It XX Bologna 2-2-4 | It XX Savena 2-2-4 | 1 0-0-10 |

| 21 / 104 3-3-10 | OR | / 200 2-2-10 | It XX Trenta 2-3-4 | OR | It XX Trento 2-2-4 | It XX 7 Bers. 1-1-6 | HOME BASE | It GaF 0-1-3 | OR AGHEILA |

MAY 1941

| 15 / 8 7-7-10 | 15 RECCE 33 2-2-12 | SMK 300 1-2-6 | III 255 1-1-4 |
| 15 / 115 3-3-10 | OR | 21 / 104 3-3-10 | 90 / 155 2-2-10 |

SEPTEMBER 1941

| It XX Trieste 3-4-6 |
| 90 / 55 2-2-7 | 90 / 361 3-3-7 |

NOVEMBER 1941

| Arko 104 2-0-6 | It RECAM 1-1-9 | It Fascists 2-3-4 |
| It GG FF 1-1-6 | It Sabratha 2-2-4 |

FEBRUARY 1942

| 90 / 200 2-2-7 | 90 RECCE 580 2-2-12 |
| sv 288 2-2-10 | It San Marco 0-1-3 |

JUNE 1942

| It XX Centar 2-2-4 | It XX Pistolo 2-2-4 | 51 4-4-7 |
| 164 / 125 2-2-7 | 164 / 433 2-2-7 | 164 / 382 2-2-7 | 164 RECCE 220 1-1-12 |

AUGUST 1942

| It XX Littorio 4-5-6 |
| It Folgore 1-1-7 |

| / 15 4-4-10 | **SUBSTITUTE COUNTER** |

ALLIED ORDER OF APPEARANCE

MARCH 1941

EL ALAMEIN

| Pol Carpathian 1-1-6 | 41 / 5 1-1-6 | 41 / 7 1-1-6 | 41 / 11 1-1-6 | 41 CIH 1-1-8 |

HOME BASE

| 7 RECCE Hussars 1-1-12 | RECCE LRDG 1-0-14 |

MATRUH

| 7A / 1 1-1-6 | 7A / 2 1-1-6 |

TOBRUCH

| 9A / 4-4-6 | **SUBSTITUTE COUNTER** |

MECHILI

| 2 RECCE KDG 1-1-12 | 2 / 3 4-4-7 | 7 / 31 Motor 2-2-6 | OR | 31 Motor 1-1-8 |

BENGASI

| 2 / 2 S.G. 1-1-7 |

SALUM

| 22 Gds 2-2-6 |

TOBRUCH

| 9A / 20 2-2-6 | 1 0-0-10 |

JUNE 1941

| 7 / 4 4-4-7 | 7 / 7 3-3-7 | 7 / 7 S.G. 1-1-7 | OR | 7 / 7 S.G. 2-2-7 |
| 7 RECCE 11 Hussars 1-1-12 | 41 / 23 1-1-6 | 7 / 4 SA Motor 1-1-6 | 7 RECCE 4 SAAC 1-1-12 |

JULY 1941

| 50 / 69 1-1-6 | 50 / 151 1-1-6 | 50 / 150 1-1-6 | 50 / 6 SA Motor 1-1-6 | OR | RECCE 6 SAAC 1-1-12 |
| 2 SA / 6 1-1-6 | 2 SA RECCE 7 1-1-12 | 2 SA / 4 1-1-6 | 9A / 18 2-2-6 | 70 / 16 1-1-6 |

AUGUST 1941

| 51 / 9 1-1-6 | 51 / 10 1-1-6 |
| 51 / 29 1-1-6 | 70 / 23 1-1-6 |

NOVEMBER 1941

| 1 SA / 1 1-1-6 | 1 SA / 2 1-1-6 | 1 SA / 3 1-1-6 | 1 SA / 5 1-1-6 | 1 SA RECCE 3 1-1-12 | 1 2-2-7 | 32 2-2-7 | 1 RECCE 12 Lancers 1-1-12 |
| 2 NZ / 4 1-1-6 | 2 NZ / 5 1-1-6 | 2 NZ / 6 1-1-6 | 2 NZ Div. Cav. 1-1-10 | 1 / 2 4-4-7 | 1 / 22 4-4-7 | 1 / 201 Gds 2-2-6 | 7 RECCE 11 Hussars 1-1-12 |

DECEMBER 1941

| 1 RECCE Royal Dragoons 1-1-12 |

MAY 1942

| Free Fr / 1 1-1-6 | Jews / 1-1-6 |
| 81 / 18 1-1-6 | 101 / 21 1-1-6 | 101 / 25 1-1-6 |

JULY 1942

| 9A Div. Cav. 1-1-10 |

AUGUST 1942

| 10 / 8 3-3-7 | 10 / 23 3-3-7 | 10 RECCE 2DY 1-1-12 |
| 81 / 161 1-1-6 | 9A / 24 2-2-6 | 44 / 61 1-1-6 | 44 / 132 1-1-6 |

OCTOBER 1942

| 51 / 1 1-1-6 | 51 / 2 1-1-6 |
| 10 RECCE HCR 1-1-12 | NZ / 2 1-1-6 |

7/4 SAAC (1-1-12) and 6 SAAC (1-1-12) The 4th and 6th South African Armored Car regiments. These are the correct designations of 7/4 SA Motor (1-1-6) and 50/6 SA Motor (1-1-6). These were probably used as 1-1-6's to get a reasonable strength for the South African Infantry divisions without giving them 2-2-6 counters. However, since the emphasis is now on reconnaissance substitute the 1-1-12's as needed.

7/7 S.G. (2-2-7) The 7th Armored Division's support group. It contained two infantry battalions, 2 RB and 1 KRRC, plus the divisional engineers, anti-tank, anti-aircraft, and field artillery. The 2nd Armored Division's support group had exactly half this strength in Libya, which is why the 7th support group is assigned a 2-2-7. Now then, 1 KRRC was available (at the Allied home base) March 29, 1941, but 2 RB wasn't. Therefore, for the purposes of this variant we can be very flexible. 7/7 S.G. can be brought on in June, 1941 as a 1-1-7 or a 2-2-7. Another option would be to start it as a 1-1-7 at the Allied home base at the beginning of the game. If it is not in an isolated (surrounded) position change it to a 2-2-7 in June, 1941. If the 1-1-7 gets eliminated before June, 1941 bring 7/7 S.G. on again as a 1-1-7.

70/16 (1-1-6) If you change your South African motor regiments to 1-1-12's you may need this unit. It arrives July, 1941. Only 70/23 was included in the original game because the division was pulled out of Libya in December of 1941. Right. One of those in-and-out units that give game designers royal pains.

2NZ/Div.Cav. (1-1-10) The divisional cavalry regiment of the 2nd New Zealand division. This was a light tank and Bren gun carrier formation. It has an armored cavalry type designation because you may not want to give it full reconnaissance powers and allow it screening ability only. It arrives November, 1941.

9A/Div.Cav. (1-1-10) The same type of unit as 2NZ/Div.Cav. (1-1-10). It arrives July, 1942.

9A (4-4-6) The 9th Australian Infantry Division. This is a substitution counter that can only exit in Tobruk. It can consist of 9A/20 (2-2-6), 7A/1 (1-1-6), and 7A/2 (1-1-6) or 9A/18 (2-2-6) and 9A/24 (2-2-6). The arrival of 9A/18 and 9A/24 can be accelerated to have them be in Tobruk on initial placement. After November 1941 its use should probably be discontinued. Its use is strictly optional and depends on which additional units you add to the game.

31 Motor (1-1-8) and 4I/CIH (1-1-8) These units can be used instead of 7/31 Motor (2-2-6). 31 motor consisted of three Indian Cavalry Regiments. As it had no artillery or support units, attack and defense factors of one are probably more realistic. 4I/CIH (Central India Horse) was the divisional cavalry for the Fourth Indian Infantry Division. No reconnaissance vehicles were available for these units so they had to make do with trucks. Happily this gives us an excuse to use them as needed in the game—Allied reconnaissance units that are comparatively slow. They can keep you informed of what the Axis player has, but are not really fast enough to make dangerous end runs. To counterbalance the use of these two units, the Italian Trenta Division (2-3-4) should be replaced by Trento (2-2-4) and 7 Bers. (1-1-6).

ADDITIONAL AXIS UNITS

300 OASIS (1-2-6) The 300th Oasis battalion. This unit operated as separate companies to garrison strong points. There were at least five companies (2,6,10,12,13) and possibly a maximum of thirteen. Well supported by 88's and heavy weapons they were tough nuts to crack. Arrives May, 1941.

III 255 (1-1-4) This was one of five separate infantry battalions sent to Africa. Most of them became part of the 90th Light Division. This par-

ticular battalion combined with sv 288 to become Panzergrenadier Regiment Afrika at the end of October, 1942. Until then it guarded the rear areas. With all the Allied 1-1-12's running around this is what you'll have it doing. Arrives May, 1941.

Arko 104 (2-0-6) All of the German heavy artillery was lumped under this unit. It fought as a separate entity, perhaps more familiarly known as Group Boettcher or Group Mickl. German combat units can be stacked four high if this unit is one of them. It has an attack and defense factor of 2 when stacked with another combat unit, 0 when it is alone or with only Rommel or a supply unit. The presence of this unit was historically critical to a successful attack on Tobruk. Therefore, since much of an armored unit's strength depends on its mobility, you can have Arko 104 cancel the defensive doubling of any *one* armored unit it attacks. If it were to attack two 4-4-7s in Tobruk, the combined defense factor would be 12. In this case you would want to use the 9A (4-4-6) substitution counter. Arrives November, 1941.

sv 288 (2-2-10) Sonderverband 288. This was a special completely self-sufficient motorized unit of all arms that was originally scheduled to be sent to Iraq. It usually fought under the command of the 90th Light Division. Since it had strong reconnaissance elements it can be used as a reconnaissance unit. Arrives February 1942.

90/155 (2-2-10) This regiment of the 90th Light Division was completely motorized in February of 1942. If you need its speed, you can substitute it for 90/55 (2-2-7) in February, 1942. Actually, this unit was available in its incompletely motorized form for the Crusader offensive. For play balance you can bring 90/55 (2-2-7) and 90/361 (3-3-7) on the board in September of 1941—also the Italian Trieste division if you have to. Trade 90/155 (2-2-10) for 90/55 (2-2-7) in February of 1942 if it survives.

164/220 (1-1-12) The reconnaissance unit of the 164th Light Division. It is doubtful if it ever was adequately equipped. It can be brought on the board June 1942 if the Axis player uses one of his replacement points.

It/GaF (0-1-3) This unit represents about three battalions of Italian frontier guards supported by the "Genova" machine gun battalion. They eventually wound up as the Bardia Garrison in November of 1941. Starts at Axis home base at initial placement.

It/GG FF (1-1-6) The Giovani Fascisti or Young Fascist division. This was an Italian armored division that was never supplied with tanks. It did have three battalions of motorized infantry, one of which was a heavy weapons unit as in a standard Italian armored division. However, the battalions were independent and not formed into a bersaglieri regiment as in the other armored divisions. The Young Fascists did have their divisional artillery, although it wasn't up to the material given to Ariete and Trieste. The original game It/Fascist (2-3-4) division actually represents this unit plus quite a few odds and ends of reinforcements that the Italians received. You can use the new unit instead of the old one or include them both and use the old one as a replacement draft. That is, when an Italian infantry division is destroyed you can bring it back by trading the It/Fascist (2-3-4) unit for it. If nothing else you get a little more realism. After all, you don't plan to use any of your replacement points for Italian infantry do you? Both the old and the new unit arrive November 1941.

It/RECAM (1-1-9) The reconnaissance unit for the Italian Armoredred Corps (CAM). It is brought on the board by being placed on the Ariete division in November, 1941.

It/San Marco (0-1-3) One of the numerous Italian San Marco Marine battalions. This one was assigned to garrison Benghazi and had quite a bit of heavy weaponry to support it. Arrives February, 1942.

200 (2-2-10) Both of the German armored divisions (15 and 21) are in their 1942 configurations. This is not how they arrived. If you wish, you can use this counter to get an arrival variation. Bring on the 21st Panzer (or 5th Light as it was known then) as 21/5 (7-7-10), 21/3 (2-2-12) and 200 (2-2-10). Bring the 15th Panzer on as 15/8 (7-7-10), 15/33 (2-2-12), 21/104 (3-3-10) and 90/155 (2-2-10). 90/155 is standing in for 15/115 (2-2-10). 21/104 was originally a two battalion unit of the 15th Panzer. The division's motorcycle battalion is added to it here to make it a 3-3-10. In February of 1942, 200 (2-2-10) becomes 90/200 (2-2-7), 90/155 becomes 15/115 (3-3-10) and 90/55 becomes 90/155 (2-2-10) if you wish.

15 (4-4-10) Originally this was the brigade command for the 15th Panzer Division's two Panzergrenadier regiments. It was used by the Germans for numerous command duties. You can give the Germans yet more clout by using it as a substitution counter. The combat factors of the substituted units must add up to 4 and the movement factors must be 10 or more. Alternately, you can put the substituted four counters aside and govern the 15th Brigade counter's speed by the slowest unit substituted for.

It/Trento (2-2-4) and It/7 Bers. (1-1-6) These units can replace It/Trenta (2-3-4). The Italian Trento division was supposed to be a fully motorized division like Trieste. Like Trieste, it had three regiments instead of the normal two in a standard Italian infantry division. However, only the 7th Bersaglieri was motorized. The 7th Bersaglieri was eventually detached for use as a corps unit leaving the rest of Trento the composition of a normal infantry division. The substitution of these two units for It/Trenta (2-3-4) is normally performed to counter-balance the Allied use of 31 Motor (1-1-8) and 4I/CIH (1-1-8).

GETTING GOING

If you now have the impression you have more extra counters than you'll ever need you're right. These counters are cut easiest in sets of 12 and 14 so why give you blanks?

If you try to use all the counters immediately you'll bog down in a welter of confusion. A suggested start is a maximum of four fake counters per player. Substitute the 4 and 6 SAAC 1-1-12 units for the two SA Motor 1-1-6 units and you have a good beginning. Once you have experience you can throw in units as you desire. If you balance a unit by one on the other side brought on at approximately the same time, things should stay pretty even. In addition to balancing the units, for every extra Allied unit added, the Axis player gets an extra supply unit to eliminate it. This is done by giving the Axis player a cancel for a bad supply roll for every extra Allied unit added. Thus, if the Allied player takes two extra units, the Axis player gets supplies for two turns he normally would not.

As more and more Allied reconaissance units get added to the game, the more the Axis player will have to contend with "end runs" in the southern part of the board. If this gets out of hand, cancel a reconnaissance unit's defensive doubling if it is not within five squares of a supply unit or a road square. Due to its initial position 2/KDG (1-1-12) can be particularly pesky in this regard. In actual fact, historically it had its hands full screening 2/3 (4-4-7). Therefore, until 2/3 reaches Tobruk, you can require 2/KDG to end its movement in screening position of 2/3 or one of the fakes representing it if used. If the Allied player neglects to do this, the Axis player can move 2/KDG back to its starting point and move it to a proper screening position.

Until you think you can handle it, do not allow fakes in the fortresses of Benghazi and Tobruk.

I'd also like to soapbox about *AFRIKA KORPS* a little bit. I feel that luck is too much of a factor. The supply rolls for instance can make the difference between a win or a loss. I would like to suggest the following alternate: The German gets only one supply unit per month (every other turn) from July 1941 to November 1941. From April 1941 to June 1941, the Allied Player can prevent a new German supply unit from appearing three times, but the German can cancel one of these. From December 1941 to the end of the game the Allied player can declare an arbitrary sunk 5 times, two of which the German can cancel. This gives you the average result of the die roll all the time. Also, supplies are most likely to be sunk when the Allies put maximum effort into it. If the German is in desperate need of supplies he will put maximum effort into convoy protection. Note that this method can be adjusted for perfect game balance.

ORDERING INSTRUCTIONS

You can order precut counters and deception counter charts for this variant directly from:

Richard Gutenkunst
Box 3301, Traffic Station
MPLS, MN 55403

Cost is $1.00 plus a sturdy stamped self-addressed envelope bearing 18¢ postage. The stamped, self-addressed envelope is vital for same day service. If you have questions that can be answered in a few words or a simple yes or no the answers can be included with the counters.

☆

SO THAT'S WHAT YOU'VE BEEN PLAYING

| | | Rank | Times | |
| | | Last | on | Freq. |
Rank Title	Pub.	Time	List	Ratio
1. Squad Leader	AH	1	3	7.3
2. Third Reich	AH	4	3	4.1
3. TRC	AH	3	3	3.8
4. COI	AH	6	3	3.3
5. D & D	TSR	8	3	2.5
6. FE	AH	5	3	2.5
7. Stalingrad	AH	15	3	2.3
8. Panzer Leader	AH	11	3	2.2
9. COD	AH	10	3	2.2
10. VITP	AH	9	3	2.1
11. Afrika Korps	AH	12	3	1.7
12. War At Sea	AH	14	3	1.6
13. Panzerblitz	AH	13	3	1.4
14. War & Peace	AH	7	3	1.3
15. Air Force	AH	—	1	1.2
16. WS&IM	AH	17	3	1.2
17. Diplomacy	AH	—	1	1.1
18. D-Day	AH	—	1	1.0
19. Midway	AH	16	3	1.0
20. CM	AH	2	2	1.0

Titles Listed: 170   **Total Responses: 934**

The Frequency Ratio is derived by dividing the number of votes received by the number of votes for the 20th place entry. Ties in rank are resolved in favor of the older title. The Times on List category is based on *consecutive* preceding times on the list; not total appearances.

The startling turn-around in the ranking of *CIRCUS MAXIMUS* seems to indicate the very heavy influence of the *GENERAL's* content on what you're playing. Last issue, following a feature presentation on *CM*, that game shot to second place from all the way off the chart. Only one issue later it has slid all the way to the bottom rung. *STALINGRAD*, on the other hand, posted the biggest gain by climbing eight places to 7th following its feature article status in Vol. 17, No. 6.

DESIGN ANALYSIS

PzKw VIa
ABS 3.2" 12
ABF 4.0" 12
GPres 14
GUN 88mm/L56   Eff Rng 3000m
AMMO 92   PEN 4.9"   2 MG 34
8   Wt 60.5t   HPWt 11.6
15 A 12
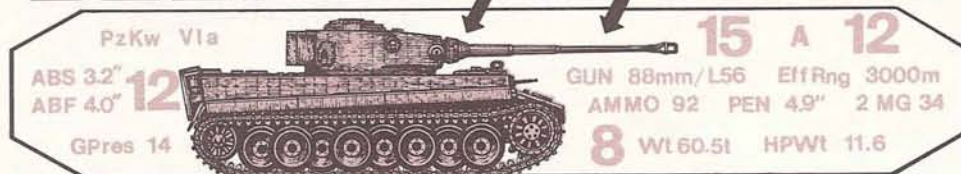
The Third THIRD REICH

By Larry Bucher

Larry Bucher was both the main instigator behind the THIRD REICH revisions and the chief contributor thereto. Not only has he been the inspiration and main guiding light of the third edition, but he has also handled the THIRD REICH nutmail chores ever since the project got underway over a year ago. If anyone has a better understanding than myself of how badly those rules needed revision it is Larry. And while we both share a great feeling of accomplishment in the house cleaning we did on those old rules, I'm not altogether sure that I believe him when he says his recent overseas reassignment with the state department in Haiti was purely coincidental.

If a poll were ever to be taken in the category "Most Mystifying Rules of an Avalon Hill Game" *THIRD REICH* would surely be on the ballot, in the company of the original *ANZIO, 1914,* and (judging solely from RBG ratings) *GETTYSBURG '77* and *MAGIC REALM*. I would not want to call a winner. That *THIRD REICH* should have attained its popularity, and won its awards, despite those rules, speaks volumes for the other qualities of the game. I certainly found it intriguing that the game, now seven years old, fared no less than third in the first "What Are You Playing?" survey.

I would take mild issue with a phrase of a few *GENERALS* ago that described *THIRD REICH '81* as "completely new". I do not feel that the change is that great. There are perhaps four brand new rules, half a dozen rule areas that are drastically different, and a myriad of differences that some will see as changes and some as clarifications—with no two players able fully to agree on which is which.

Until 1978 I harbored misconceptions that Leningrad stood on an equal footing with Moscow as a Russian supply source, and that fleets of less than nine factors could not perform the supply function. In 1979 I encountered players—good players—who played that Italy and Germany did not take their turn in unison until they were allied. Such examples could continue. The point is that many third edition rules that strike me as no more than a formalization of "the way it always was" are sure to strike others somewhere as changes, reversals of tradition. And vice versa.

What began as simply an effort to rewrite the existing rules and their interpretations for clarity and completeness generated a fascinating give and take debate on the possibilities for improvement and innovation, and far more changes were in the end incorporated than I had originally envisioned. To describe it in terms which will be more familiar to many, I think the degree of change to *THIRD REICH* approximately equals the changes to the current editions of *D-DAY* and *BLITZKRIEG*. For argument's sake, assume that first edition rules = 60, second edition rules = 65, and perfection = 100. If granted my assumptions, I believe *3R '81* will score at about 95.

Why can't I claim 100 after all the effort? Experience! The new rules have gone through at least five stages of rewrite (I've lost count) and at each stage I felt, "*Now* they're surely perfect—or nearly so—no one could find any more errors or omissions of much consequence."

I've been wrong five times. And as will be seen below, there are at least two things (concerning supply and Spain) that should have been clarified in the final product. I will take refuge in the quotation taped to my typewriter: "Nothing would be done at all if a man waited till he could do it so well that no one could find fault with it." (That's ascribed to one John Henry Newman; I confess to never having heard of him.) An imperfect *THIRD REICH* in 1981 beats a perfect *RISING SUN* in 19-whenever.

There seemed to be a majority opinion—though a shaky one, and without eloquent dissenters-that the Axis had somewhat the better of play balance. A number of changes do affect play balance; and many, but not all, are pro-Allied. Only time will tell whether the shifts go too far, not far enough, or are just right.

The new edition contains only one body of standard rules. There is no "advanced game"; there are no "optionals". This reflects a prejudice of my own, for which I advance two arguments:

—the tendency of recent games to include basic and advanced (and sometimes intermediate) versions, each perhaps with its own set of optional rules, does have its rationale. Players are free to pick and choose among rules that strike them as good, bad, too complex, too simple, or whatever, and tailor the rules they use exactly to their taste. I think the trend is inevitable, but its accompanying drawbacks should be recognized: no two players are likely to agree right down the line, and each new opponent played entails a new round of discussion and compromise over the rules to be used. It thus becomes all but impossible to play the *same* game against more than one opponent. The acquisition of expertise is hampered, and the lessons learned against one opponent may have to be painfully unlearned when using a different rule mix against another foe.

—in a broad sense, *all* rules are optional and do not need to be labeled as such. Whenever players can agree to ignore a rule, to modify it, or to insert one of their own inspiration, they are perfectly free to do so without seeking advance sanction from Baltimore. The key word is "agree". It is when players do *not* agree that the "official" rules should be treated as gospel.

A Tour of the Mapboard

It doesn't look all that different at first glance. You have to look closely to spot the significant changes, but they are there. All coastlines have been redrawn and sharpened so that there should no longer be doubt as to whether land (or sea) movement between hex A and hex B is legal. In perhaps a dozen cases the coastline was drawn exactly to coincide with the intersection of three hexes, these spots are specified in the rulebook. Hexes with two or more fragments of unconnected land—whether mainland and island, or bits of mainland—have been eliminated. Troublesome islands (such as the

two-hex island near Athens) and bits of mainland· have been "blacked out" in the process of correcting this problem.

Switzerland and the unplayable hexes around the board edge have been "grayed out". Traditional hex-grid coordinates have been printed along the mapboard edges.

A crossing arrow in Scotland has been replaced by river, and all others appear clearly on hex*sides*, eliminating former rule difficulties arising from crossing arrows within a hex. Scotland, Wales, and the Balkans contain some added mountains. The river Thames appears south of London.

Ireland has been separated into British Ulster (two hexes) and neutral Eire (zero BRPs). A beach hex has been added, and thus the rules no longer need to wrestle with "islands without beaches".

The Hague has migrated a hex northwest (and France has been given two replacement counters at start, to compensate for what this does to her 1939 defenses). The Vichy border has been more accurately placed, to encompass Lyons and touch Switzerland. Tunis has gained port status while Bengasi has lost it. Sevastopol has become a fortress, and is in Russian hands at 1942 scenario start. Istanbul is another "new" port. And it, and Gibraltar, become full two-front ports with the same privileges as Kiel. The West Wall appears on the map in a gray shade, and the sometime capital, Vichy, is a gray star.

The Scenario Cards . . .

. . . contain comparatively few changes of substance, but do include a good bit more information and cross-referencing to the rulebook than previously. France and the U.S. have separate cards now, with assorted useful tables printed on the reverse of each. Russia is reduced to two fleets in the 1944 scenario; Germany gets six factors of Italian partial naval counters. (The latter is to cure a 1944 catch-22 for Germany—she controls several Mediterranean islands, but had no way to supply a unit placed on one. For the same reason, Germany now is able to seize a remnant of the Italian fleet when Italy departs the war in other scenarios.)

"Surplus SW" appears on 1942 and 1944 cards. SW construction may now take place before the start of these scenarios; the surplus represents subs (1942) and SAC (1944) left over from the previous year.

On to the Rulebook:

There is no essential difference in the rules for two-player and multi-player games other than the victory conditions. A two-player game may see a player make any "diplomatic agreements" between nations he controls, or with the enemy, that would be allowable in a multi-player game.

In a two-player campaign game, the Allies must defeat both Germany *and* Italy to fulfill their victory conditions. If the Axis fulfill one of their victory conditions the game doesn't necessarily end, unless the Allied player wishes to concede—it is still theoretically possible, no matter how unlikely, for the Allies to attain an equal or higher level of victory.

While on this subject, players might enjoy a question that was posed in the recent nutmail: two-player campaign game; Italy already gone. Allies, moving second in summer 1945, occupy Berlin. Do they win a marginal victory? Answer: no, because a major does not fall until its opportunity to counterattack its capital fails. This cannot occur until fall; the Axis are not conquered in Summer.

The correspondent did not explain how the Allies could have been moving *second* under such circumstances! Perhaps the players had agreed not to use the turn flip-flop rule.

France now achieves stalemate if she is not conquered until Fall 1940, a marginal victory if she is not conquered until winter, tactical for not falling until Summer 1941, and a decisive victory if she survives the entire campaign game or 1939 scenario. Similarly Italy (in 1942 and campaign) achieves stalemate by not falling until Winter 1943 and a marginal victory by not falling prior to Summer 1944. In the 1942 scenario she can attain tactical victory by not falling before the Winter 1944 turn and decisive victory by surviving the game to the time limit, but in the campaign game she needs, respectively, three and four objective hexes. Note that if Rome is occupied in the second half of a Winter 1944 turn that the 1942 scenario would end in a decisive Italian victory even if the Allied player could prove there is no way that the Axis could recontrol Rome the following turn, because the Italian chance to reoccupy would come in the Spring 1945 turn—after the scenario time limit. In essence, the Italian player has been saved by the bell.

Neutral objectives are no longer counted when determining 1944 scenario victory conditions.

Scenario card deployment limits are clarified. The specified forces may be added to, where stacking/basing limits permit, but never altered. Thus Britain could not start 1939 with a 5-4 air unit in Malta in place of the mandatory 1-4, but she could place a second ground unit there to augment the 1-3. Starting a 4-5 armor in Egypt would *not* release the 2-5 WDF to start elsewhere. And let's close a couple more loopholes at Malta while on the subject: Britain can't start more air there by placing an airbase counter; Malta can never base more than five factors, period. Britain can't break down a 5-4 air in order to start another partial in Malta; using partials during setup has been newly prohibited.

Fortress hexes, except for Malta and Gibraltor, now lose their fortress status permanently as soon as occupied by an enemy unit. This cures a couple of former ills: if the Axis occupied a Maginot hex they were themselves quadrupled against Allied attack, and they could exploit from it impervious to the ZOC of any adjacent Allied armor. If the Maginot hexes haven't been entered at all by the Axis, they still lose their status when France falls.

Overstacking when retreating during an attrition is no longer at the retreater's option—it is allowed only if he has no other choice.

When an entirely cross-river attack is made on a fortress hex, a bridgehead counter may be placed even though the defense was quadrupled rather than tripled. A BH counter may also be placed when a cross-river attack is untripled *solely* by an airborne drop, thus not penalizing attacker for using his airborne. Attacker must place his BH counter when his first ground unit advances into an eligible hex; he can't change his mind and place it later. A player may place a BH counter, provided his side has unused ones, with or without the concurrence of his allies but a neutral Russia or Italy may place only *one* such counter with concurrence.

A BH counter *may* be removed whenever the player who placed it desires, even if he's run out of counters and wants to reuse it immediately. It *must* be removed whenever no longer needed to provide supply to any unit *and* no enemy ground units are within four hexes by land. If removal leaves an overstack at the end of the player turn, the owner must eliminate units of his choice.

ASW now eliminates 1½ subs per factor in 1943, one per factor from 1944 on. Whenever SAC inflicts *any* BRP losses, Germany must remove a 5-4 air unit from the board. It is *not* placed in the German force pool (it is out of the game, at least for a year but Germany gets five additional interceptor factors for next year start. If Germany again loses BRPs to SAC, she loses another 5-4 similarly. But if she does not, she may retrieve a 5-4 from limbo, exchanging five inter-

ceptor factors for it. If Germany has to give up a 5-4 but doesn't have one on the board, she must build one in Spring and immediately exchange it for five interceptors.

The above SW changes were inserted with one eye on play balance and the other on putting some guesswork back into the SW building, which had become a stereotyped all-subs, all-ASW affair. I suspect that the end result, when players have digested the changes, will be another stereotype in which Germany builds just enough interceptors to offset any possible Allied SAC; while the Allies, expecting Germany to do exactly that, still build all ASW in the early years and improve their long-term BRP situation. But the opportunities to burn one's opponent or perhaps get burnt by departing from that stereotype should be significantly increased.

10.46 If BRP totals are close enough that SW expenditures could have an effect on which side plays first in the coming Spring turn, each side must write their spending decisions on a sheet of paper, revealing them to each other simultaneously.

In 1945, SW builds are revealed at the end of the Spring 1945 turn. Losses are determined, quartered (rounded down) and deducted at the end of each game turn that year.

Except in the 1944 scenario, the Axis always play first in the first turn regardless of any variant counters affecting BRPs. If any turn should end with BRP levels exactly equal, the order of play from the previous turn remains unchanged.

12.13 Italian BRPs are always included in the Axis total and Germany and Italy conduct their turn together whether or not Italy has entered the war. Russian and American BRPs are not included in the Allied total until they are at war with Germany. However, Russia and the western Allies conduct their turn together throughout the game, even if a neutral Russia has a larger BRP total than the Axis.

This alleviates the "unwanted initiative" problem for Russia, previously pointed out by David Bottger in Vol. 14, No. 3. Germany could formerly arrange to move last in Winter 1940 and first in Spring 1941, getting two devastating moves against the Russian defense. It has not been made impossible—but Germany must now spend much more freely and get her Winter 1940 BRP figure below that of Britain in order to pull it off. If Britain seeks to match German spending, she may not have enough reserve left to absorb SW losses, and will then suffer the consequent BRP base reduction.

In order to take an attrition option on a front, a nation no longer need end movement with its ground units in contact with enemy ground units. The only penalty for failing to do so is inability to roll on the Attrition Table (which, incidentally, now reads 1-10 vice 0-10 in the first column). The pass option will consequently be more rare, but will still be needed when a player doesn't join his ally's offensive.

When allies can't agree on what option to use on a front, the player desiring an offensive prevails. But a nation choosing an offensive must, on that front, either make at least one ground attack or conduct one air or naval mission. This is to deter a BRP-rich and anti-social player from spending for an offensive on a front where he has few or no units, solely to inconvenience his ally who wants to attrition. For similar reasons, Russia, once at war with the Axis, always determines the Allied option to be used on the *Eastern* Front. Until Italy is at war with the Allies, she may take an offensive option on a front where Germany takes attrition and vice versa.

Units may be voluntarily destroyed by their owner, but this can be done only just before his movement phase begins. This can't be used to evade the permanent loss of an airborne unit (the same restrictions apply as if it were lost in combat) nor avoid the effects of isolation (isolated units so destroyed can't be rebuilt until the following turn).

For obvious reasons, French units can't be destroyed under this rule.

All air and naval units are inverted immediately after use (or after being counteraired, or designated to provide supply) and are placed on the board inverted when constructed; all are then faced up at the end of each game turn. Although a rule, this is actually more of a bookkeeping device or "playing aid". It is easy for a player to unintentionally use these units for more than one purpose in the complexities and confusions of combat, particularly so in the case of supply fleets. In ftf play it is all too easy for the opponent to fail to notice such lapses.

Fleets providing supply must be based on the same side of the water as the supply source (rather than being anywhere on the front as previously). The supply line must run by land from the source to the fleet's base. It is possible for a movement-phase base change to open a sea supply line to otherwise unsupplied units. Such units are then considered supplied at the start of their turn and able to move. Conversely, it is possible for such a base change to put units *out* of supply at the start of their turn. For these reasons fleets are now required to move *first* during the movement phase, before ground and air unit movement. It is also possible to have SR of a supply fleet open a supply path to unsupplied units which are otherwise about to be eliminated.

A detailed sequence of play chart has been placed on the back of the new rulebook. The offensive option combat phase sequence is particularly worthy of attention:

1. Attacker announces *all* naval and air missions (excepting only possible interceptions and exploitation missions).
2. Counterair is resolved and losses removed.
3. Defender announces any defensive air support, attacks on naval forces at sea, and naval interceptions.
4. Attacker announces any air interceptions, any naval counter interceptions, and any air attacks on naval interceptors at sea.
5. Steps 3 and 4 can be repeated indefinitely where naval units are involved, until one side or the other wishes to commit no more units or has none. Combats are then resolved in the reverse order they were announced.
6. Successful sea transport missions are concluded and the naval units returned to base.
7. Airborne drops. (May also be made during movement phase.)
8. Attacker announces and resolves his attacks. He may resolve each attack before announcing his next one—thus being able to cancel a planned attack if it is made undesirable by the success or failure of earlier attacks. If he committed ground support to any hex, he *must* make a legal attack on that hex or lose his air units there.
9. Post-combat advances may be made after each attack, bridgehead counters may be placed where entitled. All invading and shore bombardment fleets return to base.
10. Exploiting units move to breakthrough hexes.
11. Air attacks on naval units in port are resolved. As before, this is so that air can't reduce a 9-factor fleet in time to permit an invasion.
12. Exploitation movement, air activity, airdrops, and combat.

When two or more allies have ground forces participating in an attack, they must agree on which one of them will control a vacated hex prior to occupying it after combat. If unable to agree, neither one may advance. This becomes particularly relevant when the hex to be occupied is a BRP-producing capital or an objective hex—such hexes may no longer be transferred from the control of one ally to the control of another.

During exploitation, the first exploiting unit may not move more than two hexes. Each subsequent exploiter may do the same, or may duplicate exactly the move of a previous exploiter then move two additional hexes. (The unit's movement factor remains a "speed limit" of course, and enemy ZOC has its usual effect.) Thanks are due Marcus Watney for the "duplicate exactly" wording which expressed perfectly the idea I'd been trying to get across in much less understandable fashion. The rule restricts somewhat the number of behind-the-lines hexes that exploiting units are able to place under their control, and thereby makes units encircled by exploiters a bit more susceptible to rescue.

When exploiting units cross a front boundary, they must conform to whatever option their owner chose for the entered front. If it's a pass-option front, they could exploit only over hexes controlled at the start of the turn, couldn't pass adjacent to enemy units and couldn't attack. If it's an attrition-option front, the exploiters could even add their factors to the attrition total there if they're able to advance next to enemy *and* provided their owner had the foresight (or luck) to conduct the combat phase on the offensive-option front before turning to the attrition front!

Breakthrough and exploitation can now be achieved by "attacking" any vacant hex. (This was previously possible when invading an undefended *beach* hex.) This is intended to allow a player with armor to spare to advance more rapidly across a vacant area (e.g. North Africa); I dare say inventive players will find additional uses for the tactic.

Russia can no longer receive BRPs, by either Murmansk or Lend-Lease, until she's at war with the Axis. The cost of opening the Lend-Lease route can't be paid until then either. In most games, this will prevent the unrealistic Allied ploy of having France spend her soon-to-vanish BRPs for this purpose early in the game.

Russia gets some free construction. She may place four ground units (from her at-start force pool only) free in Winter 1941, three more (from her entire force pool) in Spring 1942, two more in Summer and one in fall. These represent transfers from Siberia. The number of armor taken in each turn can't exceed the number of infantry; no airborne can be taken. But there's a catch: if Russia avails herself of this option, her victory conditions (Allied conditions in a two-player game) are raised by one objective hex or season as appropriate. In the multi-player campaign game only, they are raised by two objective hexes.

Britain's SRs have been raised from six to seven. Since BRPs travel from capital to capital, they can't be SR'd if an enemy unit is adjacent to either capital. Russia is excepted, naturally.

U.S. initially deploying units may go to France on an equal footing with Britain *if* France has not been conquered. (A "1917" situation.) If Britain and France both fall, but one or both falls after U.S. entry, initial deployment may go through any Atlantic port still in U.S. hands. Initial deployment may even be made by sea transport *if* the only ports the U.S. controls are ineligible to receive sea escort SRs because of adjacency of Axis units.

It is worth mentioning, also, that U.S. fleets invading, sea transporting, or bombarding from the U.S. box do *not* themselves deploy. They perform a mission from their U.S. base and return there.

Counters removed as attrition losses must belong to a defending nation that had ground units actually in contact with the enemy on the front. Partisans, active minor allies, units of a minor in which a major has intervened, all count as if they were the major's units for this rule, but no more of British replacements being taken as Western Front attrition losses when the BEF hasn't even landed in France.

Attacker may not advance across a crossing-arrow hexside to gain an attrition option hex.

Attrition sequence has been altered somewhat when the attacker gets more than one hex. Attacker first selects all hexes he wants, then defender makes all his retreats, finally attacker makes all his advances. Defender still can't retreat more than one hex.

21.4 A major power that declares war on a minor must on the turn of declaration, either move forces into that minor or conduct an Offensive or Attrition Option attack against that minor's forces. If a nation finds itself unable to comply with this rule, its DoW is revoked and the BRPs lost. The minor is at peace with all powers and may not be attacked in the future without a new 10 BRP DoW expenditure.

This was adopted to counter subterfuges such as France declaring war on Norway or Portugal while Britain does the work and reaps the BRP benefits. it doesn't completely prevent such monkey business, but does make it a bit more inconvenient.

A nation that declares war on a minor must pay 35 BRPs instead of 10 if the declaration will automatically put it at war with a major. This, I hope, closes all conceivable loopholes. Germany and Italy can't attack the same minor until Italy is at war with Allies; Russia and the Western Allies can't attack the same minor until Russia is at war with the Axis. When war is declared on a minor, the minor's units are set up *before* front options are announced.

As previously, upon initial conquest of a minor country its hexes automatically pass to the conqueror's control at the end of his combat phase. An exception has now been applied to minor allies (unless they were activated by Allied attack plus Axis intervention). This prevents Russia from barging into the Balkans in 1944 and claiming control of all vacant hexes of a minor ally because of a technical "first conquest".

As previously, minor country (except minor ally) ground units may not move outside their home country; they may attack across its borders but may not advance. Minor air and naval units are still restricted to basing only in their home country, but may operate freely from their in-country bases.

24.23 If hostile major power ground units are in the conquered country, and can still trace a line of supply at the end of the conqueror's Combat phase, the hexes they are on and the hexes of their supply line do not pass to the conqueror's control. The owner of the units in question chooses exactly which hexes will be his supply route (or routes if more than one is needed), but the routes must be as few and as short as possible and must go to the nearest port or controlled friendly home. The conqueror controls all other hexes. He may not cut the supply route(s) by SRing armor adjacent to them until a later turn.

This provides some specifics for a BEF trapped in conquered France as well as assorted other predicaments. It is intended to allow a reasonable chance for units to extricate without denying the conqueror an inordinate amount of real estate. The rule above quoted is for units trapped in minor countries; in majors the principles are the same except that there are no restrictions on conqueror's SRs (these become irrelevant because a major falls during its own side's player turn).

Examples to clarify some often confusing situations: Germany conquers Belgium. France then occupies Brussels on the last half of the winter turn. *Both* Germany and France receive the Belgian BRPs at year start—Germany because of the one-turn-to-recapture principle; France because she is the actual physical possessor (nine points of the law, remember). Germany will immediately have to deduct BRPs if she fails to retake Brussels in spring. If she does retake it, this of course places France in the same recapture-or-deduct situation. One nation or the other will eventually have to subtract the dually-awarded BRPs—probably. In theory, control of Brussels could continue to seesaw for an entire game year, and another dual award could occur in the following year start.

However if Germany occupies Paris in the last half of a winter turn, the tenth point of the law prevails. Germany gets nothing—because conquest of the major cannot occur until the following spring, when France's counterattack on her capital fails.

And another however: if the Allies get Paris back from Germany in the last half of a winter turn, at any time after the fall of France, a dual award *is* made.

Capture of Paris in the 1942 and 1944 scenarios, and of Rome in the 1944 scenario, does yield 42 and 37 BRPs respectively to the Allies at year start. Those captures were previously of no BRP value because the rules had specified that you got half the BRP value a major started the scenario with; in the cited cases that meant zero.

The principle that you can't lose BRPs for a territory you controlled at scenario start has been relaxed in one instance: loss of a capital to partisans in the 1942 and 1944 scenarios. The partisan threat was much diminished in those scenarios because they couldn't cost Germany any BRPs if they did seize their capital.

Major powers may not transfer controlled hexes to the control of an ally. Thus:

EXAMPLE: Italy may allow German units to occupy any or all Albanian hexes, but those hexes (and Albania) remain under Italian control. If the Allies conquer Albania and the Axis reconquer it, either Germany or Italy could control Albania. Neither country could receive BRPs for it.

EXAMPLE: Italy alone attacks Yugoslavia; occupying and therefore controlling Belgrade. Italy later leaves Belgrade and allows a German unit to enter. This doesn't give Germany any Yugoslav BRPs, nor does it alter the status of Belgrade as an Italian controlled objective hex.

EXAMPLE: The Axis make a Cooperative Conquest of Yugoslavia. Either nation may control Belgrade, whichever one occupied it; and the Yugoslav BRPs may be split in any agreed manner. Regardless of the manner in which Yugoslavia was conquered, if the Allies subsequently occupy Belgrade and hold it for one Axis turn, and one Axis nation alone reconquers Belgrade, that nation receives all of the Yugoslav BRPs and controls Belgrade. However, if the other Axis nation has units in, or makes an attack on, any Yugoslav hex, the reconquest is Cooperative and the resulting BRPs may be split in any newly agreed manner. Belgrade still goes to the nation that occupies it.

BRPs derived from a cooperative conquest may be shared in any manner the conquerors agree on; they are split evenly only if allies fail to agree. Thus if Britain and France conquer Libya together, they can allot five BRPs to France at year start and none to Britain, or vice versa, or three or four to one and the remainder to the other. If they can't agree, they each get two and the odd BRP is lost. Once set, the division cannot be changed from year to year. If one of the allies is conquered by the Axis later, the survivor would get all five BRPs if he still controlled Libya. If the Axis reconquered Libya, and still later France and Britain should conquer it again, they could agree on a new split of the Libyan BRPs. Let us say British convince France to aid in the conquest by promising her all five BRPs. Britain could, at year start, break the agreement and insist on her half (two) of the BRPs!

If Spain or Turkey is attacked by either side, either will automatically become a minor ally of any power that intervenes.

Intervention is automatic and immediate if a *garrisoned* minor ally is attacked by the Allies. The Axis could therefore commit DAS against the initial Allied attack, if able. The same would apply if an inactive Vichy, attacked by the Allies, had an Axis unit present in Vichy territory.

Some geographical limitations have been placed on the deployment of minor ally units, in addition to those previously in effect for Finland. In addition to their home country, units may only be used in areas as follows:

—Bulgaria: Yugoslavia, Greece and European Turkey.
—Rumania: Yugoslavia, East Europe and Russia.
—Hungary: Yugoslavia, Poland, East Europe and Russia.
—Spain and Turkey: the Mediterranean Front and Russia.
—Iraqis: Persia, Lebanon-Syria, Palestine, Transjordan and Arabia.

Spanish units may also be in East Europe, and may SR through the Western Front to reach East Europe/Russia.

Minor ally air and naval units must *base* as shown, but may operate freely from their bases. Spanish fleets in northern Spain could operate in the Atlantic—so, conceivably, could Turkish fleets if able to transit or base at Gibraltar.

NOTE: If Spain, because of Axis attack, becomes an Allied minor ally, her geographical limitations change to Mediterranean Front and Western Front. This provision did not make the rulebook.

Germany may not place a garrison unit in Bessarabia before summer 1940 unless she is at war with Russia. This prevents Germany from claiming she has denied East Europe's BRPs to Russia by doing so.

The 20-factor maximum which Germany may place in her minor allies while inactive has been retained. An added restriction is that no more than five of the 20 may be in Finland.

Italy can now be made to surrender, somewhat as in the real war. The rule was plagiarized (but modified considerably) from a proposal by David Ritchie in Vol. 15, No. 3. Italy surrenders if all of the following apply:

—a supplied Allied ground unit (not airborne) is in mainland Italy at the end of an Axis combat phase.

—there are no Axis forces in Africa (unactivated Vichy don't count).

—Allies control every hex of Sicily, or of both Sardinia and Corsica.

—Allies moved first in the current game turn.

While Paris is Axis-controlled, France may attack hexes other than Paris *if* "success could conceivably permit exploitation movement into, or a 1-2 or better attack on, Paris." Similarly a 1-3 or 1-4 French attack on Paris may be made *if* "an EX result would remove all Axis ground units from Paris, *and* other units, exploiting or paradropping, could conceivably then occupy it." France can't counterair except against Axis air units in position to interfere with a legal French ground attack, can't take an offensive anywhere but the Western Front, can't attrition anywhere, and can't declare war on anyone.

Britain can't normally recapture Paris, because she's banned from the hex until France falls. But it's theoretically possible for a British unit to prevent the fall of France by moving *through* a vacant, Axis-controlled Paris.

The Axis still gain, and Russia loses, 15 BRPs each from the capture of Leningrad and Moscow. This is clarified as a one-time event; there is no further gain or loss if control of a city seesaws back and forth. But 15 BRPs per city are subtracted from Russia and added to Germany at each year start when appropriate.

In order to force Russian surrender, Russia must now be reduced to *50* ground and air factors. This shrinks the role of the Russian navy, the continued existence of which had often been vital to the Russian player—a situation somewhat at odds with history. Axis factors must now exceed Russia's by a 3-2 ratio to force surrender. The Axis factors must be inside Russia's original borders; the Russian factors may be anywhere on the mapboard.

Tunis and Beirut are supply sources for French units only (including Vichy and Free French). The U.S. is a supply source, but only if both London and Paris are Axis-controlled or isolated from Atlantic ports. Britain can thus supply a counterattack on an occupied London if she can move naval factors to the U.S. box (before U.S. entry), or may be supplied by U.S. fleets after U.S. entry. Konigsberg and Durazzo are supply sources at the start of the 1939 or Campaign Game scenarios; they lose their status as soon as the Axis open a land supply route to East Prussia and Albania.

The supply rule contains a hazy area that escaped notice until too late to clarify:

27.22 A unit is in supply if it can trace a line of controlled hexes, free of enemy ZOC, between itself and a supply source. Enemy ZOC over the unit and/or the source does not block this supply line as long as all hexes in the supply line between the unit and the source are free of enemy ZOC. Units adjacent to a supply source are always in supply unless both the supply source and the adjacent unit are in ZOC of the same enemy unit.

If hex A is not controlled by red, Red is clearly unsupplied because of the "unless" phrase of the last sentence. But what if Red does control hex A and it is not in enemy ZOC? Answer: Red is in supply. The first two sentences override the unless clause.

A word about supply from bridgeheads may be in order, because the old rules mentioned bridgeheads as supply sources. But they never were, really—the true source was across the water. So if enemy armor is adjacent to a bridgehead, that ends the supply line. The bridgehead hex itself can be supplied by sea, but the line cannot continue out of it. The same principle applies at a port, of course.

Armor and airborne units which are automatically in supply by virtue of having exploited or dropped lose their privileged status if they are moved by SR.

Airbase counters may be used only by air units of their own nationality during the player turn they are initially placed on the board. This is intended to hamper an Axis player who places Italian airbases primarily for German use, or an Allied player who places American airbases for British use.

Air combat has been thoroughly revised. Each combatant rolls a die. The roll is modified for nationality: -1 for Italy, France and Russia, -2 for all minors, and zero for the other three majors. It's also modified for superiority, the superior side getting +1 for each factor of excess.

The loser of the modified roll loses air factors equal to the difference between rolls; the winner eliminates half as many (rounded down). If it's a tie, a third die roll is made and each side eliminates that many factors (but never more than were present in the smaller force).

Counterair attackers are no longer required to equal the factors being attacked, success is simply made unlikely. If defender had the larger force *and* won the air combat, any of his surviving factors are *not* considered to have been counteraired and continue to be available for use.

Only uninverted air units defend against a counterair attack, but any inverted units present are taken as casualties also, if the face-up factors are insufficient to meet the verdict of the die rolls. A hex containing only inverted air may be counteraired. Defender has zero factors defending, the die roll is modified for attacker's superiority above zero, but no nationality modification is applied to defender.

Interception air combat is identical, and as before surviving defenders may be applied to DAS or may return to base at their option. When both naval and air units are in an attacked hex, attacker need only win the counterair combat in order to attack the naval units. He does not necessarily have to eliminate all defending air present.

Attacks on naval units are themselves changed: one die roll is made for each attacking air factor. In port, 1 or 2 eliminates a naval factor, 5 or 6 eliminates the air factor. At sea, 1 eliminates naval, 6 eliminates air.

A limitation has been put on DAS. Like ground support, it may not exceed three times the number of ground factors defending.

Moving on to naval matters, Istanbul's two-front port status now allows the Turkish Navy to operate in the Black Sea. For Sea-Escorted SR or sea supply lines to pass all the way through the Turkish straits, all four hexes adjacent to the crossing arrows must be controlled.

Fleets at two-front ports may escape to either front if their port is overrun. You, the German player, enter Gibraltar. Force H heads for Plymouth. You hopefully point out that Free French Oran is much closer. Sorry—you lose. The owner of the fleets has his choice of front—*within the chosen front* he must then flee to the closest friendly base.

At all straits containing crossing arrows, fleets may not move through unless both land sides are under friendly control. They may move *into*, as distinct from through, an uncontrolled strait to execute a mission.

Fleets based in the U.S. box may:

—invade and bombard only if no friendly port exists on the Western Front.

—sea transport only when Axis units are adjacent to all friendly Atlantic ports (thus making sea escort impossible).

—carry supply only if both London and Paris are Axis-controlled or isolated from Atlantic ports.

—intercept at maximum range, after U.S. entry.

A U.S. fleet may *initially* move from the U.S. box to Europe only during SR, as an initially deploying unit. Once having done so, it (and other Allied fleets) may freely move to and from the U.S. box during movement or SR phase. It is not again counted as an initially deploying unit if it returns to the U.S. box and subsequently leaves there by SR. U.S. fleets which have not yet initially deployed may nevertheless sail during combat or SR phase, but must return to the box at the end of the phase.

Shore bombardment has been sharply curtailed. It may be used only against hexes being invaded by sea, fortresses, and one-hex islands. To kill off a misconception that has plagued rule decipherers: fleets never bombard into an adjacent hex—rather, they enter the water portion of the same coastal hex they are bombarding. French and British fleets cannot, as some previous articles have implied, bombard the same hex before 1942 by remaining in separate, adjacent hexes.

Both ports involved in a sea transport mission must have been friendly at the start of the player turn. (The paradrop followed by sea transport tactic is dead.) A given sea transport mission may load units at more than one port, but it may discharge them at only one port. Attacker can of course move more than one such mission. Embarkation costs ground units no movement factors, debarkation costs one—but enemy armor adjacent to the port of embarkation limits movement normally; embarkation would cost 2 MF in such circumstance, even if both naval unit and transported unit begin their turn in the same port hex. Unsupplied units can't be sea transported because of the debarkation cost. Transported air units must have started their turn in the port of embarkation; they treat the port of debarkation as their new air base but cannot fly counterair missions therefrom (sequence of play problems result otherwise), and any intended ground support mission or attack on naval units in port must be announced when attacker announces his other air missions.

Invading fleets may use any surplus factors (not required to carry their ground units) for bombardment. Invading units must start their turn in a port, and the fleet that carries them must be based in the same port. (It could change base during movement phase to get there.)

EXAMPLE: Two 9-factor fleets carry a 4-5 armor unit and a 1-3 infantry unit. Only 15 naval facotrs are required to carry the ground units; the other three may provide one factor of Shore Bombardment.

Moving fleets may be intercepted, or attacked by air, at their base hex (since they enter the water portion of that hex as soon as they leave port), or at their target hex, or at any intervening hex. Their target hex is their new base (in the case of movement-phase base changes), the port of debarkation (sea transport), the invaded hex, or the hex being bombarded.

EXAMPLE: An Italian fleet attempts Sea Transport from Taranto to Tripoli. One British fleet from Gibraltor and two from Alexandria attempt to intercept it in the Tripoli hex. The Interception die roll for Gibraltar fails, but the one for Alexandria succeeds. Italy now attempts to Counter-Intercept the Alexandria fleet at I124 with a second Taranto fleet and succeeds. Italy now announces an air attack by a unit from Tobruk on the Alexandria fleet in I124. France then tries to Counter-Intercept the second Italian fleet, at FF24, with fleets from Marseilles and succeeds. Italian fleets from Naples now try to and do Counter-Intercept the French at DD18. Two British fleets from Gibraltar try to and do Counter-Intercept the Naples fleets at CC19. Finally, an Italian fleet from Livorno manages to intercept the Gibraltar fleets at CC17.

The combats are resolved in reverse order of the listing above; beginning with the Livorna fleet vs the Gibraltar fleets, and ending with the surviving factors of the Alexandria fleets vs the original Sea Transport mission.

The British, although they have one remaining uncommitted fleet in Gibraltar, cannot attempt to intercept the Livorno fleet with it because of rule 29.54. The earlier Interception failure by some of the Gibraltar fleets, however, does not prevent the other British fleets there from making their successful attempt against the Naples fleets.

The air and naval attacks in I124 can be resolved in either order the Italian player chooses. Had the fleet been attacked by naval and air in separate hexes, the order would depend on which attack the fleet encountered first along its course.

If the Alexandria Interception die roll, or any later one, had, failed, Counter-Interception opportunities would have ended. A side may not announce an attempt, roll the die, then announce another against that same target.

The revision of interception naval combat is in many ways similar to revised air combat. The superior side gets +1 if it has 1/3 more factors than the opposition, +2 for 2/3, +3 for a 2-1 edge, +4 for 3-1 and +5 for 4-1 or better. The nationality modifiers are +2 Germany; +1 U.S., Britain and Sweden; 0 France; -1 Italy; -2 all others. Italy drops to -2 in any battle north of the N row, reflecting the fact that her ships were designed for Mediterranean conditions rather than the North Sea.

The intercepting fleet wins any tie, but neither side takes any casualties. Otherwise the losing side's losses are multiplied by the number of 9-factor fleets (or equivalent) it had in combat. Let's say the difference between the modified die rolls was three: the loser eliminates three factors if he had 17 factors or less present; six if he had 18-26; nine if he had 27-35; etc. As in air combat, winner eliminates half (rounded down) as many as defender. The loser must immediately return to port.

A fleet on an interception mission—only—can choose, before die rolls are made, to break off combat. Die rolls are still made; the intercepting fleet automatically loses the combat regardless of the result, but its losses are halved (rounded down) from what they would otherwise have been and in no case can it lose more than half of its factor strength. The winner's losses are reduced correspondingly.

Replacement counters are *not* counted in attrition factor totals. This is guaranteed to be the final word on the conflicting rulings of the past.

An airborne unit that has dropped, and wishes to drop again in the following turn, must be able to trace a normal supply line to do so. It can't use the hex it just dropped on to supply it for this purpose, even if a capital.

Partisan construction is allowed in Italy (1) and Britain (3) if they leave the war. Partisans may not be constructed in nor move into Vichy France until Vichy has been activated or deactivated.

When Allies disagree on who gets to construct partisans where, the nation with ground forces closest (as the crow flies) to the country in question gets first construction and first choice of placement. Russia and Britain both want to build partisans in Greece. Britain has ground units closer. She gets to build two and has first and third choice of placement; Russia gets one and second choice. A partisan unit is controlled and moved by the nation that constructed it. "Russian" and "Western" partisans can't stack or attack together. A partisan-controlled hex is controlled by *no one* for victory condition purposes.

So how do you get rid of a partisan on an objective hex? Unless you constructed it and therefore can move it, you don't! This allows some underhanded play in a close multi-player game: "Russian" partisans sitting in Marseilles or Lyons to deny it to the Western Allies; "Western" partisans in Belgrade to frustrate the Soviets. This can be regarded as simulating in a small way the struggles within the liberation movements for postwar political control. The Axis may also face choices—given the relative victory prospects of the opponents, it may sometimes be better to pass up a chance to attack a particular partisan.

Axis variant 2 (Irish resistance) now has no effect if any part of Ireland is under Axis control when it is played.

In order for variant 4 (Spain) to be played, Italy must be at war with a major power and France must have been conquered.

Variant 5 can now activate all four Axis minors early. It is no longer played at a specific time point, Germany must have conquered France and be at war with Russia.

Variant 8 (reduction of U.S. initial deployment) is playable if submarines outnumber ASW by a 3-2 ratio. This was lowered from 2-1 because of the strategic warfare changes.

Variant 10 (jet fighters) has the additional effect of raising the German air combat roll modifier to +1.

Allied variant 3 (Free French) is void if France falls before winter 1940, and if it is played, Free French armor, air and naval units may not be reconstructed if lost in combat.

Allied 5 had drawn some criticism: all other variants represented something that might have happened—but this one represented something that did happen, and Britain unfairly was being deprived of her 50 four-stackers. On the other hand, Britain normally can build only four (rarely five) ASW in 1940. The ancient destroyers can hardly be said to have tripled her ASW capacity, as they used to in the game. The outcome:

U.S. Navy makes full commitment to protect shipments to Britain from unrestricted submarine warfare. Allies lose only two BRPs (instead of three) for every surviving submarine factor in Strategic Warfare resolution for the remainder of the game. Play only in 1941 YSS for immediate resolution.

Allied 6 (U.S. Navy in Atlantic) has the additional effect of raising the U.S. naval combat die roll modifier to +2.

I'll have more to say on the subject of variant counters when we publish our *THIRD REICH* feature issue. Making the variant counters part of the game as opposed to an optional rule has obviously increased their importance. To counteract this increased role we feel there should be an even wider selection of variants which might occur —thus decreasing the likelihood of any particular one being drawn—and we have a number of good ones to add to the current list.

The intelligence rule is completely new and owes its existance at least in part to a desire to give players a chance to overcome the increased role of fate encompassed in the now mandatory Variant Events. One player per side may spend five BRPs during each construction phase to roll two dice on the following table:

dice roll	results
12+	The opponent's variant counter is nullified if not yet played. It cannot be replaced.
11	The opponent's variant counter must be disclosed.
10	A nation of your choice loses an amount of foreign aid equal to (but not exceeding the amount of aid already given) the roll of a die in any one Minor Country of your choice.
9	You may draw one unused variant counter. This variant counter must be returned to the unused variant counter pile for a possible redraw by either side. The counter has no effect beyond its value as a clue regarding the possible identity of the opponent's variant.
8	Opponent must reveal the contents of his SW box.
7	Opponent must reveal the contents of his Murmansk box.
6,5	No Effect.
4	Your intelligence network has been compromised. Your side may not use the Intelligence Table next turn.
3	Same as dice roll "4" and the next Intelligence effort by your side will cost 10 BRPs.
2	Same as dice roll "4" and the next two Intelligence efforts by your side will cost 10 BRPs.

The U.S. can't roll while neutral, Russia and Italy can. When two or more players on the same side want to roll, they settle it by die roll. If the die roll ties, the player with most BRPs wins.

The opposition can spend five BRPs on counterintelligence. If they do, one is subtracted from the intelligence roll; if they don't, one is added.

The rolling player may select any lower result instead of the result he actually rolls. He may keep any information gained to himself, or may share it with his allies. He may even choose to use the result of the roll against a fractious or untrustworthy ally rather than against the enemy.

Also completely new is the "Foreign Aid" rule, under which BRPs may be granted to various minor countries to reduce or enhance the chance of their activation. Both Germany and Britain may grant BRPs to the four "standard" Axis minor allies, and to Turkey, Spain, Vichy, Ireland, and Iraq. Italy may grant to Spain and Iraq only; Russia may grant to Bulgaria, Hungary and Rumania. (But Russia is unlikely to use the option with Rumania, the grants are void if Russia occupies Bessarabia, which she must do if she wishes the East Europe BRPs.)

The granted BRPs actually evaporate, since the minors have no independent BRP levels or force pools of their own. Grants to minors are limited to 10% of the granting power's year start BRP total. They are transferred by SR, each destination counting one against SR totals, and require sea escort where applicable. For this rule only, neutral hexes are treated as if controlled, even in garrisoned, inactive minor allies. Thus Britain could send BRPs to Hungary via sea escort—Athens-Bulgaria-Rumania, and could do so even if a German garrison unit was in Budapest. Germany can send BRPs to Ireland via Dublin, and Britain or Germany can send to Finland via Helsinki, but using these non-ports costs double SR.

Whenever a minor ally is due to activate—be it one of the four that normally activate in summer '41, or one that is to be activated by variant counter—the activating player must roll one or higher with one die. Each BRP *more* that the minor has received from the opposition subtracts one from the die roll. (Germany has given two BRPs to Hungary; Britain has given four—there is a net modification of −2.) Thus there is no need for the actual die roll *unless* the opposition has granted more BRPs than has the would-be activator.

In the case of Vichy, the modifications are done as above if the Axis hold variant #3. Otherwise, they are included in the modifications to the Vichy activation/deactivation die rolls. Excess Allied aid to Ireland can in the same way affect the play of Axis variant #2. When a player tries to activate a

minor by variant counter and fails, he can keep trying. Although the Spain variant is normally played only in Spring '41, it can be retained and tried again if Allied foreign aid prevents its play that turn.

Through much of the war both sides devoted a good deal of diplomatic effort to courting Turkey. Turkey finally did enter the war in February 1945, when Axis forces were no longer on her border and no one but Hitler doubted the outcome. Turkey may now become a British minor ally under the right circumstances:

—Allied ground factors in the Mediterranean Front exceed Axis ground, and Allied naval factors based on the Med exceed Axis naval. (Italy counts as Axis, whether neutral or not.)

—Allies control at least seven of the Mediterranean Front objective hexes.

—Turkey is still neutral.

(As mentioned earlier, Turkey, if attacked, automatically becomes a minor ally of *any* intervening power.)

35.5 A sea supply route through one or more of the following ports: Antioch, Beirut, Haifa, and Port Said, would also be limited to a maximum of 18 factors and this limit would include Italian and Spanish units as well. The 18 factor limits do not apply to factors which can trace an overland supply route to any non-Libyan port source (i.e. through Turkey or Persia to some source of supply). The Allies can decrease this maximum limit in a similar manner to which Malta acts on Libyan supply sources if they have an air unit on Cyprus, Crete or Rhodes or more naval factors stationed in the Mediterranean east of the Suez Canal than the Axis. Should the above situation arise the amount of supply the German could draw through one or more of the above ports is limited to the 18 factor limit minus one factor for each Allied air factor on Cyprus, Crete or Rhodes or within four hexes of the Axis port, and minus one factor for each Allied naval factor stationed east of the Suez Canal. Note that if the Allies stationed two 9-factor fleets in the Mediterranean east of the Suez Canal no Axis units could be "supplied" through the port. *NOTE:* Axis units are never automatically in supply solely because they are within the limits of this rule. Supply must still be provided by Axis fleets to the respective ports.

Loss of Gibraltar or of Suez/Alexandria now costs Britain 25 BRPs each—if she loses both, she loses 50 BRPs altogether. If Gibraltar is lost, Egypt's ports may support only four ground units and four air/naval counters. These limits wouldn't apply to units in the Mediterranean that were able to trace supply to some other source, for example a controlled Ankara or Madrid, or a sea supply line from Britain to a north Spanish port and across Spain. But the limits do apply to units at Malta, even though Malta is a fortress.

Units may SR through the strait if Gibraltar is controlled, regardless of enemy forces on any hex near Gibraltar. This is unchanged. They may also SR *into* Gibraltar (remaining there) regardless of adjacent units. The converse is not true; enemy units may not SR into hex Z8. Gibraltar may be bombarded or invaded from either front and sea transport missions from either front may land there.

At Suez city, displaced fleets must escape to the Mediterranean if the canal is usable and Gibraltar is not hostile. If either condition does not apply, they may escape to the Western Front, but they don't reappear until their side's next SR phase, and then at SR cost.

Whenever a hostile unit enters a canal-side hex, the canal becomes inoperable and cannot be used again until one side or the other has controlled *all* canal-side hexes for two *complete* game turns. (This rule also applies to the canal at Kiel—the two ports are usable, but only as one-front ports until the damage is repaired.) Either side may use the Suez-Western Front Sea Escort SR route (throughout the game) at double SR cost, but the Allies may prevent the Axis from using it by removing one 9-factor fleet from play. (This simulates a Red Sea blockade force.)

Iraq has been labeled a British colony. Technically it was independent (from 1932)—but technically so was Egypt (from 1922). World War II era maps generally showed Iraq in the pink of the British Empire; British bases and forces were present much as in Egypt. The Iraqi revolt variant is still quite playable; if British forces are in Mosul, the rebels have one turn to capture it for their supply. BRPs cannot be SR'd through Iraq. The prohibition became necessary to prevent cost-free circumvention of the Lend-Lease route.

Even though Persia is located within the Mediterranean Front, a player who pays the Lend-Lease activation costs does not thereby gain an offensive option throughout that entire front. In fact, the old "declaration of war and offensive option" phrasing has been abandoned entirely in favor of a flat 25 BRP charge.

Lend-Lease BRPs have been reduced to a maximum of 20 per turn. They require sea escort only for the first turn of the two-turn transfer process. They are charged against SRs during both turns, but are charged against American initial deployments (if coming from the U.S.) only on the first of the two turns.

BRPs in the Lend-Lease box can be moved back to the West instead of on to Russia if surrender of Russia, cutting of the Lend-Lease route, unjust Bolshevik commentary on Western shortcomings, or some other development causes the granter to change his mind. Or they can remain in the Lend-Lease box for additional turns (to await a hoped-for reopening of a closed route or a diplomatic apology, perhaps).

If an eastern Mediterranean port-plus-land-hex route through Turkey is friendly, it may be used for Lend-Lease without paying any activation cost, but is subject to the same two-turn delay as is the Persian route. The BRPs are considered to have reached the port at the end of the first turn and the Axis may destroy them there if they are able to occupy the port before the BRPs move on.

Extensive changes have been made to Murmansk convoy rules. All (vice 90%) of unopposed convoy BRPs reach Russia. Submarines may oppose convoys even if Germany does not control Norway, but eliminate one less BRP per factor than they otherwise would. And:

42.42 Axis fleet strength opposing the convoy is compared to Allied fleet strength. (The latter includes the units Sea Escorting the BRPs as well as any extra convoy protection fleets.) If the Axis-to-Allied naval ratio is less than 1-3, nothing happens. For 1-3 and higher ratios a die roll is made; results are as follows:

1-3: On roll of "1", Axis fleets feint sortie—convoy scatters and loses an extra BRP for each factor of submarine and air attacks.

1-2: On die rolls "1", or "2" Axis fleets sortie, drawing Allied reaction. Convoy scatters and automatically loses 10% of its BRPs (fractions rounded down) plus an extra BRP for each factor of submarine and air attacks.

1-1: On die rolls "1", "2" and "3" Axis fleets sortie. Convoy scatters and loses 20% of its BRPs plus an extra BRP for each factor of submarine and air attacks.

3-2: On die rolls "1" through "4" Axis fleets sortie. Convoy scatters and loses 30% of its BRPs plus an extra BRP for each factor of submarine and air attacks.

Any ratio greater than 3-2 is treated as 3-2. These losses from surface naval opposition are determined first before any further BRP deductions are made for successful air or submarine opposition. If the Axis fleets sortie, both sides roll a die to determine if a naval battle will occur. The player rolling the higher number may decide whether to join battle or not (Axis player wins ties). If battle is joined, naval losses are extracted in the normal manner. Regardless of naval losses suffered (if any), the percentage convoy BRP loss is not affected.

42.43 For each air factor in the Murmansk box a die is rolled with the resulting number indicating the BRPs lost from the convoy. (There is a +1 die roll modifier if the convoy scatters and a −1 die roll modifier for every excess 9-factor fleet beyond those needed to transport the BRPs if the convoy does not scatter. After each air factor attacks another

die is rolled to see if the air factor survives. The air factor survives on any die roll less than "6". There is a +1 die roll modifier for every accompanying 9-factor fleet providing protection (i.e. not needed for transport of BRPs) if the convoy does not scatter.

42.44 For each submarine factor in excess of escorting ASW factors, 3 BRPs are lost from the convoy (4 if convoy scatters). Submarine and ASW counters are mutually eliminated as in SW resolution in whatever ratio was in force during the YSS of the current year.

Germany's required 25-factor commitment to the Eastern Front has been reduced to 20, but must be composed of ground and air only. It must be met at the end of each German movement phase *and* player turn. (The same principle has been applied to Britain's 10 factors in Ireland when the IRA variant is played, and to the 45-factor Axis post-conquest garrison in Russia.) This pretty well ends the German tactic of basing air in the east, staging it west to France and then SRing back; although it is still permissible for Germany to move or SR units into the East in order to allow other units to exit during the same phase. The penalty for a German shortfall is lifting of the prohibition on Russian declarations of war. If Germany falls short of the 45-factor requirement the penalty is more elaborate: Germany must abandon one Eastern Front objective hex of her choice and return it to the Russian player, must lose 15 BRPs as penalty, and may not use SR for any purpose other than to correct the shortage until the 45 factors have been reinstated.

Russia may not cross the partition line in Poland until at war with Germany. Germany may, but must withdraw to her own side as soon as Poland falls.

If a reckless Nazi declares war on Russia before Russia declares war on East Europe, Russia may enter any part of Poland without further ceremony. Neither Russia nor Germany may enter the Baltic States until one of them spends 10 BRPs to declare war on that area. Bessarabia remains a permanent part of Rumania.

If neither Russia nor Germany deigns to declare war on East Europe by the end of spring 1940, eastern Poland belongs to whoever controls Warsaw. The Baltic States become a separate area worth 25 BRPs, and Bessarabia again remains part of Rumania.

Previously Germany could evade much or all of the effect of the Russian Winter rule by arranging to declare war on a fall or winter turn and having few or no units across the original Russian frontier at the onset of winter. This rule is now applied to the first winter *following* German declaration of war on Russia, and Russia may even then be able to postpone the first winter effects. Four dice are rolled at the beginning of the first winter following declaration of war. If the dice sum exceeds the number of non-Finnish Axis units east of the original border, Russia may choose to postpone first winter effects until the following winter.

All pre-1942 restrictions on France-British cooperation apply equally to cooperation between Russia and the Western Allies, throughout the game. The prohibition on combining to attack the same hex is retained. Neither may give the other any type of air or naval support, neither may draw supply from a source controlled by the other, and neither may use air/naval bases controlled by the other. No more than ten factors of Western Allied units may ever be in Russia, and even these would have to be able to trace their own supply from a Western-controlled source.

If the Axis declare war on their fellow fascists in Spain, their good will with other authoritarian-inclined regimes plummets. Axis variants 1, 3, 5 and 7 are cancelled if not yet played, and the Axis must roll six or higher with one die (as opposed to 1) to activate a minor ally.

Corsica becomes Vichy upon the fall of France. Although Free French colonies yield BRPs to Britain, Vichy colonies do not yield BRPs to the

BRP CALCULATIONS

The BRP calculations necessary in a year start sequence are one of the more difficult portions of the rules—both old and new rules—for a new player to grasp. They have not been changed, and are summarized here:

Previous Base _____
ADD previous year's leftover BRPs multiplied by the nation's growth rate (omit this in 1940 YSS) _____
SUBTRACT any BRP deficit resulting from SW losses _____
NEW BASE _____
ADD BRP value of appropriate minor countries, conquests, etc. Germany only: add Moscow/Leningrad BRPs if controlled. _____
ADD (in 1940 only) 1939's leftover BRPs multiplied by growth rate. _____
SUBTRACT any BRP deficit not caused by SW losses. _____
Russia only: SUBTRACT Moscow/Leningrad BRPs if not controlled. _____
YEAR START TOTAL _____
SUBTRACT any BRPs spent for SW construction _____
Divide by two, dropping any fraction. (This gives the spending limit *per turn* for the coming year.) _____

Axis upon Vichy activation. If a French colony had been conquered by the Axis before France fell, or if a Vichy colony was lost to the Allies and reconquered by the Axis, then the Axis could receive BRPs.

Vichy ceases to exist, and her units are removed, when the Allies enter Vichy city, *or* when Germany fails to recapture an Allied-controlled Paris. Partisans in either city don't result in the deactivation of Vichy.

A few changes have been made to the Vichy activation table. The +1 for all colonies Vichy has been dropped. The +2 for Gibraltar or Suez/Alexandria has been clarified; there can be a total +4 addition if the Axis control both areas. There is a –2 if the Axis declare war on Spain. Several –1's are clarified:

—if all French colonies are under Allied control.

—if Axis forces have violated Vichy territory, except during the first Axis player turn after the fall of France, and except when intervening against an Allied attack on Vichy.

—if no Axis units are in Africa.

Gibraltar, Norway, Sicily (and all other islands) don't count as a bridgehead or port on the European continent. No port or bridgehead counts if held solely by airborne.

In the 1942 scenario, Axis units may not set up in Vichy territory. (This eases Britain's defensive problems a bit by making Gibraltar less vulnerable.) Britain controls Tobruk and the desert to the south and east at the start of this scenario.

In multi-player games, a player may never move his ground units over hexes controlled by an ally without consent, nor may he base his air/naval units at a base controlled by an ally without consent. A player may *not*, however, refuse to let an ally trace supply from a source the player controls.

51.5 Whenever on the same turn two allies wish to attack the same minor country or colony, or to intervene in the same minor country, and cannot reach agreement on how to proceed, a coin is flipped. Winner of the flip may move one unit into, or adjacent to, the forces of, the territory in question. The loser then moves one unit, and they continue to alternate until one or the other does not desire to move any more units in that vicinity. This procedure may be used either during Movement, Combat, Exploitation, or SR; and may be adapted for the other instances where allies cannot reach agreement on how to proceed. Since such disagreements indicate a strain on the alliance, units of the allies concerned may not stack together on that front for the remainder of that player turn—though units already stacked together could remain so if they did not move.

Those who playtested the new edition have been credited in the rulebook and praised in these pages, and rightly so. I wish also to credit some unknowing participants—those who sent in questions about the rules. If during the past year or so you received a reply with a star next to some of your questions, you may have had a hand in the new game. Such starred questions often, although not always, resulted in a change or an addition to the new rules; at the very least they sent me back to the manuscript to ponder and review what had been done. I will conclude with my favorite:

Q: If Berlin falls, can I SR to Argentina?

A: Yes, if the Russian player doesn't SR you to Siberia first.

☆

THIRD REICH '81

Few wargames have maintained their popularity over the years as well as *THIRD REICH*; the winner of various hobby "Best" awards, and to this day the holder of *CAMPAIGN* magazine's "Best Game of all Time" honors. This popularity is even more remarkable in light of the game's admittedly poorly developed rules. In recognition of the special qualities of this title, Avalon Hill has put *THIRD REICH* through the development process again. A team of *THIRD REICH* enthusiasts from all around the globe was assembled to test the revised edition. Years of experience with the earlier edition helped formulate the revision during a blind playtest session. The results have been more than gratifying with our most enthusiastic testing response ever.

THIRD REICH '81 is much more than a cleaned up version of the old game, although the rules presentation itself is much improved over the first edition. Among the changes is a completely revised mapboard with terrain changes that have profound effects on the game, while being both more functional (no ambiguous hexes) and attractive. The scenario cards have been revised to provide more useful information at the player's fingertips and also provide the U.S. and French players with their own separate cards.

However, the biggest change is in the rules themselves. Not only are they more complete and better organized, but they contain many design changes which drastically improve play of the game. Paramount among these changes are revisions to the Strategic Warfare rules which bring the U-boats under control by 1944 and account for the Luftwaffe's absence from the battlefield as they are withdrawn to protect the Reich from Allied strategic bombing. A free Russian Replacement rule portrays the influx of Siberian forces at the crucial point of the Eastern Front, and major changes to the Murmansk Convoy rules make that aspect of the game almost a game in its own right. A completely new innovation is provided in the form of Intelligence and Foreign Aid rules which allow more political maneuvering outside the purely military sphere of the game.

THIRD REICH '81 is available now in a revised 3rd edition box for $16.00 plus 10% (20% Canadian; 30% overseas) postage charges from Avalon Hill. Those wishing only to update their old game may order the parts separately (mapboard $8.00, rules $2.00, scenario cards $2.00). Maryland residents please add 5% state sales tax.

STATE OF THE ART TOBRUK

By Lorrin Bird

It is hard to believe that anyone would challenge the realism of TOBRUK. Playability or excitement level sure, but the historicity? Designer Hal Hoch brought more impressive credentials to his design than anyone else before or since. We're not saying Mr. Bird is correct; we'll let you decide if his changes give the game a better "feel".

When *TOBRUK* first came out in 1975, many of the ideas included in the game were among the most advanced concepts in armor miniatures gaming. Over the last five years, however, innovations and improvements in the world of armor simulation have rendered many of *TOBRUK's* rules relatively out-of-date. This article investigates several of the major rules where current thinking has evolved to the point where a revision might help, and offers optional solutions.

When our group first played *TOBRUK* back in 1977, there was no doubt in any of our minds that the game represented the ultimate in armor gaming on the 1:1 scale (one tank equals one tank, unlike *PANZER LEADER* where a tank counter was a platoon). From the relative rate of fire (which caused many a sore wrist the next day for the British players) to the different armor thicknesses over the parts of a tank (upper hull, lower hull, turret mantlet, etc.), this game had it all, and in a simpler system than many of the fancy miniatures rules.

As time went on, and we experimented with the various miniatures rules that started to become available, problems with *TOBRUK* came to light. Rules for miniature tank battles with scale models contained many shortcuts which served to shorten playing time, although they did overly generalize some of the combat steps. We occasionally found the forty turn *TOBRUK* scenario a little unwieldy, and felt that we were actually sitting out there in the sweltering desert as the hours ticked by with dice rolls predominating. We all agreed that the game could use some streamlining.

Combat results also held a few relative misgivings, as some of the determinations conflicted with armor miniatures rules and what thinking we could drum up regarding the issue. In particular, the large number of automatic ricochets on frontal hits sometimes left one feeling odd, as the ferocious "88" rounds trickled off the tinniest armor going. Whyfore, we brazenly asked?

Since *TOBRUK* will always remain dear to our hearts, and really detailed games or rules covering the 1942 North African conflict are in short supply, we decided to take all of the most recent design innovations and see if the old (game) warhorse could be instilled with new blood. To our satisfaction, we found that *TOBRUK's* system was lively enough to accept a number of revisions without crumbling or becoming a "monster of unplayability", and the following represents our findings and suggested rule updates.

The "88" Phenomena

Based on our readings on North African battles, there was no doubt that the German 88 millimeter gun was the most feared and productive part of the Afrika Korps battle plan. Whether on the defense, where they were used to cut apart British armor after they were lured into a trap, or used offensively to blow away any enemy tanks at long range that dared to counterattack, 88's were the most lethal weapon in Africa.

The equally feared (for a while, anyway) Matilda, whose armor was beyond the means of PzKw IIIg's and M13/40's with their low velocity

guns, suffered one of the rudest awakenings of the war (equal to the T34's introduction to Barbarossa) when 88's first opened up on them in 1941 Africa. The German Flak 18 not only stopped the vaunted Matilda, but proceeded to dismantle their turrets and terrorize British armor crews. It appeared that even the 80mm thick hide of the Matilda was no match for the panzer wonderweapon, which must have made the cruiser crews (protected by 15-40mm of plate) a bit nervous.

After reading about the 88's total domination of many battles, and how nothing could really turn away its shells, we were taken by storm when 88mm hits of Stuarts in *TOBRUK* failed to damage. Doing a little math, we discovered that almost 60% of the "88" hits on the front of a Stuart do nothing at all.

Getting into the armor mechanics of the thing, one finds further proof that something is amiss. At 525 meters, or about seven hexes in *TOBRUK,* an 88 can penetrate 130mm of armor hit head on. Stuarts, according to our data, have about 40mm of frontal armor, so the 88 can blast through *three times* the Stuart armor at seven hexes. Even accounting for angled hits, there is very little logic that suggests that 88 hits will bounce away three times in every five hits.

Of course, one could always assume that the rounds blew through the target tank, but without hitting anything? An 88mm shell is about 3.5 inches across, and even if it didn't hit anything, the metal it would throw around the tank interior would certainly make things a little uncomfortable, if not totally chaotic (would you stay in a tank that had been portholed by a gun, and would certainly be in store for more rounds if you didn't give some sign that the tank was out of action-like bailing out).

To our way of thinking, the tendency of rounds to bounce off armor due to angle of hit is a function of shell penetration to armor relationships, and the general procedure of having hits ricochet without distinction was too simple.

This, of course, requires an adjustment to the hit determination and shell damage charts, but fortunately it was relatively simple. Instead of a different hit chart for every tank, our group decided on a common chart for everyone. The issue of ricochets, since it is very particular and is a function of tank armor, would be included in the damage resolution procedure.

We decided to use the following for hit determination:

Die Roll	Aspect Hit
2-5	Turret
6-7	Upper Hull
8-9	Lower Hull
10-12	Suspension or Track

In our system, front, side and rear hits would all use the same chart, which is a gross simplification but speeds things up considerably.

The simplified handling of turret mantlet and frontal face hits will be handled as part of the damage determination, where a lot of the separate steps previously required will be wrapped into a number of very basic assumptions.

Having done away with the automatic ricochets, the next step is to work them into the damage system. As previously noted, the tendency of shells to bounce should be a function of how much their penetration exceeded the armor they hit. More particularly, consider the following data that was derived from U.S. Army Field Manuals:

Angle of Hit	Increase in Armor Resistance
30°	25%
45°	70%
60°	160%

A 40mm plate, when hit at an angle of 30 degrees from the perpendicular (see figure one), resists penetration as if it were 25% thicker, or 50mm in thickness. While a shell capable of wasting 130mm of armor wouldn't feel too much more resistance at a 30 degree angle, a round with 45mm penetration would probably ricochet since the *effective* armor exceeds the shell penetration. So ricochets should be a function of penetration to armor, but how do we pop this into our game system in a playable manner?

Resorting to the old gross assumption toolbox for a "quick and dirty" method, the following policy was formulated:
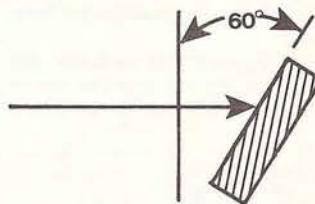
Figure 1: As angle of shell incidence increases, the armor to be penetrated also increases

If a shell can penetrate an armor plate out to a given range when hitting head on, towards the outer limits of that range there will be a tendency to bounce off due to angle hits.

In game terms, we just assumed that at the outer six hexes where penetration is possible, one third of all hits will bounce off (besides angle effects, individual rounds always deviate a little from the average penetration figure). This means that if a 50mmL/42 shell can damage a tank out to 12 hexes, from 7-12 hexes one third of the hits will ricochet.

Six hexes was chosen since it represents 450 meters, a distance within which shells usually lose a good share of their penetration, and the one-third ricochet factor was picked so that a fair share of non-bouncing hits would accrue.

So, if our 50mmL/42 did hit at 11 hexes a piece of armor was only capable of damaging out to 12 hexes, after the hit one die would be rolled. On a roll of five or six, the shot failed to damage (this also provides for penetrations that got into the tank but did nothing).

The end result is that the favored 88, after hitting a Stuart front at any range, will *never* ricochet (a change my British opponents will never forget or forgive). Besides being a bit more logical, things like this will help speed up play, since ricochets helped build the number of rolls needed to knockout a target vehicle.

Target Aspect Definition

As defined in *TOBRUK,* where the vehicles face the flat part of a hex (figure 2), the angle of front hits is limited to 30 degrees either side of the target direction. While this selection simplifies the frontal angles that might conceivably come up, it makes it too simple to score a flank hit, and distorts the armor rating system.
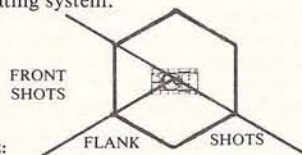

Figure 2:

To get into it a little deeper, the arc in which flank shots are defined extends for a range of 120 degrees, twice that of the frontal arc. Since getting a flank hit often spells doom for the poor target, the relatively liberal range of flank hits makes careless placement a deadly game.
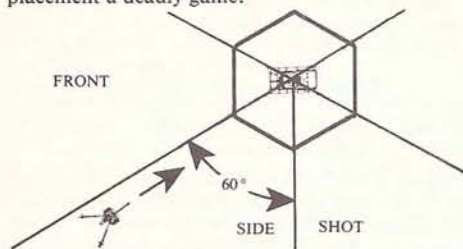

Figure 3: The *TOBRUK* flank shot definition allows side hits at 60° angles

What compounds the large flank arc is the effect on armor resistance of allowing hits at 60 degrees from head on to be treated as perpendicular flank shots. Figure 3 shows a target PzKw IIIh being hit from just inside the flank arc, a round that will probably KO the tank due to the flimsy side armor. In reality, at that angle of shot, the flank armor will resist penetration as if it were 2.6 times its basic thickness (due to the effects of angled hits that were previously described).

Instead of being a chintzy 30mm thick, the side of the panzer III will react to armor piercing shot as if it were 78mm thick, the equivalent of a Matilda II's front.
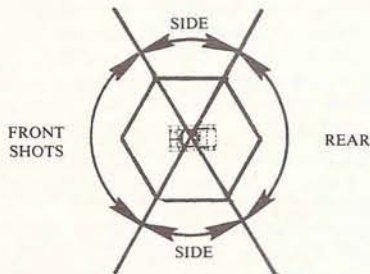
Figure 4: Alternative target aspect system (movement into one of two frontal hexes)

What this all suggests is that the arc of flank shots be reduced, both to more realistically reflect what constitutes a side hit (at 60 degrees from the side perpendicular, many hits would land on the frontal armor, a problem we would like to glance over for playability purposes), and to resolve the angle effects issue with the least offensive assumptions possible.
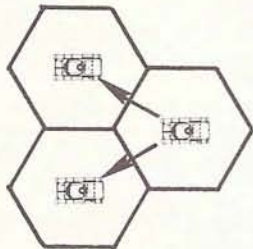
Figure 5: Movement mechanics

The solution appears to be, at its simplest level, to ape the *SQUAD LEADER* system and point tanks *towards the corners* of the hex. This greatly reduces the ease with which one previously scored a flank hit, and while avoiding a direct confrontation with angle effects (which would really fill out the playing *hours* with die rolls and mathematical gyrations), gives us a more reasonable model of target aspect problems. While things are still too simplistic for the purity freaks, *TOBRUK's* primary concern should be a playable *game,* and not something that Einstein would have trouble finding fault with (let alone playing a game inside of a light year).

Suspension Hits

If *TOBRUK* were taken literally, the answer to the King Tiger would had to have been the Bofors anti-aircraft gun. What better tactic could one think of than attacking the most heavily armored beast on the battlefield, one which could defeat hits by any gun, with a weapon that almost always would blow the tracks off the Tiger II. Once the giant were immobilized, the assault would peter out, and artillery could bury the enemy panzer.

As it stands now, track hits *always* immobilize, which is a very simplified version of the truth, if ever there were one.

Logic would tell us, right off the bat, that a track capable of carting around a seventy ton tank would sometimes be able to ward off hits by ½ inch anti-tank rifle shells, let alone shells with practically no penetrating capability at all. While nothing in North Africa approached a King Tiger (or even half of one), the assumption that Bofors, anti-tank rifle and 20mm hits would always tear apart tracks and bust wheels is just too general and weak.

Without getting into considerations of relative track strengths, one can put together a reasonably detailed and realistic model by assuming the following:

Weapon Type	Roll to Immobilize	Notes
ATR's	2-4	20mm Breda, PzKw II gun
Up to 41mm	2-5	2pdr., Bofors
Up to 57mm	2-8	6pdr.
Up to 90mm	2-10	Included here is 25 pdr.

The added lethality of larger shells is due to their size, weight (75mm rounds scale out at about 15 pounds, while 40mm rounds are under 2 pounds), and explosive charge (they have more chance of blowing off a wheel, or bending an axle).

High Explosive Tank Fire

While the Grant is one of the most inaccurate long distance tanks when it comes to firing its 75mm gun, the rules indicate that the 75mm HE factors will *always* land in the target hex. A 75 meter wide hex may be a big area (about 250 feet across), but having a gun incapable of hitting a tank at 1300 meters landing an HE shell inside a 75 meter circle at that range boggles the mind. And this is more than a moot point, since the Grant can immobilize trucks, halftracks and infantry in the open with those unusually accurate HE blasts.

If a tank gun can't land a direct hit inside that 75 meter hex, we don't see how the fragmentation factors will ever hurt anybody. While one can always put forth the fact that HE shots don't have to hit directly, but only land nearby, we can reply with two facts;

1. HE shell lethal areas are usually less than 30 meters, meaning they have to be accurate *inside* of the hex.
2. HE shells are fired at slower velocities than armor piercing rounds and therefore are more inaccurate.

With quite a bit of logic on our side, we can safely say that HE fragmentation factors from direct fire weapons should have to undergo the *same* hit/miss procedure as anti-tank fire (but no target size modifiers in deference to the lethal radius of HE rounds).

Armor and Shell Revisions

While the various sources commonly used for armor gaming almost always differ in their armor thicknesses and shell penetration, we prefer sources that give different results from *TOBRUK*.

Using Von Senger and Etterlin and the *TANK CHARTS* set of armor miniatures rules, we modified the following damage ranges:

PzKw IIIh

Aspect	Gun	Maximum Effective Range
Front	2 pdr.	no KO vs. turret any range Use TUR for LH
Front	37mm	13 hexes against LH No KO vs. TUR at any range
Front	6 pdr.	16 hexes vs. LH & UH 12 hexes vs. TUR
Front	75mm	17 hexes vs. LH & UH 12 hexes vs. TUR
Front	25 pdr.	Automatic K/C3 vs. LH

PzKw IIIj

Aspect	Gun	Maximum Effective Range
Front	2 pdr.	4 hexes vs. LH
Front	37mm	3 hexes vs. LH
Front	6 pdr.	20 hexes vs. LH
Front	75mm	4 hexes vs. UH 16 vs. LH
Front	50mm Short (APCR)	9 hexes vs. UH & LH
	50mm Long	7 hexes vs. UH & LH
	50mm Long (APCR)	4 hexes vs. TUR

Matilda II

Aspect	Gun	Maximum Effective Range
Front	All	Treat LH & UH the same
Front	50mm Short (APCR)	7 hexes vs. LH, 9 vs. TUR
Front	50mm Long	7 hexes vs. TUR
Side	50mm Short (APCR)	7 vs. UH, 11 vs. LH, 9 vs. TUR
Side	50mm Long	3 vs. UH, 7 vs. TUR

Valentine

Aspect	Gun	Maximum Effective Range
Front	50mm Short (APCR)	11 hexes vs. UH & LH, 10 vs. TUR
Front	50mm Long	13 vs. LH & UH, 12 vs. TUR
Side	50mm Short (APCR)	13 vs. LH & UH, 11 vs. TUR
Side	50mm Long	16 vs. LH & UH, 13 vs. TUR

These changes are basically major problem areas that were discovered while pouring over every armor statistic and gun capability. Given the enormous amounts of research that were required to put the game together, we assume that somewhere along the line a few mistakes were input into the machinery. For instance, the Valentine had 60-65mm of frontal armor, with 65mm on the turret front. The German 50mm long could penetrate 78mm at 500 meters, so should be able to destroy a Valentine frontally beyond the 225 meter range that *TOBRUK* now allows.

The PzKw IIIh changes are somewhat more subtle, since they are based on the relative mix of the various Mark III models in the desert.

The Afrika Korps could never claim strict adherence to a firm mix of tank models, since at the time of Gazala the Pz III's were made up of IIIf, g and h models, each with differing armor. And even the IIIH's could differ, since a solid 75mm hit on the frontal spaced armor would probably blow the plate to bits (most of the IIIj's that are shown in pictures don't retain the turret spaced armor, the likely victim of a 6 pdr. or 75mm hit). What is included in our optional changes is a fair common ground upon which to determine likely damage results, and no claim to strict purity is advanced.

We did not try to get into the different levels of tank damage that *TOBRUK* does with our revisions, but would suggest that players treat damaging hits as KO's for simplicity sake.

Rate Of Fire

This, as far as we could tell, was one of the worst causes of the *WAR AT SEA* atmosphere that permeated most of the dice throwing *TOBRUK* games. Throwing for 3-11 shots per weapon, target section hits and then damage was just too much. So, along comes another one of those beautiful simplifications that will make the game more playable.

Instead of rolling for every shot, why not roll once but allow for multiple hits?

For example, a weapon with one shot rolls once for a hit, but if two shots are called for, rolling the hit score obtains one hit, but rolling two above the hit score results in two hits. Three above the hit score allows three hits (given a ROF of 3, of course), etc. Say a PzKw IIIh is firing on an acquired Crusader, and needs a hit score of 6 for a successful shot. Then here is how the dice rolls would be interpreted:

Roll	Number of Hits
2-5	None
6-7	One Hit
8	Two Hits
9	Three Hits
10-12	Four Hits

If the ROF had gone up to six, then the chart would have been extended.

Note that while this chart does not strictly relate the probabilities of throwing individual rolls to the percentages presented on the table, it has enough "saving graces" to excuse the differences. For one thing, a weapon with 35 shots will never score more than six or seven hits (depending on the hit score), which not only saves your wrist from future arthritis pains, but assumes multiple hits on one target section will not create the additional mayhem that more rolls would require. Cutting down on the plethora of hits has got to liven things up.

On the negative side, an awful lot of shot throws will result in *no* hits, which may be a wild assumption considering that six shots may be involved. Keep in mind, however, that this will really speed things up and will even bring a little suspense into the game (it's now a totally "hit or miss" affair. It also intuitively brings into play the duel concept, since if all six shots miss with one roll, one can assume that the enemy hit the tank before the majority of rounds could be fired off (if it is done in). Since tank combat is a wild and wooly affair, and is not easily simulated (a few Churchill tanks once overran a horde of firing "88's", PzKw III's and IV's and 75mm anti-tank guns, a feat none of my games ever duplicated), assumptions really can't be proved or disproved with any degree of certainty.

In fact, carrying this a bit further, the use of alternate tank fire in *TOBRUK* is an assumption that aids in the play but has no relationship to reality. No tank is going to wait until the other tanks have fired off all of their rounds before opening up. The use of one roll to simulate many shots is no more "in the wrong" than alternate tank shots, and it is upon this gross assumption that the use of "many shots rolled into one" systems are based. *TOBRUK* is a game, and assumes things for playability (*or should have*) that are not technically correct. So there, nitpickers!

While on the subject of alternating fire, here's an additional rule to consider.

Instead of alternating fire, tank by tank, why not use a priority system that bases who fires first on ROF, crew morale, and a random roll. Before combat starts (but after movement), each side rolls two six-sided dice, with the higher score giving the thrower the first shot based on the following system:

1. Higher ROF always goes first *if* they've acquired a target.

2. Higher roll fires all his units first, if no tanks have acquired a target, or many have (higher roll breaks acquisition tie).

3. Anti-tank guns *always* fire first.

Modifiers: −1 to roll if British and defending.

If two PzKw IIIh are firing on a Matilda, and one Pz III and the Matilda are firing on acquired targets, and the roll is higher for the panzers (or is a tie, which goes to the DAK), the firing order is: PzKw IIIh with acquisition, Matilda, remaining PzKw IIIh.

Instead of playing these sort of games, we usually limit tanks to their initial rate of fire (battlefields are confused, dusty and panic stricken, and proving ground ROF may be too high), and whoever rolls higher fires off all their weapons first. Allowing for no hits helps to reduce the overwhelming advantage first fire might otherwise allow. Players can experiment with this further, and assume their own conventions, but anything that quickens play will be a big plus.

Visibility

While the good old 88 is quite capable of hitting targets out to 1600 meters and beyond, many British tankers commented on the fact that glare, dust and whatever often limited visibility to 1000 meters. In addition, some targets, like infantry on foot, just can't be seen beyond 500 meters, especially if they're stationary. Add on to this the fact that hedgehogs, weapon pits and other defensive positions were often camouflaged, and one can appreciate the fact that Rommel did not look on his *TOBRUK* board and count hexes to see where his troops were to go.

The following rules are very basic, and simple, but help to bring the problems of visibility into the game;

1. No fire may be directed at weapons in hedgehogs, weapon pits or other depressed cover until the turn after they open fire.

2. Camouflaged weapons that are in depressed cover will not be detected until the enemy is in the same hex.

3. Towed weapons in the open cannot be fired upon until the nearest radio equipped unit is ten hexes away ("88s" and other large guns are treated as vehicles in the open, and guns in the open when they're in depressed cover).

4. Infantry on foot are invisible if more than eight hexes from an enemy unit.

Range Measuring Ruler

Counting hexes can sometimes be a real drag, and range determinations are really speeded up by using a ruler. Just take a piece of cardboard, about 16 inches long and 1-½ inches wide, and using one of the maps lay out the one-hex intervals (basing the lengths on center-to-center distances). When measuring, anything more than a full hex is rounded upwards.

This is a relatively simple thing, but when all of the end runs mentioned in this article are used, the end result is a streamlined game of *TOBRUK* that becomes considerably more playable and enjoyable.

Machine Guns On Tanks

TOBRUK is presently one of the few WWII systems that state that the turret MG was more lethal than the hull version. This is open to discussion.

Turret MGs depend on the rotation of the turret for sweep and accuracy, which is more constraining than a ball mounted hull machine gun. There also appears to be better visibility from the hull. On the other hand, turret models won't vibrate as much, so the fire will be more accurate.

Our final arbiter, in this issue, was *CROSS OF IRON,* where hull MG's generally get twice as many factors as turret models. So be it.

Therefore, we quartered the turret MG factors, and halved the hull MG effects, since our play indicated that tank machine guns were having too lethal an impact at long range and while groups of vehicles were firing on the move. Once again, players are urged to experiment with this on their own, since these things are subjective to a great degree.

Conclusion

As this article has stated several times, these suggested revisions are put forth primarily to get players into an experimenting mode, and are not intended to be the final word on the subjects. With time, any system will naturally grow old, stale and behind the times, and by occasionally reviewing recent accomplishments and concepts the old can be revived, and brought into a competitive position with the best of the new. ☆

MICROCOMPUTER GAMES UPDATED

The Microcomputer Game Division of Avalon Hill has expanded its line to provide cassette programs for the ATARI 800 as well as diskettes for the TRS-80 II, APPLE II, and ATARI 800 computers.

All four cassette versions come in the same package; unless specified otherwise below; that is TRS-80 II, APPLE II, PET, and ATARI 800 versions are spaced at intervals on the same tape. Diskette versions come with only one version to a package so it is important that you specify the computer you intend to use the program for as well as noting the varying memory requirements of the different programs. A complete listing of Microcomputer offerings follows.

B-1 NUCLEAR BOMBER is available in 16K cassettes for all four computers for $15.00. A 32K diskette is available for the TRS-80 and APPLE, and a 24K version for the ATARI for $20.

MIDWAY CAMPAIGN is available in 16K cassettes for the TRS-80, APPLE, and PET and 32K for the ATARI for $15. 32K diskette versions are available for the TRS-80 and APPLE, and a 40K version for the ATARI for $20.

NORTH ATLANTIC CONVOY RAIDER and *NUKEWAR* are available in 16K cassettes for all four computers for $15 each. 32K Diskettes for the TRS-80 and APPLE, and a 24K version for the ATARI are available for $20.

PLANET MINERS is available in 16K cassettes for the TRS-80, APPLE, and PET and a 24K version for the ATARI for $15. 32K diskettes are available for the TRS-80, APPLE, and ATARI for $20.00 each.

LORDS OF KARMA is available in 48K cassette for the TRS-80, 32K for the APPLE and PET, and 40K for the ATARI for $20.00. 48K diskette versions are available for the TRS-80 and APPLE only for $25.

COMPUTER ACQUIRE is available in 16K cassettes for the TRS-80, APPLE, and PET for $20. 32K diskettes are available for the TRS-80 and APPLE for $25.

CONFLICT 2500 is available in 16K cassettes for the TRS-80, APPLE and PET, and a 32K version for the ATARI for $15.00. 32K diskettes are available for the TRS-80 and APPLE, and a 40K version for the ATARI for $20.

MAJOR LEAGUE BASEBALL is available in a 16K cassette version for the TRS-80, and a 32K version for the APPLE for $25.00. A 32K diskette for the TRS-80 and a 48K diskette for the APPLE are available for $30.00.

EMPIRE OF THE OVERMIND is available in 48K cassettes for the TRS-80 and APPLE and a 40K version for the ATARI for $30.00. 48K diskettes for the TRS-80 and APPLE are available for $35 each.

TANKTICS is available in 16K cassettes for the TRS-80, APPLE, and PET and 24K for the ATARI for $24. 32K diskettes for the TRS-80 and APPLE, and a 40K version for the ATARI are available for $29.00.

AIW POINT BY POINT
By James C. Gordon

OR, LOOK WHAT YOU'VE STARTED TOM OLESON!

If imitation is truly the sincerest form of flattery, Tom Oleson has to be feeling pretty good by now. The premise for his 1971 article "Situation 13" has fostered more spin-offs than Mary Tyler Moore and D&D combined. The concept should be getting a bit tired by now, but on the off chance that some AIW enthusiast out there is frustrated because someone hasn't applied the formula to his game, here we go again . . .

In the spirit of Tom Oleson's "Situation 13" (THE GENERAL, Vol. 8, No. 1) and Robert Chiang's "Abstract Panzer Leader" (Vol. 14, No. 6), this is a third generation article. The objective is to re-establish the system for 'free unit selection' scenarios using the same basic concept of 'unit point totals'. A single point value is derived for all units in the game, and each player is allowed to choose whichever units he desires as long as the total number of points expended does not exceed an agreed upon maximum.

Although all three games are similar, each has its own unique pieces and game system which necessitate developing new standards for calculating the point totals. In AIW, there are new unit capabilities to consider, along with the new unit types that have arisen in modern armies, and a variety of changes in these weapons' effectiveness. Another difference between AIW and the earlier games is the increased participation of air units, in Basic and Advanced capacities, allowing a number of weapon types to be carried.

For most units, the four basic factors (AF, RF, DF, MF) are summed with allowances and modifications for twelve capabilities (or incapabilities), some of which are in contrast to the systems devised in the earlier articles. A few units have specific modifiers that apply only to that weapon type, which will be explained with their respective categories.

In the chart below are listed the modifying factors, and the changes that they enact.

Hull Down	DF + 1 or 2	Cross Country	MF – ¼
Smoke	DF + 1	Truck	MF – ½
Overrun	AF & MF + 2	Amphibious	2MF –1
without SMF	MF – ¼	Carry "T"	MF × 2
without Carry	MF – ¼	Special Infantry	MF × 2
CAT	AF + 2 or 3	Wire Guidance	DF – ½

Since tanks and "A" type tank destroyers are the basic weapon in all three games, that is again the starting point for summing the basic factors. The standard capability of the tanks and TD's, when their factors are combined into a single total, is the model against which all other AFVs will be compared and modified.

Contrasting the earlier articles, all tanks, plus the Arab SU-100, add two to their AF *and* MF for overruns, representing the addition to the die roll and the movement points required. The RF remains the same, and the DF is raised for Hull Down (two for the Israelis, one for the Arabs), and for Smoke (if the unit is capable). All Arab units, plus the Israeli TDs, are without Split-Fire-and-Movement and Carrying abilities, both lowering the MF by one-quarter. (The base MF is lowered by one-quarter, twice, before the two is added for Overrun.)

The light armor category contains a mixture of units, with the common element being mobility (and Hull Down). The light tanks are totalled as regular tanks, although the Israeli AMX-13 is without Carry; the Arab PT-76 is missing Carry,

SMF and Smoke, but it is Amphibious. The recoilless rifle jeeps have a modification for Cross Country movement only. The Israeli armored infantry and scout jeep mount "I" class weapons, counting their RF as one, with the armored infantry also possessing Smoke and Amphibious movement.

Regular infantry units raise their AF by two for Close Assault Tactics, while combat engineers add three, accounting for die roll modifications (as with Overrun). The RF is one, since that's the only effective range for CAT attacks. All infantry and engineer units have Hull Down and Smoke, and the regular infantry types also have Special Infantry capabilities.

Only the Arabs are equipped with infantry anti-tank weapons of an "A" class, and against armored targets the split in effectiveness is at a range of six hexes, rather than the "½RF" cut-offs in the earlier games. If the RF is greater than six, the AF is halved, otherwise the total AF is used. The only other modifier is Hull Down, raising the DF.

The major new weapon type included in AIW is the "G" class missile, including infantry anti-tank weapons and mobile tank destroyers, which can only attack armored targets. All units use their total AF, and subtract two from their RF, except for the Israeli TOW M113A1 (the only units which can be used at ranges of one or two hexes). Wireguided fire direction and Hull Down alter the DF, and various units move with Cross Country or Amphibious abilities, or at the Truck rate.

Transportation is provided by trucks and several types of armored personnel carriers, carrying "I" and "A" class weapons, and moving at various rates. The BMP and OT62, with "A" weapons, are treated as mobile TDs, retaining the total AF because their RF is under six. All other units total these factors as infantry (AF, RF or one). None of these units have Smoke, but all have Hull Down and Overrun (except the trucks). Movement rate modifiers include Cross Country, Amphibious, and lack of SMF, plus the truck rate for the BTR 152 and 60, and the trucks (surprise?), which also double their MF for towing artillery.

Engineer vehicles present a unique problem because their standard factors do not include any allowance for special engineering abilities. The basic factors are totalled like other units, except that no points are lost for lacking an ability, and then an individual modifier is applied to each unit to cover its engineering specialty. The flail tanks add ½MF for flailing ability; the AVLB bridgers add 3MF + 1, to include the single turn expenditure in laying a bridge and the maximum of three per game that can be installed. Ferry units are Amphibious, and must expend their entire MF twice to transfer one unit; their MF is totalled as 2 (2MF-1). Finally, the Arab PMP bridgeplayer and MLG minelayer are totalled exactly the same, each moving at the Truck rate, and doubling their MF for engineering abilities.

Artillery comes in four varieties: towed (including mortars), self-propelled, off-board, and anti-aircraft. Beyond the standard DF and MF modifications (disregarding SMF and Carry), regular artillery is factored mainly for indirect fire ability, counting RF-¼ (the usable percentage) and AF-½ (strength against armored targets); AA units use ½AF if the RF is over six. Off-board AFs come from the game scenarios, and is combined with "3AF" for the RF.

Assessing the totals for Basic Air Strikes is similar to that for Off-board artillery. First, the AFs are taken from the game scenarios; the Arabs can use 10 or 16, while the Israelis choose from 10, 21 or 22. All attacks are class "A". Next, the standard range for Basic strikes is one, but there is the option to shift the target hex by one on the turn of attack, making the RF two. Combining the class "A" weapon and the range of two on the WEC doubles the AF for all strikes. There is no DF or MF involved in the Basic rules, and each strike can be used only once.

Advanced Air Strikes differ from the Basic in that they use jet and helicopter counters, and can carry a variety of weapon types, attack strengths, and corresponding range factors. In addition, the Israeli helicopters have organic weapons, and both sides have units capable of transporting infantry types.

The Israeli Huey Cobra, with an "A" class weapon, is totalled as an anti-tank weapon, retaining all four factors as they appear. The UH-1 mounts an "I" weapon, but retains its total AF against (strictly) non-armored targets. Both transport units, the UH-1 and the Arab Mi-8, double their MF for their Carry "3I" ability. Jet units have a DF, but not any MF because of their unlimited movement. They can be placed on any hex on any turn.

The AF and RF for air strikes carried by these units varies according to the weapon type and the WEC. Individual point totals for the "A", "G" and "H/(H)" class AFs are restricted to those used in the game scenarios. Class "A" strikes use the same AFs as the Basic game (doubled), plus an RF of three. The Israeli "G" strikes have an AF of 40, while the Arabs use 30, with a range factor of twelve. With "H/(H)" attacks, the Israelis use 45, the Arabs 20, and the range is zero. The AF for "G" strikes is totalled at face value, while the last type is halved; jet units add their DF, and helicopters also add their MF. Like Basic strikes, Advanced strikes can only be used once (although the helicopters can use their organic weapons any number of times).

Neutral counters are also included in the calculations, and given point totals appropriate for their participation in the game. Fort counters start with their DF of ten, and add two for the die roll addition, and four more for the improvement on the morale table, for infantry types. The last two totals also apply to Improved Position counters.

Minefields are totalled by adding all relevant factors; specifically, the odds they attack at, the number of favorable results, and the factors involved in removing them: the odds that engineers "attack" at to remove them, their chances for a favorable result, and the minimum number of turns for this activity. The three types of minefields, 1-1, 2-1 and 3-1 have three, five and six chances for a result of some kind, respectively. Engineers always "attack" at 2-1 odds (giving them two chances for a result), and must attack at least twice to disarm the entire field.

Block and Trench counters each cost five points for their relative effect on movement, and the engineering requirements to remove them. Assault Boats, though not included as counters, have costs for their DF (1), their singular usage (1), and MF costs (x3) in transporting units across the canal.

Bridges have totals equal to their DF (24), if they are in place at the start of the game. Otherwise, their cost is according to their construction time. Normal Bridges taking 60 turns, Infantry Bridges 5, and Cuts taking 40 turns to place in the same manner.

With the individual unit point totals established, there are still several aspects of any potential scenario remaining to be qualified. These can be divided into three sections. First, there are the determinants prior to the initial setup, including Morale levels, number of turns to be played, number of boards to be used and their configuration, and, most importantly, the total number of points available to each side to use in selecting units. The second group involves initial deployment, and any factors that take place during play, such as late entry, air strikes, etc. Lastly, there are the objectives, conditions, and levels of victory that each side is striving for.

The Morale levels to be used can also be accorded a point total, requiring each player to "purchase" them as they would regular units. The Israeli player picks first, and can choose either A or B; the Arab player can select B, C or D. The costs of these levels are equal to the number of chances for that side's units to become undispersed, using the levels available to them (9, 7, 5, 3,), multiplied by two, for the two different types of units (infantry, non-infantry) on the Morale chart. An alternate method is to multiply the total number of units that each side selects by the percentage of favorable rolls (75%; 60%, 40%, 25%), and use that as the Morale cost; an opposite approach to this item is to apply the cost of the morale level chosen, not as a total subtracted from those used to obtain units, but as the starting victory point total for the opponent.

The number of boards, their configuration, and the number of turns are probably the most arbitrary items. This can easily be left up to the whim of the players, depending on how large a scenario they wish to play. In lieu of this option, all three parts can be determined by a roll of the die:

die roll	1	2	3	4	5	6
number of boards	1	2	2	3	3	4

die roll	1	2	3	4	5	6
number of turns	7	10	12	12	15	20

Board configuration can really be trivial, except when the Suez Canal edge is being used, but if a die roll index is appreciated, it exists:

die roll	1-2	3-6
connected sides	width	length

Point totals for both sides can also be set randomly by the players, 500 or 1000 is the total suggested in earlier articles, although the pieces in *AIW* tend to be "priced" somewhat higher on the average than those in *PB/PL*. If a systematic method is desired for setting the point total available at start, the idea of a die roll index can be applied using two die rolls, instead of one, to increase the possible spread of results:

first die roll	second die roll					
	1	2	3	4	5	6
1	500	1100	1700	2300	2900	3500
2	600	1200	1800	2400	3000	3600
3	700	1300	1900	2500	3100	3700
4	800	1400	2000	2600	3200	3800
5	900	1500	2100	2700	3300	3900
6	1000	1600	2200	2800	3400	4000

An additional variation to this total is derived from a "battlegroup" delineation, suggested by the game scenarios. When using this idea to help determine the point total, ten percent is added to the total for each split within the players' forces. In effect, this means that ten percent is added if two groups are to be used, twenty percent is added if three groups, etc. This new point total can be divided evenly among each separate group, for selecting units; alternately, one main group can be allotted half of the point total, with the remainder divided among the remaining, smaller, support groups.

As described in the methods above, each element in setting up the game is determined separately, independent of the other elements. These points can also be made interdependent so that one die roll determines all of the aspects covered in the pre-deployment segment. The die is rolled once, and indexed with each item to specify the number of boards, their configuration, the number of turns, and then rolled a second time for the point total index. (In this case, the horizontal line is used with the first die roll, so that the longer games, with more boards, will also involve more units.)

The second major group, involving Initial Setup and In-Progress factors, deals with three main points. First, there are specific deployment restrictions for the static unit types deployed at start. Bridges over the Suez Canal must be placed at least twelve hexes apart, and Cuts must be at least three hexes away from *each pair* (Cuts are deployed in pairs on either side of the Canal, with the positioning signified by the location of a Trench counter in the canal). Another such restriction, that can be more optional, comes from another game scenario, in which the Fort counters placed at start must be within two hexes of each other Fort counter. This is intended to be used with three Forts, but can be modified accordingly if more are used.

Another element of deployment comes from the association of areas to the victory conditions. Often, when a specific hex (such as a town or road junction) is to figure in determining victory, one side will be required to place specific units on that hex. This usually entails a fort counter and infantry, or perhaps artillery, unit inside it.

There are many alternate methods for setting up, beyond the requirements for specific units noted above, that apply to the general situation of the scenario. The basic method is for each side to deploy all of their units on-board from the beginning, each with a board to consider as their territory, and all units face up. Building from this setup, one or both sides can turn some of their units upside down (except static counters, like bridges, forts, etc.), even to the extent that all units begin in a "hidden" state. It is quite easy for an attacker to be in the dark as to the deployment and strength of his opponent before he joins battle, just as a defender may not always know what type of force is approaching him. (I am a firm believer in hidden movement for tactical games, not just until the point of sighting or contact, but also at any time that a unit has broken contact to the point where it cannot be seen by any enemy units.)

The next step in deployment variation is to reserve some units off-board at start, determined either by a percentage of the total number of unit points, or simply a percentage of the total units. If either side is allowed more than one board for setting up, a set percentage can be determined for each board that they occupy, plus an additional total for off-board. The most logical division here is to halve the total in question, allowing one group on-board and the other off. While one side sets up in this manner, the other can be allowed to deploy in a hidden state, giving each side an advantage of some kind.

In addition to limiting each side to one or two boards for deployment, there can be further restrictions according to area or Battlegroup designations. The first is derived from examples found once again in the game scenarios and serves as a general restriction for deployment, while the second point is an extension of the first (also suggested

Arab Unit Point Totals

T-34/85	30	BRDM-1 Rocket	62	MTU-2 AVLB	32
T-55	37	SAGGER	44	GSP Minelayer	25
T-10M	39.5	SAGGER reload	30	PMP Carrier	15
T-62	40	82mm Mortar	18	Shilka SPAA	32.5
Centurion III	50.5	120mm Mortar	28.75	ZPU-4 14.7mm	22
T-34/100	39	251br How.	34.75	S-60 57mm	60
SU-100	48.5	122mm How.	46.5	122mm OBA	42
PT-76	28	140mm MRL	43.5	130mm OBA	45.5
106mm RR on jeep	32.5	Truck	8	152mm OBA	49
Infantry	22	M113	21	180mm OBA	73.5
Commando	19	BTR 152	16.25	240mm OBA	43.5
Combat Eng.	23	BTR 50	20	Basic Air	22/34
Const. Eng.	12	BTR 60	21	Jet "A"	41/53
107mm RG	24	BMP	31	MI-8 "G"	118
171br ATG	20	OT62	23.5	MI-8 "(H)"	86
85mm ATG	22	PT-54 Flail	36		

Israeli Unit Point Totals

Sherman 50	45	Infantry	23	M3 Halftrack	19
Sherman 51	48	Machinegun	19	Sherman Flail	37.5
Sherman 51 Hv	55	Combat Eng.	17	M-60 AVLB	27
M-48A5	66	Pontoon Eng.	10	Twin 20mm on M3	28
M-60A1	67	SS11 Missile on M3	54.5	251br How. OBA	31.5
Centurion VIII	64	TOW M113A1	74	105mm How. OBA	35
Patturion	66	COBRA	40	155mm How. OBA	50/52.5
90mm ATG on M3	30.5	COBRA reload	30	Basic Air	22/44/46
AMX-13	46.25	81mm Mortar	23.75	Jet "A"	47/69/71
Armored Infantry	36	120mm Mortar	33.75	Huey Cobra "G"	128
Scout Jeep	15.5	Truck	8	UH-1 Transportation	84
106mm RR on jeep	32.5	M113A1	28		

Neutral Counters

Fort	16	Assault Boats	5	Normal Bridge	60
I.P.	6	Minefields	10/13/15	Infantry Bridge	5
Trench	5	Bridge (At Start)	24	Cut	40
Block	5				

by the situations given). An area restriction can be either within a certain distance from a point, or outside of the same; the most common usage of this is for a player to deploy within "x" hexes of the board edge nearest "his" side, or to be at least "x" hexes away from the nearest enemy unit. Areas surrounding, or one side of, static units or terrain features can also be used as reference points for this type of deployment restriction.

With separate groups being used, each one should be given a different area to deploy in, or else a different turn of entry. Obviously, the more boards being used, the more units being used, and the more battlegroups, static units, and terrain features being included in the initial deployment, the more confusing it all gets. But if that weren't enough, there is still the third major set of alternatives: late entry.

The easiest method to use for determining which turn the reinforcements will arrive on is to leave it entirely up to the players; units starting off-board can enter when ready. This can be used with either or both teams having units off-board, and with further divison into battlegroups.

A die roll can determine the turn of entry, corresponding to the results for number of boards, game turns, etc.:

die roll	1	2	3	4	5	6
turn of entry	3	5	6	7	8	10

These expressed turns of entry can be used as the specific turn for deployment, or they can be a reference point, allowing entry either no earlier or no later than indicated. With more than one group entering late, each should deploy on a different turn, consecutively, beginning with the turn rolled for on the chart above.

The method of entry concerns the area along which the units deploy, usually a specified map edge, but at times restricted to a road hex. Another point to consider is to vary the turn of entry for units within a group, which would otherwise be entering together. Two die rolls are used for this procedure, though the best results are obtained by rolling the die only once, and then using the same total twice. The number obtained determines two factors, the turn on which the units will begin to deploy, and the number of units that can deploy per turn. For example, a roll of five (being used for both parts) would allow five units to arrive each turn, for five turns; any units in excess of this total would enter either on turn five or six.

The grand finale to all of this is the victory determination, just as in an actual game. As with the general aspects mentioned previously in this article, victory can be built around several alternate, often supplementary, ideas.

Victory at the base level revolves around the elimination of unit points, and the differential between the total elimination by either side determines the level of victory, as in the game scenarios. With this scenario, the spread of points look like this:

Differential	Level
0-30	Draw
31-60	Marginal
61-90	Minor
91-120	Substantial
121-150	Major
151 +	Decisive

Aside from counting just the initial unit point costs in determining the respective totals, the role of the static units, or specific hexes on the board, can be emphasized by awarding more points for elimination, occupation or location.

10 pts for assaulting town held by enemy
15 pts for occupying town held by enemy
10 pts for assaulting enemy fort
15 pts for occupying enemy fort
 1 pt for occupying road junction
20 pts for eliminating bridge
30 pts for eliminating bridge with enemy unit on it

15 pts for occupying bridge
 5 pts for placing bridge across canal
30 pts for ferry in position

In addition to, or instead of, counting victory points solely from the elimination of the opposing forces, there can be points awarded for activities, both offensively and defensively. In most cases, for each activity of one kind (offensive) there is an opposite (defensive) activity that the other player can be concerned with, so that in a particular scenario each side can have its own objectives.

Offensive	Defensive
Exiting units off board edge	Preserving units by-passed on exit board
Attacking/capturing specific hex or unit	Retaining possession of specific hex; preserving unit
Move a majority of units onto specific board	Retain a majority on a specific board
Prewritten Air Strikes not used	Opponent's Air Strikes used
Moving units across Canal	Offense's units not across Canal

Using these activities in the victory conditions can give the players a much harder problem to solve; one side can be given points for exiting the map and not using Air Strikes, while the opponent aims to keep a majority of the forces (more than the first player(on one board and retain possession of towns or forts on another. The combinations can go on and on with each side having any number of options to obtain points; another idea is to give each side a Defensive goal and an Offensive one, with the opponent taking the respective opposites.

Offensive
Exiting units off board edge
Attacking/capturing specific hex or unit
Move a majority of units onto specific board
Prewritten Air Strikes not used
Moving units across Canal

Defensive
Preserving units bypassed on exit board
Retaining possession of specific hex; preserving unit
Retain a majority on a specific board
Opponent's Air Strikes used
Offense's units not across Canal

The unit point totals can be used to evaluate the level of victory, just as when totaling the points eliminated by either side, the difference being that only those units which are successful in their activity are counted (unless unit point elimination is also included in a combination).

One last variation on determination of victory is the chance for an early victory, based on a ratio of the victory points obtained at any given time. The players keep a running total of the victory points that each has received from whatever source (unit elimination or activity), and at any time one side can claim a victory based on the ratio with the levels awarded as follows: less than 2-1 ratio equals a draw, 2-1 equals marginal, 3-1 equals minor, etc., continuing up to 6-1 or more equalling a decisive victory. The players might agree on a starting point for this quick victory, such as any time after turn five, or decide to count points after both players have moved and attacked on a particular turn.

This article has covered a great deal of ground, some of it useless perhaps, but I trust that most is not. The possible variations of my own variations are limited only by desire; the point I have tried to make is that these might make some interesting starting places. Contained within this article is more than enough information and suggestion to keep even the most dedicated players occupied for a while, but they probably already are. ☆

PEARL HARBOR DEFENDED
A FLEXIBLE RESPONSE TO AN IDEAL JAPANESE STRATEGY

By James M. Lutz

VICTORY IN THE PACIFIC is one of the better releases put out by Avalon Hill in terms of playability and balance. It combines broad strategic considerations and some interesting and enjoyable tactical components. It provides an opportunity for many varying approaches by individual players in efforts to defeat a particular opponent by attempting to take advantage of perceived weaknesses or a fondness for specific types of action. For face-to-face play it is relatively fast-moving, even if a somewhat too long game. It has in effect captured much of the flavor of the war in the Pacific. It can be argued that it is a balanced game once the fundamentals have been learned. It has been suggested, however, that there is an ideal strategy, with variations depending upon the proponent, that will ensure victory for the Japanese player. The conclusion drawn from the various subscribers to this general strategy is that the game is unbalanced and even in need of modification. In actuality, the strategy put forward in its various versions is flawed. It is flawed in that some of the assumptions that are made are either overly optimistic or result from slight misreadings of the rules. These points, while important, do not really negate the strategy. More importantly, as is the case with most other games, there are effective countermeasures that the American player can take to counter the ideal Japanese strategy. As a result, the question is not one of a need for rebalancing an already balanced game or introducing new rules, but rather formulating an American response that will, if not invalidate the ideal strategy, at least make it much more hazardous for the Japanese player to pursue. Whether the Japanese strategy even remains the best alternative may vary depending on opponents, but it is hardly likely to be an optimum strategy in all circumstances, and may even be a very weak course to pursue on certain occasions.

The Ideal Strategy—A Quick Knockout Punch

The strategy that has been put forth as an answer to the Japanese player's prayers has a number of variations, but in essence follows one of the following two patterns. In Turn 1, the American fleet at Pearl Harbor is destroyed. During Turns 2 and 3, the land based air hold the perimeter and the bulk of the Japanese fleet patrols in the Hawaiian Islands. Any American opposition is destroyed, Pearl Harbor converts to a Japanese base, and the American forces trying to defend their major port are destroyed or badly damaged in an unequal action. The gains to the Japanese include a shortened perimeter (Indonesia-South Pacific-Marshalls-Hawaiian Islands versus Indonesia-South Pacific-Marshalls-Central Pacific-North Pacific or Aleutians), the forcing of American fleet reinforcements to Samoa where raids cannot penetrate to the Home Islands, and the denial of the repair facilities at Pearl Harbor to the Americans for at least two turns and probably longer. One adjunct that has been suggested for this strategy requires the Yokosuka Marines to move to Truk on Turn 1, permitting the Japanese commander to invade Johnson Island on Turn 2. Some of the Japanese land-based air units can then participate in any battles for the Hawaiian Islands on Turn 3.

The second version of this strategy is somewhat more risky for the Japanese player, but appropriately carries much greater rewards if successful. On Turns 2 and 3, the Japanese player tries to control both the Hawaiian Islands and the US Mandate. If he succeeds in controlling both areas, Pearl Harbor and Samoa become Japanese bases.

More importantly, the major American reinforcements arriving on later turns are held off the board until either Samoa or Pearl Harbor is recaptured. The Japanese perimeter will be strong and the POC lead will be so large that the American player cannot win, even if land based air units manage to recapture Samoa by basing in the New Hebrides (provided that port remains American). The American fleet will be forced to contest at least one of the areas, and it will be badly damaged. If this scenario holds up, the Japanese will in effect have won the game by the end of Turn 3. The strategy is more risky for the Japanese player in this version since the American fleet might emerge victorious if it concentrates in one of the two areas. Such a concentration might permit the American player to approach parity in terms of air power in a given area. (If the Japanese keep their carriers as raiders, the American placement of all land based air in Samoa to be joined by the American fleet carriers can be countered by sending all the carriers to the US Mandate). The inevitable carrier exchange that results would destroy the striking power of the American fleet, particularly since the fewer American carriers are at a distinct disadvantage facing a larger number of Japanese CVs and CVLs with the same number of shots, given the need for a carrier's airstrikes to attack only one ship. American surface craft might possibly outnumber the Japanese surface units, but the attack bonus of the Japanese cruisers offsets this advantage if it should exist.

The above two strategies are very compelling ones for the Japanese commander. A cautious commander will go for the Hawaiian Islands counting on the loss of Pearl Harbor with its POCs and repair facilities to give him the needed edge to win the game. A more aggressive Japanese commander will try for both the Hawaiian Islands and the Mandate. Both of these strategies have some minor problems in some cases as presented, but most importantly, they are based on the American player responding in a predictable fashion. The American commander, however, has more options then these strategies would seem to permit.

Turn 1 Possibilities or the Chance Factor

One minor flaw in one of the versions of the strategy as it has been presented is that it assumes that all the American forces at Pearl Harbor are destroyed in four air raids. Even a maximum Japanese effort is unlikely to bottom all the ships and destroy the 7th Air Force in the first two air raids. Any surviving craft and the land-based air can, of course, retreat before the final two rounds finish off the bottomed ships. Their escape will increase the forces that the American commander has available to use in Turns 2 and/or 3. A good raid will manage to sink five or six of the battleships and one or both of the cruisers. Bad luck could net fewer ships, leaving even larger American forces available for deployment.

Occurrences in the Central Pacific on Turn 1 can also be important. If sufficient Location Uncertain groups appear there in strength and hold the area, the Japanese player has to be aware of the possibility of American ships at Pearl Harbor and/or Midway raiding into the Japanese Islands or the Marianas. If the Marianas are not held by the Japanese, the Philippines must be taken by Marine assault or else control of Indonesia is threatened. Thus, the results in the Central Pacific can be important. If the Japanese commander attempts to be

sure of controlling the Central Pacific, he must weaken the raiding force on Pearl Harbor. The Japanese player could also trust to luck (hardly a preferred strategy) and simply send weak forces to the Central Pacific. Most of the presentations of the ideal strategy recognize the importance of the Central Pacific and argue for holding it in sufficient force, but lucky (for the American) die rolls could negate the ideal strategy on Turn 1.

The American Response

Neither of the above two points are critical in the sense that they negate the ideal strategy for the Japanese commander, although they might make the Hawaiian Islands-Mandate double option a little riskier. But even if the Japanese player holds the Central Pacific through luck or power on Turn 1 and does extensive damage in the Pearl Harbor raid, the American player retains some very real options to counter the proposed strategy. These options fall into two categories—first, judicious allocation of the Location Uncertain groups combined with the mounting of serious threats to the Japanese home areas, and second, the delayed defense of the Hawaiian Islands and the US Mandate. The two options are related and can go a long way to disrupt the ideal strategy. At the very least, they should prevent any Japanese attempt to control both the Mandate and the Hawaiian Islands except at a high probability of failure.

The first key decision regards the placement of the Location Uncertain carriers and requisite supporting ships when they return to port at the end of Turn 1. If these craft are misplaced, the ideal strategy may in fact become that for the Japanese player. When retreating from the Hawaiian Islands in the face of the Pearl Harbor raiding force, some of the carriers, two or three if possible, should retire to Australia with the remainder either appearing in Pearl Harbor at the beginning of Turn 2 or being sent to Samoa in the return phase of Turn 1. From Australia the American carriers in conjunction with the British fleet can pose a serious raiding threat to Indonesia. They can also combine with forces from Samoa or Pearl Harbor to threaten the South Pacific or the Marshalls (usually a poor third choice). If the Japanese commander pursues his ideal strategy, he may lose control of Indonesia. If so, Lae, Singapore, and the Philippines cannot be converted to Japanese use until Turn 4 at the earliest except by marine assault in the case of Lae and the Philippines. The British fleet based at Singapore, becomes more useful and a much more potent threat than one based at Ceylon. Raids by the Allies into the Japanese Home Islands and the Marianas will be possible. Obviously, the Japanese player may beef up defenses in Indonesia, but this move can only come at the expense of attempts to control the Hawaiian Islands and the US Mandate. Negation of control in the South Pacific has similar advantages. Access to Indonesia and the Marianas is again enhanced for raiders. Lae remains an Allied base, and a fleet negating control of the South Pacific could retire to Lae or Guadalcanal and be even more threatening than at Australia. If the Japanese player opted to send the Yokosuka Marines to Johnson Islands, he will not have marines available to assault these bases until Turn 2 for Lae (the Sasebo Marines out of Japan moving into Indonesia) and Turn 4 for Guadalcanal (Kure staging from Japan and Yokosuka and Sasebo reappearing at Truk). Again, the forces to defend the South Pacific must come from the forces designated to control the other two areas.

The ships based in Australia, Lae, or Guadalcanal will remain available for the defense of the Hawaiian Islands and the Mandate on Turn 3. Of course, if the Japanese player is moving on both areas, they will probably be unable to give aid in the Hawaiian Islands unless Japanese control in the Marshalls has also been negated by raiders on Turn 2. Some of the older battleships might fail their speed rolls if the decisive action is to take place in the Hawaiian Islands. Their numbers will be limited in any event since most available American ships will be cruisers and carriers which do not have any speed roll disabilities. If the Japanese forego attempts to control the Mandate, the battleships can always be returned to Samoa so as to be available for Hawaiian Island action.

If the dangers of key raids by the American and British fleets in the southern areas is not enough, ships appearing at Pearl Harbor on Turn 2 can pose yet another threat. These ships, including some carriers can move as raiders on the northern flank. A raid to the Aleutians saves Attu as an American port and as a base for land-based air for future turns. By returning to Dutch Harbor, the American ships are available to come to the defense of the Hawaiian Islands in Turn 3 or to move on the Japanese Islands, alone or in conjunction with a move from the direction of Indonesia. Their ultimate use will depend on Japanese dispositions in Turn 3, but their options cannot help but create problems for the Japanese player. The raiding threats to both flanks might be utilized to destroy isolated Japanese units, thus weakening the forces available for the climactic battles the Japanese commander is seeking to force. If the Japanese player is serious about controlling the Hawaiian Islands and perhaps the Mandate, the lost POCs in various other areas may offset the disabilities that the American player will suffer from the lack of his major repair facilities.

The Japanese player who is committed to one of the variations of the ideal strategy may ignore the raiding possibilities presented by the above dispositions of the existing American forces. He may decide that if he controls both Samoa and Pearl Harbor and prevents the major American fleet reinforcements from arriving, he can deal with the fleet forces and the few American land-based air units that will keep reappearing, even if these land-based air units have a multitude of areas that they can contest. The arrival of limited reinforcements for the American late in the game (if Samoa is reconverted) may give the Japanese player time to gain enough POCs in the other areas and whittle down the Allied forces.

Depending on ship losses in the battles for the Hawaiian Islands and the Mandate, a relatively small Japanese POC lead may not prove to be enough to win the game, particularly if the Americans have a raiding lane open to key Japanese held areas. With the American player always moving second, it is not clear that a decimated Imperial Japanese Navy will be able to hold off weak Allied units. The key battle may become the contest for the US Mandate in Turns 5 and 6 by the American land based air units that will have reappeared. Thus, Turns 5 and 6 can be critical, as much so as Turns 2 and 3, at least if the New Hebrides is not lost to invading Japanese marines. The appearance of American reinforcements as late as Turn 7 could still turn the tide against the Japanese player who has only a relatively small lead. If a mutually destructive battle has occurred, the American reinforcements will tip the balance even more than if they join a largely unhurt fleet.

The net effect of the dispositions outlined above is that the Japanese player may still try to follow the ideal strategy and it might still work, but if it fails, the game is likely to be lost on the spot. Failure to negate the arrival of American reinforcements

would mean that a decimated Japanese fleet would have to face the remnants of the American forces plus the substantial reinforcements due to arrive. With a diminished POC lead due to Allied raids, the possibilities of a Japanese victory will all but disappear. Thus, the ideal strategy may turn out pitting the outcome of the game on major battles in the Hawaiian Islands and the Mandate in which the advantages to the Japanese player are much fewer than supposed. If the Japanese player simply opts to try to control the Hawaiian Islands, the American reinforcements will arrive, and the POC gains that the Japanese expect will be fewer than specified in the ideal strategy, permitting the American player to compensate for the loss of Pearl Harbor repair facilities and the Hawaiian Island POCs.

Delayed Defense

The second measure to utilize in facing the Japanese ideal strategy is designed to enhance the prospects of the American player winning the critical battle by choosing the time in which to participate. This tactic requires the delayed defense of the Hawaiian Islands and the US Mandate. Rather than defending the threatened area on Turn 2, the American player concedes them to the Japanese, saving strength for the crucial battle on Turn 3. The American fleet forces and land-based air will probably be insufficient on Turn 2, thus simply being defeated in detail by the Japanese. Rather, the ship units threaten the Japanese perimeter areas and the land-based air units are placed out of harm's way. Since the Japanese effort calls for a maximum concentration in the key areas, any fleet moves to knock out land-based air in the Coral Sea or elsewhere will be at odds more advantageous to the American player and will permit favorable attrition. It should be noted that too wide a dispersion of the Japanese carrier forces to damage land-based air might even permit a Turn 2 challenge in a key area. Of course, this situation would only result from a major deviation by the Japanese player from the ideal strategy, so in effect the countermoves by the American commander will already have defeated the ideal strategy as presented.

On Turn 3, the Japanese challenge can be met in earnest with all available American forces. Six land-based air units should be available, a formidable force versus carriers subject to disabled results. At least three and maybe four of the five American carriers also will be available. The Japanese will have, assuming no losses, 11 carriers with 32 bonus air factors plus one additional carrier with 3 strikes if a speed roll is passed. The Americans will have the six air factors with 12 shots and 12 to 16 bonus shots from their three or four carriers. Thus, the lineup is 9-10 American units versus 11-12 Japanese ones. It is by no means clear that the edge in this case is with the Japanese given the greater staying power of the American land-based air. The American surface fleet will be roughly equal to the Japanese total, although again the attack bonus of the Japanese cruisers gives the Japanese player an edge in a surface action. By comparison, on Turn 2 the American player would have only two or three air forces and four or five carriers with a maximum of six regular and 16 to 20 bonus shots. The Japanese would have nine carriers for sure with 27 airstrikes and possibly two more with five strikes if speed rolls are passed. More importantly, there would be up to eight American units versus up to 11 Japanese ones. Given the number of land-based air available, the American chances are better on Turn 3. The Americans gain ten armor factors (three land-based air and assuming one 0-2-7 carrier sunk on Turn 2) while the Japanese gain only three armor factors.

There are a number of possible situations that can occur on Turn 3. If the Japanese commander opts simply to capture Pearl Harbor, the American

player will have to decide whether or not to defend the Hawaiian Islands. If his raids elsewhere have been successful, the POC situation might lead him to continue his assaults in other areas and concede the loss of Pearl Harbor. He might decide to use his land-based air in Hawaii to attrition the Japanese carrier force, trading the replaceable land-based air for irreplaceable (in many senses of the word) Japanese carriers. He may also accept the challenge in the Hawaiian Islands if circumstances so dictate, but his fleet units at Samoa, Guadalcanal, Australia, Midway, and/or Dutch Harbor will be available if needed.

If the Japanese player attempts to land the Yokosuka Marines at Johnson Island on Turn 2, a different response may be appropriate. The addition of up to six Japanese Air flotillas to the battle on Turn 3 changes the battle odds significantly in favor of the Japanese. On Turn 2 the American player might consider placing one land-based air unit in the Hawaiian Islands in the hope of disabling or sinking the marine unit. A lucky shot could in effect negate this portion of the Japanese strategy. If the Japanese player opts for a night action and succeeds, the air unit can simply retreat saving itself for Turn 3 action. Even if Johnson Island falls, however, the American still has some options available. The 1st and 2nd Marines appear at Pearl Harbor on Turn 3. Lacking any other course of action if the Hawaiian Islands were controlled by the Japanese on Turn 2, they can put to sea in an effort to recapture Johnson Island. Even if they fail, in the first round of combat the Japanese will be forced to expend airstrikes against them in order to preserve the port as an airbase. The American player will also have three battleships at sea in the Hawaiian Islands, so the Japanese player will have to counter at least these units as well. If the Japanese player is concentrating solely on controlling the Hawaiian Islands, the presence of the air flotillas will probably assure victory for him, but he must at least be careful to guard against the possibility of American raiders reinforcing the Hawaiian Islands. Reinforcements combined with a successful American invasion could doom the whole strategy of controlling the Hawaiian Islands and capturing Pearl Harbor.

If the Japanese player is trying to control both the Hawaiian Islands and the Mandate, the situation is much different. If Johnson Island is still American, the land based air can defend Hawaii, and the fleet units could contest the US Mandate, forcing two battles, only one of which the American player needs to win. The fleet units will in most cases be forced to fight in the Mandate area since Japanese control on Turn 2 would prevent supporting Hawaii from Australia. American raiders out of Pearl Harbor on Turn 2 that succeed in holding the Central Pacific could also return to Midway. If the forces from the southern areas negate Japanese control of the Marshalls, then these forces as raiders could threaten to intervene in either the Hawaiian Islands or the US Mandate. A Japanese player forced to deal with both possibilities could disperse his forces too widely. Since the American player would move second, he would know whether or not the Japanese player were committed to the dual strategy on Turn 2 and use his raiding forces in an appropriate fashion. Alternately, particularly if the Japanese control Johnson Island, the American can throw his land-based air units into the battle for Samoa. The Japanese player, if he holds his carriers back as raiders, will know that the American has chosen to defend only the Mandate, but at least some of his other surface craft will already have been committed to the Hawaiian Islands unless he trusts to luck to prevent an American invasion of Johnson Island. The combined American fleets and air forces will have a slight superiority on the surface in numbers if not quality and a slight inferiority in airstrikes, although again the land-

Hypothetical Decisive Action in US Mandate

Forces with air capability available:

Japanese: 11 CVs and CVLs with 32 airstrikes

American: 3 CVs with 12 airstrikes
6 air forces with 12 airstrikes

ROUND 1

3 CVs sink or disable 3 American CVS

8 CVs and CVLs attack air forces with 3.3 expected hits and 11.5 expected damage (2 AFs sunk)

3 CVs sink or disable 3 Japanese four strike CVs

6 AFs attack six CVs and CVLs with 2 disables and two hits with 7.0 expected damage (2 sunk)

ROUND 2

4 CVs with 11 strikes attack the 4 AFs with 1.8 expected hits and 6.3 expected damage (2 AF sunk, including previously damaged one)

4 AFs attack 4CVs and CVLs with 1.3 expected disables and 1.3 expected hits with 4.5 damage (1 sunk and 1 disabled)

ROUND 3

2 CVs and CVLs attack 2 AFs with 1 expected hit for 3.5 damage (1 AF sunk at best)

2 AFs attack 2 CVs and CVLs with .67 disabled and .67 hits for 2.4 damage (1 sunk and 1 disabled)

ROUND 4

1 AF remaining ensuring American control

Total expected Japanese damage versus American AFs 21.3

Total expected disables by American AF 4.0

Total expected damage by American AFs 13.9

---

based air have superior staying power. The Japanese will have at best 11 carriers since the twelfth cannot speed roll from the Japanese Islands. The American could have four carriers and six air forces, hardly an inadequate force. In effect, the delayed defense of the key areas will permit the American player to challenge the Japanese thrust from a position of much greater strength than would have been the case during Turn 2. The chances of the knockout punch succeeding are greatly reduced.

Of course, the simplest but most effective counter to any Japanese designs on the Hawaiian Islands is to duck the heavy Japanese patrols on turn two and threaten to control the Marshall Islands yourself. If the Japanese have over committed their offensive-minded patrols they may have trouble knocking out a strong American patrol in the Marshalls which would deny Truk based patrollers access to the Hawaiian Islands on Turn 3. Some players won't recognize this until it's too late; others will be forced into spreading their carriers more sparsely than they would like to cover

this new eventuality or lessen their land based air defenses in Indonesia. Aggressive patrols on turn 2 with expendable ships can cause a lot of problems for a Japanese player unwilling to change his goals and determined to take Pearl Harbor.

Table 1 includes an example as to how the action in the Mandate might occur. The table assumes that only air action occurs since the number of surface craft available in a given game is variable and hard to predict. Similarly, expected losses from a surface action involving many ships has too many possibilities. The table also assumes that only three of the American carriers are left to participate as well as the six air forces. The Japanese have 11 carriers with 32 airstrikes. On the first round of action, the three American carriers are disabled, sunk, or receive maximum damage, as do three of the Japanese 4 strike carriers (a typical occurrence in a straight carrier fight with bonus shots). The remaining carriers assault the land-based air with an expected 3.3 hits and 11.5 damage. Thus, with average luck and no lost hits or overkill on a particular air unit, two of the American units will be

"sunk". The American without overlap or overkill can expect to disable two ships and score two hits. The expected 7 damage points should sink or inflict maximum damage on two Japanese carriers. Thus, in the exchange, four Japanese carriers are removed from the next round of action. The surviving four carriers will have approximately nine shots versus the remaining land-based air units with eight. At this stage, the advantage shifts to the land-based air. The ultimate outcome is likely to be at least one land based air unit surviving to control the area and a significant number of the Japanese carriers sunk or damaged. Thus, while the American carrier forces are virtually gone, the Japanese fleet will be virtually impotent from Turn 6 onward to deal with the threat of the American carriers that begin appearing in large numbers. Of course, if the opening air round goes poorly, the Japanese player can withdraw from the area, accepting the failure of the strategy but preserving his carriers for later action.

Conclusions

From the above comments, it is obvious that the Japanese player can force a key battle as early as Turn 3 in the game if he so desires by following the Hawaiian Island-US Mandate variation of the strategy. The gamble involved, however, is noticeably larger than assumed. The delayed defense approach combined with the losses of valuable POCs to American and British raiders elsewhere may well prove that a double assault on the Mandate and the Hawaiian Islands will succeed less often than it fails. Even the Japanese concentration on the Hawaiian Islands combined with a dispersal of the forces slated for the US Mandate to perimeter defense is less likely to achieve ultimate victory. The American could very well survive the loss of Pearl Harbor if he has had successful raids elsewhere.

The counterstrategy of an American flexible response to the variations of the ideal Japanese attempt to win an early victory are summarized in Table 2. Forces available to both sides will vary, depending on previous actions and speed rolls, but the outline is the same, with the key action probably occurring in Turn 3, perhaps in the Hawaiian Islands and perhaps as a result of raids elsewhere. The chances of victory are at worst equal from the American point of view. If the game is decided in Turn 3 under these circumstances, then so be it. All the ideal Japanese strategy will have accomplished is to bring the game to a major decision early rather than late. Balance is still present, given the fact that a few rolls of the dice may determine victory or defeat. If a veteran Japanese player has determined that the later phase of *VITP* favors the Americans or that his particular opponent will win if the game is not decided early, then he would quite logically force an early conclusion to the game. He could not, however, expect to emerge victorious more than half the time, and perhaps less. He will also deny himself the opportunity of taking advantage of potential mistakes by his opponent later in the game.

The foregoing discussion of the ideal Japanese strategy would indicate that it fails to take into account all facets of *VITP*. It rests on a totally predictable response for the American commander. Allied raiders threaten no vital area, and, in fact, the American player will obligingly commit his forces piecemeal on Turns 2 and 3. It must be admitted that if the American player does act so predictably, then the strategy will work. Few gamers, however, are willing to assume that their opponents will be so kind. A more thoughtful American response provides a greater element of chance and largely destroys the advantages gained by the Japanese capture of Pearl Harbor and makes the Hawaiian Island-Mandate strategy a risky one.

Japanese Strategy Variation and the American Flexible Response

Japanese Variation	American Counter
I Control Hawaiian Islands on Turns 2 and 3 with major portion of fleet	Raid north from Pearl Harbor Threaten Indonesia and South Pacific from Australia Continue raids on Turn 3 Possibly contest Hawaiian Islands with land-based air on Turn 3 Threaten Control of the Marshal Islands
Ia Yokosuka Marines assault Johnson Island on Turn 2	Raid as above on Turn 2 Land-based air unit to attempt to sink or disable marines on Turn 2 Continue raids on Turn 3 Possible counterassault on Johnson Island with 1st and 2nd Marines on Turn 3 combined with land-based air defense of Hawaiian Islands
II Control Hawaiian Islands and US Mandate on Turns 2 and 3 by dividing Japanese fleet on both Turns	Raids as above on Turn 2 Land-based air defend Hawaiian Islands on Turn 3 with fleet in Mandate, or combined fleet and land-based air defense of Mandate
IIa Yokosuka Marines assault Johnson Island on Turn 2	Raids as above on Turn 2 One land-based air attempts to sink or disable marines on Turn 2 Maximum effort in Mandate in Turn 3 if Johnson Island has fallen with marine counterassault in Hawaiian Islands

★

AVALON HILL BEST SELLER LIST

As is our custom, we once again present the sales rankings for the Avalon Hill game line based on totals for our 1980 Fiscal Year which began May '80 and ended April '81. Figures for the All Time list include all versions of a title sold to date provided the game system has not changed over the years. *D-DAY* and *FOOTBALL STRATEGY* for instance have collectively gone through eight different editions, but are considered to be basically the same game. *GETTYSBURG,* on the other hand, changed drastically in each of its four versions and is therefore omitted from the list even though the collective totals of its many versions would ordinarily qualify for 10th place. Note that the current edition of *BATTLE OF THE BULGE* will soon disappear from the list when it is replaced by the new version which constitutes an entirely new game. Titles are placed on the All Time list only after having sold in excess of 100,000 copies while under Avalon Hill ownership. Sales rankings do not include sales made by a different publisher.

1980 AH BEST SELLERS

Rank Title	1979 Rank
1. SQUAD LEADER	3
2. FACTS IN FIVE	1
3. WIZARD'S QUEST	7
4. MAJOR LEAGUE BASEBALL	4
5. PAYDIRT	18
6. PANZER LEADER	10
7. OUTDOOR SURVIVAL	5
8. TACTICS II	17
9. FORTRESS EUROPA	—
10. ACQUIRE	11
11. CRESCENDO OF DOOM	12
12. WAR & PEACE	—
13. DIPLOMACY	—
14. PANZERBLITZ	20
15. BOOK OF LISTS	6
16. FOOTBALL STRATEGY	13
17. FEUDAL	11
18. CROSS OF IRON	9
19. INTERN	—
20. THIRD REICH	15

ALL-TIME BEST SELLERS

Rank Title	1979 Rank
1. PANZERBLITZ	1
2. OUTDOOR SURVIVAL	2
3. FACTS IN FIVE	3
4. LUFTWAFFE	4
5. BLITZKRIEG	5
6. PANZER LEADER	6
7. TACTICS II	8
8. THIRD REICH	7
9. FOOTBALL STRATEGY	9
10. MIDWAY	11
11. SQUAD LEADER	—
12. STARSHIP TROOPERS	14
13. BATTLE OF THE BULGE	12
14. AFRIKA KORPS	13
15. ACQUIRE	—
16. D-DAY	15
17. RICHTHOFEN'S WAR	17
18. 1776	16
19. TWIXT	—
20. PAYDIRT	—

THE ASYLUM, No. 15
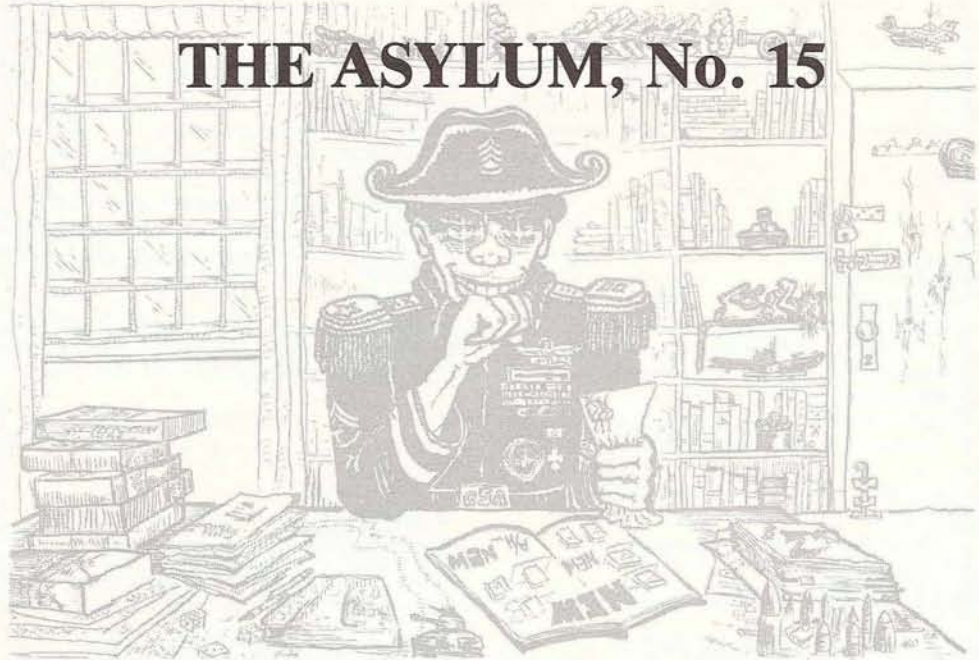
BEAN SOUP AND OTHER RECIPES

by Alan R. Moon

Throughout history a major weapon at the disposal of any army has been overlooked. Bean soup. Garbonzo beans being especially effective.

But bean soup is only one of many physically harmless, but psychologically deadly tactics gamers can use in their quest for victory. So, this should be seen as a recipe book for gamers. My ten best.

1. Operant conditioning. From the moment you sit down at the table, hum constantly, preferably in a low tone. Whenever your opponent makes a good move, raise the tone of your humming slightly. He will begin to hesitate and listen for the higher hum at crucial moments in the game as reassurance he is making the right move. That's when you have him. He's conditioned. You can now use your new found power in one of two ways. One, don't hum when he is about to make a good move. He'll wait, and think about it, but he'll inevitably make another move instead. Two, hum higher when he makes a bad move to confuse his conditioning. This negative feedback will turn him into a mess of mixed responses and from then on you can hum or not hum at random.

2. Consulting The Oracle. At important moments during your opponent's turn, pick up the rulebook. Ask him if he's sure his move is legal. Ask him repeatedly how many times he's played the game. Mumble "aha" or "hmmm" a lot when looking through the rulebook.

3. The Prim Rose Path. Study and know the historical situation and tell your opponent the mistakes he can make by following an historical pattern. Keep trying to tell him how his strategy is leading him to a disastrous historical conclusion. Make parallels between his play and the mistakes made by the actual commanders. If your opponent doesn't know anything about the actual history of the game, try to convince him to follow the historical path or an ahistorical path, depending on which will lead to disaster.

4. Time In Your Pocket. Play quickly and complain if your opponent takes longer than you do. Look at your watch a lot. If he's drinking beer, complain about the delay everytime he goes to the bathroom.

5. Jiggling Jugs. Bring your girlfriend along as a distraction. Have her wear a halter top and lean towards your opponent a lot.

6. The Expert. Talk like you have a reputation. Use self fulfillment with chatter such as, "I beat my last thirty-seven opponents with this strategy so I'm not too worried about your defense".

7. Cohorts. Bring along a friend or two. Tell them to stop by and look the game over every once in a while. They should say things like, "Isn't that the same strategy the last guy you were playing tried?".

8. Smokescreen. Light up a cheap cigar in the middle of a tight contest and direct the smoke towards the board. You should then be able to move some counters around using the smoke as cover, especially since your opponent will probably be coughing and feeling ill. However, make sure you position yourself on the correct side of the board, upwind, or the smoke will backfire. Avoid rooms with variable winds.

9. The "Lucky Me" Syndrome. A few gamers claim to be able to control the die by the power of thought. Of course, they don't come out and say it. They intimate it through hints and subtle actions. It's amazing how gullible people are and how easily they are taken in by such phonies. You'll never hear anyone accuse another of having this ability though, as this is an open admission that "the power" does indeed exist, with all its frightening ramifications. You too can have "the power" simply by announcing that you have always been lucky with the die. (This works best when playing an opponent for the first time.) When you roll a favorable result, say you're sorry you are so blessed. When your opponent throws a bad result, say you're sorry; you didn't know you could control his rolls so well. If you lose, sigh deeply as if relieved, and say you're glad you don't win all the time. If you win, act matter-of-factly. The word will get around that you are a "lucky guy", and you'll be well on your way to becoming the Kreskin of Kriegspieling.

10. Cry. Preferably real tears.

Of course, after using these tactics, you may find that no one will play with you anymore. After all, a gamer without opponents isn't worth the soup his beans are in. I know, I know, I should just clam up.

☆

c.kibler 1981

Strategy in Diplomacy
By Lewis Pulsipher

Part II of a Three Part Series on the Game With No Dice

While negotiation is a means of convincing other players to act as you desire, the art of strategy is choosing the combinations of countries, and overall direction of movements (thrust east instead of west, by land instead of by sea) which, if executed as planned, will result in a win. It is the most neglected of the three aspects of *DIPLOMACY* play, the one in which the average player is most likely deficient, and the one which separates most experts from merely good players. The average player is content to let his negotiations determine his strategy rather than vice versa. Consequently he seldom looks beyond the next game year, the immediate identification of enemy and ally, to what he ought to do later in the game.

I assume in the following that the player's objective is to win, or failing that, to draw. Those who eschew draws in favor of survival as someone else wins will approach some points of strategy differently, but until late in the game there is virtually no difference between the two approaches.

Strategy in *DIPLOMACY* is strongly influenced by the shape of the board. Spaces near the edge are larger than central spaces, so that movement around is as fast as movement through the middle. More important, the board is divided into two strategic areas or "spheres". The eastern sphere includes Austria, Russia, and Turkey, while the western is England, France, and Germany. Italy sits astride one of three avenues between the two spheres. The northern route through Scandinavia

and the Barents Sea enables Russia to have some influence in the western sphere. The central route, between Germany on one hand and Austria and Russia on the other, looks short but is rarely used early in the game.

Normally the game revolves around efforts to dominate the two spheres. Early in the game a country rarely moves out of its own sphere—it can't afford the diversion of effort until the conflict in its own sphere is resolved. However, the country or alliance which gains control of its own sphere first, enabling it to invade the other sphere, usually gains the upper hand in the game as a whole. A continuous tension exists between the need to completely control one's own sphere and the need to beat the other sphere to the punch. Commonly, two countries in a sphere will attack the third, attempting at the same time to arrange a long indecisive war in the other sphere so that it will be easy to invade later. Sometimes the two countries will fight for supremacy before the winner goes on to the other sphere; more often, the players of the other sphere, becoming aware of the threat from the other side of the board, will intervene and perhaps patch up their own differences. Poor Italy is trapped in the middle. Naturally an alliance which endeavors to dominate a sphere wants Italy to move into the other sphere, probably to establish a two vs. two stalemate. And the odd man out in a sphere turns first to Italy to redress the balance of power. In

either case Italy is stuck in a long war. An Italian win is usually a long game.

This discussion shows us the most important principle of strategy: *everything that happens anywhere on the board affects every country*. If you concern yourself only with two or three neighboring powers you'll never become an expert player, though glib negotiation skill can go far to compensate for strategic deficiency. If you as Turkey can influence the move of one French or English unit it may make the difference between a win and a draw, game years hence. If you can strongly affect the entire country's movements, even at that distance, you should go far along the road to victory. The expert strategic player knows where many foreign units will be ordered each season, and he tries to do so subtly, by misdirection and through intermediaries; it doesn't do to attract too much attention.)

One of the most important considerations of strategy is the attainment of a "stalemate line" by your country or alliance. Your long-range goal is to win, but unless you are a quite romantic player who prefers instability, your immediate objective is to be sure you can't lose—then worry about going on to win. A stalemate line is a position which cannot possibly be breached or pushed back by the enemy. The area within or protected by the line includes supply centers sufficient to support all the units needed to form the line. There are many stalemate lines, but these have been discussed at length in

books and fanzines about *DIPLOMACY*. I will describe the two major lines, which roughly coincide with the two spheres (and not by accident!), and you can find variations and other lines by studying the board. (U = unit, that is, either army or fleet)

Eastern Line: A Vienna, A Budapest S Vienna, A Trieste S Vienna, U Venice, U Rome, U Naples S Rome, F Adriatic S Venice, U Apulia S Venice, F Ionian, F Eastern Med. S Ionian, U Sevastopol, U Rumania, U Bulgaria S Rumania, U Armenia S Sevastopol.

Western Line: U St. Petersburg, U Norway S St. Petersburg, U Kiel, A Ruhr S U Kiel, A Burgundy, U Marseilles, A Gascony S Marseilles, U Spain, U Portugal S Spain, F Mid-Atlantic, F English S Mid-Atlantic, (Can be expanded to hold Berlin and Munich. Alternative: nothing in Spain and Marseilles, F Portugal S Mid-Atlantic, A Brest S Gascony, A Paris S Burgundy.)

With 13 to 15 centers, or as many as 17, within a line, a player is almost certain of a draw. If he reaches the line soon enough, and alone, he can move on to prevent any other player from conquering the rest of the board, and a draw or win is assured.

A drawback of reaching a stalemate line is that it can put other players on their guard against you. If they know they can't knock you down to size, they'll be reluctant to fight one another. This is a danger any strong country faces, however, and it must be noted that a perfectly played *DIPLOMACY* game will end in a draw, not a win. (This depends partly on the players' styles, of course—a game among seven extreme "placers" (see last issue) will never be a draw.)

You can win only if other players make mistakes. The better the players, the more likely a draw will be.

So far we've been discussing the fundamental strategic structure of the game. Next we'll consider what to think about as you devise a strategy, and lastly we'll talk about individual differences between countries.

When you devise a strategy you plan the general direction of your movement, expected allies, expected enemies, and what you want countries not adjacent to yours to do. At each step you should have several alternatives, for barring great good luck something will go wrong. Often the styles and personalities of the players will strongly affect the strategy you choose. But let's assume that one player is as suitable (or unsuitable) to your purposes as another. First, consider the nature of your country. Is it a natural land power, a sea power, or both? Is it on an outer edge of a sphere, an inner edge (Germany or Austria), or in between (Italy)? Think about this, look at the board, and decide where you're going to get 18 supply centers to win the game. You must take several centers in one sphere, or in Italy, even if you control the other sphere entirely. Your plan must include 1) a means of gaining control of your sphere without hostile incursion from outside it, 2) attainment of a stalemate line in at least one part of the board, and 3) penetration into the other sphere (or Italy) to reach 18 centers. (Note that Italy is within the eastern stalemate line, and that the western line is anchored in the eastern sphere (St. Petersburg). These seemingly minor points may have a strong effect on your plans.) You *can* plan to jointly control your sphere with an ally, but then the penetration must amount to eventual control of the other sphere as well. You must include a means of reacting to any attempt to disrupt your plan from outside your sphere. You must provide for other contingencies; for example if someone dominates the other sphere before you dominate yours you must be prepared to stop him. You must be flexible, though you'll try to implement your original plan.

Italy is left out in the cold. Italy must either be sure that neither sphere is dominated by any country or alliance early in the game, allowing Italy time to grow, or it must *quickly* dominate one sphere. From the strategic point of view Italy is definitely the hardest country to play.

Here is a brief example of a strategic plan for England. Let's say you don't like the Anglo-German alliance, or the German player is notoriously unreliable, so you plan to offer a limited duration alliance to France for a joint attack on Germany. You'll offer Belgium, Munich, and Holland to France while you take Denmark, Kiel, and Berlin. You don't mind if Russia and Germany get into a fight over Sweden, but you want Russia to concentrate, with Austria, on attacking Turkey. This will leave Italy free to peck away, initially at Germany, later at France. When your alliance with France expires you will attack France with Italian help, and at the same time pick off Russia's northern centers (Germany should fall sooner than Turkey—if necessary you'll give Turkey tactical advice). You want Austria to attack Russia after Turkey falls. This is important, because Austria-Russia would be a formidable alliance against you. It is possible but not likely that you could reach a stalemate line as Italy collapsed to an attack from Austria, but it is much better to have most of the eastern units fighting one another. In the end you should be grinding down an outnumbered Italy (England will gain more from attacks on Germany and France than Italy will, by nature of the positions) while Austria keeps Russia busy. For supply centers you want England, France, Germany, the Low Countries, Scandinavia, Iberia—a total of 16—plus two from St. Petersburg, Warsaw, Moscow, Tunis, and Italy's three. To go into all the alternatives would require pages. But as one example, if necessary you could extend your alliance with a France who will be worried about Italy, and hope to march into Russia and the Balkans.

Now we come to individual countries. Reams of statistics are available about the success of each country in postal play, but the percentages have varied as years passed, and statistics of American and British postal games show some differences. Generally, each country has a good chance of success except for Italy, which is handicapped by its between-spheres position. (The pirated South American versions of *DIPLOMACY* give Italy a fleet instead of an army in Rome, and add a supply center in North Africa. These changes strengthen Italy and probably make *DIPLOMACY* a better game.) Russia tends to be an all-or-nothing country because of its extra unit, its long borders, and its connection with the western sphere and stalemate line. Russia wins outright far more than any other country. The inner countries, Germany, Austria, and Italy, are hard to play well.

The next seven sections briefly state what to look for when you play each country. "Natural neutrals" are neutral supply centers which are usually captured by the Great Power during 1901. The most common opening move is also mentioned, but remember that tactics are subordinate to strategy, and even the most common opening is used no more than half the time. One general point remains to be made. Western countries can wait longer than eastern countries before committing themselves to agreements. The easterners are too close, with too many centers at stake, to wait.

Austria. Land power, natural neutrals Serbia and Greece. Turkey and Austria are almost always enemies, for Austria is at a great disadvantage when the two ally. Turkey usually owns territories on three sides (Mediterranean, Balkans, Russia) if the alliance is successful, and Austria is just too easy to stab. Russia and Italy are the best alliance prospects, especially the former. If Russia and Turkey ally, Italy can often be persuaded to aid Austria in

order to avoid becoming the next victim of the eastern juggernaut. Germany virtually always agrees to a non-aggression pact, nor should Austria waste units in the western sphere. The early game is often a desperate struggle for survival, but a good player can hang on until events elsewhere and his own diplomacy improve his position. Unfortunately, normally Austria must eliminate Italy to win because the seas and crowded German plains halt expansion northward; this land power must become a sea power in order to grab the last few centers needed.

Commonly Austria opens with F Trieste-Albania and A Budapest-Serbia followed in Fall by Serbia S Albania-Greece. A Vienna is used to block whichever neighbor, Russia or Italy, seems hostile, by Vienna-Galicia or Vienna-Trieste or Tyrolia.

England. Seapower, natural neutral Norway. England has an excellent defensive position but poor expansion prospects. An Anglo-German alliance is not as hard to maintain as the Austro-Turkish, but neither is it easy. England must go south when allied with Germany, but it can hardly avoid a presence in the north, facing Russia, which puts it all around the German rear. England-France is a fine alliance but it may favor France in the long run. Whichever is the ally, England may be able to acquire Belgium if he works at it. Patience is a necessity, however, unless Italy or Russia comes into the western sphere. If either does, one to attack France (or even Germany), the other to attack Germany, England must gain centers rapidly or be squeezed to death between its former ally and the interloper.

England can win by sweeping through Germany and Russia, but all too often the eastern stalemate line stops this advance short of victory. Similarly, a southern Mediterranean drive can founder in Italy, but this part of the defenders' stalemate line is harder to establish. If England can get up to about six or seven units it has many alternatives to consider.

Usually England opens with F London-North, F Edinburgh-Norwegian, A Liverpool-Edinburgh. The army can be convoyed by either fleet while the other can intervene on the continent.

France. Balanced land and sea, natural neutrals Spain and Portugal. France may be the least restricted of all the countries, vying with Russia for that distinction. There are many options in a good defensive and offensive position. Alliance with Germany or England are equally possible, though it is easier to cooperate with England. An astute French player can usually obtain Belgium regardless of which country he allies with. Italy's movements are important to France, since some penetration into the Mediterranean is usually necessary late in the game if not sooner. Russia can be helpful against England or Germany. In fact, a French-Russian-(Italian) alliance against the Anglo-Germans is possible. At any rate, if France is attacked there are several players to ask for help.

A common French opening is F Brest-Mid-Atlantic (heading for Iberia), A Paris-Burgundy, A Marseilles-Spain.

Germany. Land power, natural neutrals Holland, Denmark. Like Austria, Germany must scramble early in the game. But the defensive position is better, alliance options are broader—and Italy isn't quite at one's rear.

Alliance with England is difficult because England usually sits in the German rear as the game goes on. (As England I have been stabbed (ineffectively) several times by Germans who couldn't stand the strain, though I had no plans to attack them.) Germany-France is a better alliance, though France may gain more from it, and you can be left dangerously extended between France and Russia. Either romantic methods or great patience is re-

quired. Fortunately, Austria rarely interferes early in the game (nor should Germany waste effort in the eastern sphere) and conflicts with Russia are rare if Germany concedes Sweden.

A common opening is F Kiel-Denmark, A Munich-Ruhr, A Berlin-Kiel. Kiel-Holland or Munich-Burgundy are also common.

Italy. Balanced, natural neutral Tunis. Italy needs patience and luck to win. Fortunately the defensive position is good, but immediate expansion possibilities are very poor. Don't be hypnotized by all those Austrian centers so near. If Russia and Turkey ally Italy's lifespan isn't much longer than Austria's—full support of Austria is required. Italy tends to become involved in the eastern sphere more than the western. Unless England and Germany are attacking France, Italy stands to gain little in that direction. Although Turkey seems far away Italy can attack her using the "Lapanto Opening". Spring 1901 A Venice H, A Rome-Apulia, F Naples-Ionian (which is also the most common Italian opening) followed in Fall by A Apulia-Tunis, F Ionian C Apulia-Tunis, build F Naples. Spring 1902 F Ionian-Eastern Mediterranean (or Aegean), F Naples-Ionian. Then in Fall 1902 Italy can convoy A Tunis to Syria. This attack requires Austrian cooperation, of course.

Russia. Balanced, natural neutrals Sweden, Rumania. With a foot in the western sphere owing to its long border, Russia has an advantage in expansion but its defensive position is weak despite the extra unit. Russia often feels like two separate countries, northwest and south, and it may prosper in one area while failing in the other. The eastern sphere is more important and usually gets three of Russia's starting four units.

Russia has no obvious enemy. Because the Austro-Turkish alliance is so rare Russia can usually choose its ally—but don't become complacent. In the north Germany can usually be persuaded not to interfere with Sweden. An Anglo-German attack will certainly take Sweden and threaten St. Petersburg, but Russia can lose its northern center and still remain a major power. A Franco-Russian alliance can be very successful provided Germany and England start the game fighting one another.

A common Russian opening is F St. Petersburg (sc)-Bothnia, F Sevastopol-Black, A Warsaw-Ukraine, A Moscow-Sevastopol. Moscow-St. Petersburg is rarely seen (and very anti-English). Warsaw-Galicia is anti-Austrian (with Moscow-Ukraine). Sevastopol-Rumania is very trusting of Turkey.

Turkey. Balanced, natural neutral Bulgaria. Turkey has the best defensive position on the board. Its immediate expansion prospects are not bad, and at one time it was notorious in postal circles for "spreading like wildfire" once it reached six or seven units. Now players realize that an Austro-Russian alliance, or the Italian Lepanto opening, can keep Turkey under control.

Austria is an unlikely ally—see Austrian notes for why. Russia-Turkey can be an excellent alliance, but if Russia does well in the north Turkey will find itself slipping behind. Nonetheless, beggars can't be choosers. The Italo-Turkish alliance is seldom seen, perhaps because all too often Italy becomes the next victim for Russia and Turkey. A fight between Italy and Turkey on one side and Russia and Austria on the other is rare, for Italy prefers to go west and hope Austria will attack Russia after finishing with Turkey. Turkey has plenty of time to look for help from the other side of the board while fighting a dour defensive, but help usually comes too late.

A common Turkish opening is A Constantinople-Bulgaria, A Smyrna-Constantinople (or Armenia, to attack Russia), F Ankara-Black. The favored alternative if Russia is definitely friendly is Ankara-Constantinople, Smyrna H.

Next time we'll turn to an examination of tactics in *DIPLOMACY*.

⭐⭐⭐⭐⭐

AH Philosophy . . . *Continued from Pg. 11*

OF THE GIANTS. It will contain many different types of scenarios including wars between kingdoms, quests, treasure hunts, escapes, and pursuits. In most scenarios players will be able to select their own forces and objectives. Characters will include most of the familiar fantasy and hero types like dwarfs, goblins, ogres, and magicians. And, of course, giants. Designed for two to eight players.

Three of the others are card games; one about gangsters, one about the Middle East, and one about senatorial politics.

. . . Alan R. Moon

SAMURAI

Work has just begun on the *SAMURAI* update, so there is not really that much to report. A new game map is now in preparation which is both attractive and functional. Each province will be a different color from its adjacent provinces; thus permitting immediate recognition. This gives the map an appearance similar to those U.S. maps you see in schools. You know—the kind with each state in a different color. The mountainous provinces will be distinguished by terrain symbols rather than the solid orange color used on the current mapboard.

We're planning to add two additional noble families, thereby increasing the number of players to six. This will necessitate slight alterations to the victory conditions to reflect the increased number of players. *SAMURAI* is most enjoyable when diplomacy takes an active roll; and this increase in the number of players will definitely increase the diplomatic infighting.

Several new game mechanics are being considered with a view toward adding new play options to the game system. The most ambitious of these is the use of cards instead of dice to determine the sequence of play. Each player would choose one card from a hand of six. The player with the lowest valued card would take his turn first and so on. Each card contains certain advantages and disadvantages; so a player wanting to go first can also find himself severely penalized in another area. Thats about where I am right now. There'll certainly be more later as the game progresses.

. . . Mick Uhl

STRUGGLE OF NATIONS

A first phase playtest kit was sent out in March, with printed prototype components. However, the rules were in very rough shape, and the playtesters have had difficulty getting into play with what's been provided to them so far. Our weekly testing sessions here are proceeding fine, and a "first draft" of the rules is in progress. This will go out to the "Second Phase" playtesters this summer. Right now the game is slated for a winter release. Work is also underway correcting the provisional components for a final production press run.

The unusual step of sending out a "design sketch" with rules indicated but not always specified, was tried in an attempt to hurry up development toward an Origins release.

STRUGGLE OF NATIONS will not hurry up.

DAUNTLESS GAMETTE

This project has been taking up more time than it was supposed to. A number of production innovations which were supposed to save time and money ended up costing more of both, and the result is that an estimated March release was pushed back to late summer. *Sturmovik* has been likewise affected; because of production difficulties on the data cards, the old "Expansion Kit" will be split into two parts (if it's done at all). *STURMOVIK* will have 32 aircraft from the Russian/Asian/Pacific Theatres, and *SPITFIRE* will include 28 aircraft, mostly from the period 1939-41.

. . . Kevin Zucker

OBJECTIVE ATLANTA

Progress on the Avalon Hill revision of *OBJEC-TIVE: ATLANTA* has understandably been slow due to the great number of other projects I am involved with. However, the rules are currently undergoing a massive revision which I feel is necessary to eliminate out-of-date and obscure terminology. The rules will also be presented in a more clearly defined format. After this has been accomplished to my satisfaction I will begin work on redesigning the charts and organization displays. The counters and mapboard I also intend to discard as I want to introduce standard period symbolism onto both items. As far as graphics are concerned, my plans include color-coding the counters to distinguish the units and their various functions. The mapboard I would like to airbrush and, if it goes well, should be a vast improvement over the original.

. . . D. A. Sheaffer

GUNSLINGER

GUNSLINGER is in final playtest at last. Production delays and an unexpectedly large number of suggestions and comments from enthusiastic playtesters have led to our missing the early summer ORIGINS deadline, but the final game will be out later this summer. Actually, the fulsome response might have been expected, for *GUN-SLINGER* is a completely new tactical system—and nothing generates enthusiasm and discussion like novelty and tactical systems. The basic game is a straightforward system that explains combat in split-second showdowns. Additional rules add stalking for longer periods of time, campaigns that combine showdowns into longer games and role-playing rules that allow the players to develop their characters from game to game. The result is a simple, fast game that can be extended into a longer, more serious game for role-playing enthusiasts and gaming clubs.

MAGIC REALM

The initial rewrite of the *MAGIC REALM* rules has travelled strange paths. Many people have offered some intriguing suggestions for improving the game, so rather than simply rewriting the rules as we planned last summer, we are reorganizing and adding to the presentation. With the gunfighters fading into the sunset at last, we should start a playtest of the new *MAGIC REALM* rules sometime this summer (yes, we will playtest the second edition rules). Players who are familiar with the existing rules will find the overall game unchanged, with some very nice changes to the details of play here and there. The delay comes from these changes and the reorganization in the presentation.

ALPHA OMEGA

The biggest problem with *ALPHA OMEGA* is restructuring the game to fit the Avalon Hill format (have you seen the size of those maps?). It is a good deal like fitting a quart of water in a pint bottle without losing anything. We're working on this, but progress is problematic with other projects intruding. Fortunately, the game system is quite

Figure 1:

HIT THE BEACH!
by Jim Stahler

But What Happens When The Beach Hits Back?
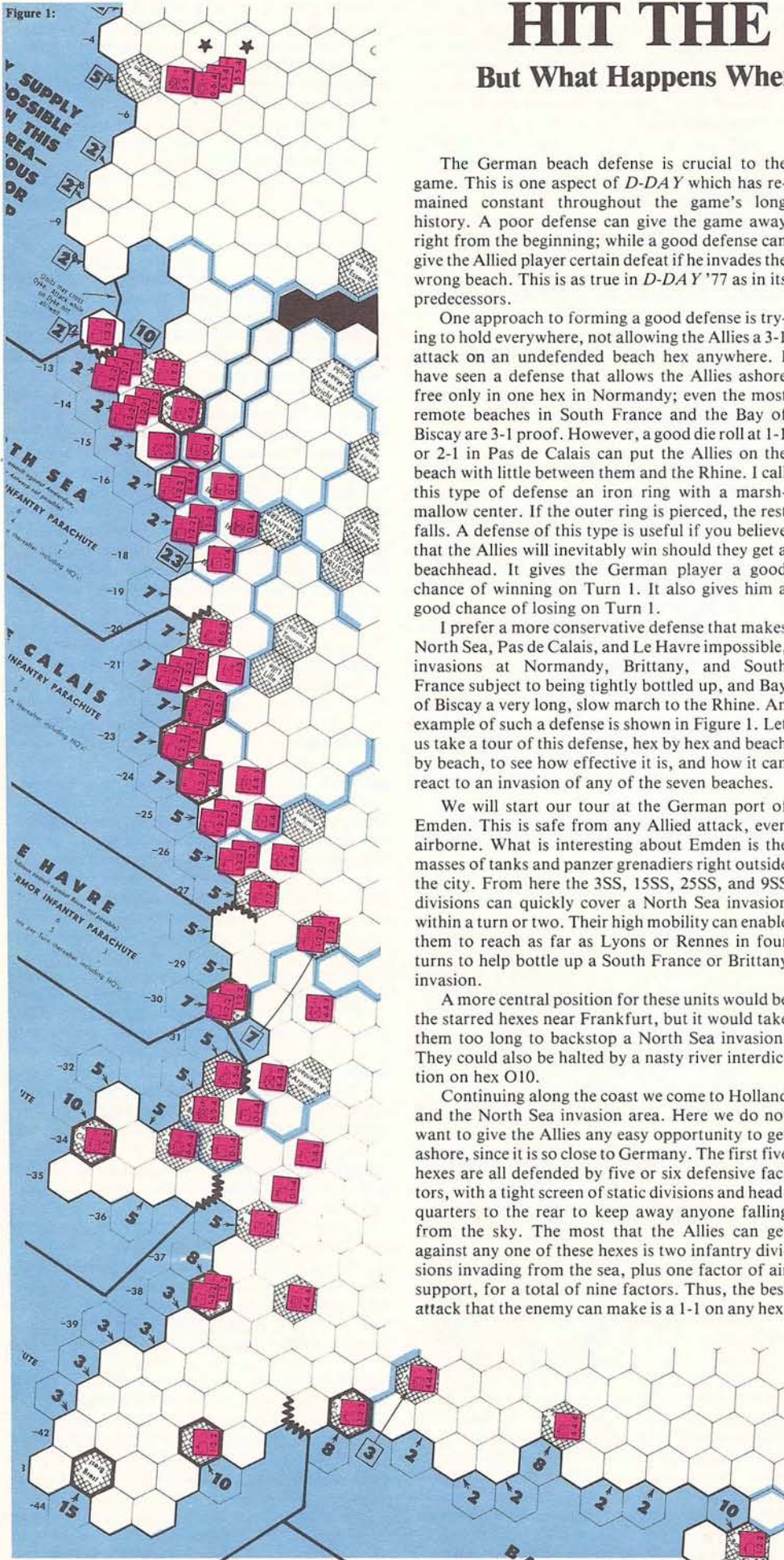
The German beach defense is crucial to the game. This is one aspect of *D-DAY* which has remained constant throughout the game's long history. A poor defense can give the game away right from the beginning; while a good defense can give the Allied player certain defeat if he invades the wrong beach. This is as true in *D-DAY* '77 as in its predecessors.

One approach to forming a good defense is trying to hold everywhere, not allowing the Allies a 3-1 attack on an undefended beach hex anywhere. I have seen a defense that allows the Allies ashore free only in one hex in Normandy; even the most remote beaches in South France and the Bay of Biscay are 3-1 proof. However, a good die roll at 1-1 or 2-1 in Pas de Calais can put the Allies on the beach with little between them and the Rhine. I call this type of defense an iron ring with a marshmallow center. If the outer ring is pierced, the rest falls. A defense of this type is useful if you believe that the Allies will inevitably win should they get a beachhead. It gives the German player a good chance of winning on Turn 1. It also gives him a good chance of losing on Turn 1.

I prefer a more conservative defense that makes North Sea, Pas de Calais, and Le Havre impossible, invasions at Normandy, Brittany, and South France subject to being tightly bottled up, and Bay of Biscay a very long, slow march to the Rhine. An example of such a defense is shown in Figure 1. Let us take a tour of this defense, hex by hex and beach by beach, to see how effective it is, and how it can react to an invasion of any of the seven beaches.

We will start our tour at the German port of Emden. This is safe from any Allied attack, even airborne. What is interesting about Emden is the masses of tanks and panzer grenadiers right outside the city. From here the 3SS, 15SS, 25SS, and 9SS divisions can quickly cover a North Sea invasion within a turn or two. Their high mobility can enable them to reach as far as Lyons or Rennes in four turns to help bottle up a South France or Brittany invasion.

A more central position for these units would be the starred hexes near Frankfurt, but it would take them too long to backstop a North Sea invasion. They could also be halted by a nasty river interdiction on hex O10.

Continuing along the coast we come to Holland and the North Sea invasion area. Here we do not want to give the Allies any easy opportunity to get ashore, since it is so close to Germany. The first five hexes are all defended by five or six defensive factors, with a tight screen of static divisions and headquarters to the rear to keep away anyone falling from the sky. The most that the Allies can get against any one of these hexes is two infantry divisions invading from the sea, plus one factor of air support, for a total of nine factors. Thus, the best attack that the enemy can make is a 1-1 on any hex.

Even if he wins one or two of these attacks, he is not home free. I16 and J17 are easily bottled up by the surrounding rivers, and the other three hexes are subject to counterattack by the four major divisions, 3 and 5 Parachute, and 77 and 271 Infantry, with 15 attack factors, supported by plentiful static divisions. Even if the Allies do succeed in getting a toehold on the coast and survive the ensuing counterattack, their supply situation will be critical until they capture a port. The only available ports are Amsterdam and Rotterdam, and Antwerp in neighboring Belgium. Holding the fortress of Rotterdam, with its tripled defense, prevents the Allies from using either Amsterdam or Rotterdam. The Panzer divisions streaming from the West, along with the river barriers, will keep Antwerp out of Allied hands.

About the best that the Allies can expect to do against the North Sea is to make a 2-1 with three airborne divisions against Amsterdam, coupled with a successful invasion against one of the two beach hexes adjacent to Amsterdam. The Germans need only retreat a couple static divisions across the dyke, beef up Rotterdam, and use the Emden armor to hold the Rhine. The Allies will be bottled up in a tiny beachhead with supply for two divisions, and hordes of Panzers on the march (See Figure 2). And this is what the Allies get after risking their valuable airborne divisions in a 2-1 attack. The Allied player can write off most of the North Sea as a viable invasion area.

There is one more beach hex in the North Sea: K19. It looks like an easy, unopposed landing, but look closer. Units invading K19 must attack the adjacent 2SS in Ostend, with retreat blocked by 15 HQ. Since 2SS is doubled, even paratroopers are required to make a 1-1. With the masses of German armor and infantry stationed to the West, the most that the Allied player can hope for is a beachhead bottled by Dunkirk, the Scheldt River, and Antwerp (see Figure 3). Not much gain for risking an airborne division and the first invasion.

Note a couple more features about the North Sea defense. The hexes most likely to be attacked, I16 and J17, are defended by static divisions. The more valuable units are positioned on hexes less likely to be invaded, making these units safer. They also are farther west, allowing them to quickly assist their comrades defending Pas de Calais, Le Havre, Normandy, and Brittany.

Continuing along the coast we enter France at the Pas de Calais. This is the closest invasion area to Britain, the beach that Hitler expected the Allies to invade. It is the scene of the British evacuation at Dunkirk, and the debacle at Dieppe. Should the enemy choose Pas de Calais as their invasion area, it will be three in a row.

Pas de Calais is a very different sort of area from North Sea. Supply is generally not a problem at Pas de Calais, whereas it made an offensive nearly impossible from North Sea. There are five coastal ports to choose from, which are the key to the area. They are hard to take, because they double or triple the defender; however, this makes them easier to hold once taken. Pas de Calais has better exits to the interior than North Sea, making an invasion more difficult to bottle up. Since Pas de Calais is farther from the Rhine than the North Sea, a beachhead is not quite as dangerous; a line can still be formed on the Meuse. The biggest danger comes from isolating the bulk of the German army West of the Seine, should the Allies successfuly invade and quickly break out.
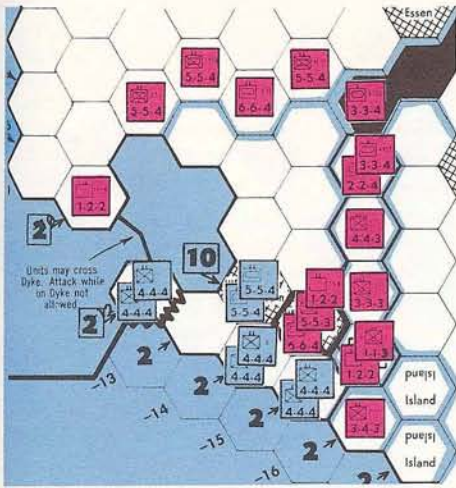
Figure 2: A successful North Sea invasion bottled up by a combination of German defenses and supply restrictions after two turns.

My strategy is to strongly defend the five ports, while being able to drive into the sea any units that struggle ashore on any of the three clear beach hexes.

Ostend, defended by the 2SS Panzer Division, is 2-1 proof, and it requires two infantry divisions, an airborne division, and air support to get a 1-1. Should it be taken, the Germans are in the same position as if K19 is successfully invaded. Because the Allies would be doubled in the city, counterattack is out of the question. Fall back to Dunkirk, the Schedlt, and Antwerp as in Figure 3.

Figure 3: A successful invasion of K19 bottled up by massive German forces, rivers and fortresses after turn 2.

The next hex, I21, is a clear terrain hex. It is undoubled, which makes it easy to attack, and easy to counterattack. The 6/2 Parachute Regiment protects the hex from airborne assault. The Allies can attack it with at most two armored divisions and aircraft, for a total of 11 factors. Since we have three static divisions defending it, the Allies are one factor short of a 2-1 attack. We will be seeing a lot of this one factor shortage up and down the coast. In case the Allies do make a successful 1-1 and gain a toehold, they can be annihilated by 2SS, 6/2 Parachute, 5 Parachute, 84 and 85 Infantry, and a few of the omnipresent static divisions, with at least 18 factors, enough for a 3-1 against an armored division supported by defensive air. L21 is not a healthy place for the Allies in June.

Dunkirk, Calais, and Boulogne are next. They are all fortresses defended by two static divisions, worth 12 factors. The best attack without paratroopers consists of two armored divisions with air support, or 11 factors; again one factor short of a 1-1. Dunkirk can be attacked at 1-1 with paratroopers dropping on N22, but a soakoff must be made against 6/2 Parachute Regiment. Paratroopers landing at N23 can up the odds to 1-1 against any two of the fortresses, but the 84 Infantry must be attacked also. Since a 1-1 only has a .33 chance of succeeding against the coast, it is not too likely that the Allied player will take the chance, nor succeed if he does. In the unlikely event of one of the fortresses falling, you should crush the airborne division exposed in the open, hold onto the other fortresses, and build a wall of units directly outside of the captured fortress. If worse comes to worse, it is back to the Meuse, but this will happen only if you are facing a very bold, very daring, and very lucky opponent.

"Come on in" said the spider to the fly. Hexes O25 and P26 look weak, but they are a trap for an inexperienced Allied player. They are airborne-proof, but they are each defended by only two static divisions. The allies can hit both hexes with a tempting 2-1 (however they are one factor short of a 3-1). The strength of these hexes comes not from the garrisons in the hexes but the large units behind the lines. They can be counterattacked on the first turn by 2SS, 1SS, 84, 85, 91, and 352 Infantry, the 6/2 Parachute, and some static divisions, with at least 30 factors. This is enough to crush units ashore on both hexes. Don't forget about an additional 20 factors from Normandy that will be available to attack on turn 2. If the Allies get ashore here, they will soon wish that they had attacked elsewhere.

The last hex in Pas de Calais, Dieppe, is defended by the crack 1SS Panzer Division. Being doubled in the city, it is worth 14 factors. Two armored divisions, an airborne division, and air support are required to make a 1-1. Note that retreat cannot be cut off without attacking the 91st Infantry. Attacking Dieppe is taking a big risk, with small chance of success. Should the Allies be foolish enough to attack Dieppe, and lucky enough to win, tears are in order. When your eyes dry, try counterattacking the lonely airborne division, soaking off against the city. If you can't do that, all is still not lost. Hold onto Amiens and Rouen for dear life, and form a line including the Somme and the lower Seine. Figure 4 shows what can be done to bottle up Dieppe. Beware: you will have quite a fight on your hands; be sure to evacuate everything to the west, so that it won't be trapped in case the Allies do break out.
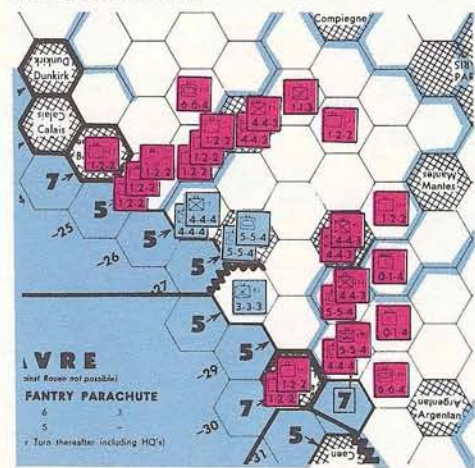
Figure 4: Allies bottled up following a very successful invasion against Dieppe.

We have seen that Pas de Calais is a very tough beach. There are no free hexes, and lots of counterattack strength. In most games the Allies won't even consider a Pas de Calais invasion, and in

the few that they do, they normally won't survive turn one. If your opponent chooses Pas de Calais, sleep well; you have the game in your pocket.

Little Le Havre is only three hexes wide, but it can be dangerous if the Allies get a firm foothold. The key to Le Havre is Rouen. If the Germans can hold on to Rouen, they can bottle up the invasion on a line Dieppe-Rouen-Le Havre, or at worst Somme-Amiens-Rouen-Lower Seine, as in Figure 4. Should the Allies secure Rouen early, they can break out towards Paris and trap the troops in Normandy, Brittany, Bay of Biscay, and South France.

Rouen can only be attacked by airborne on the invasion turn. With the two static divisions, the Allies' best odds are 1-1, risking all three airborne divisions. If he loses (⅔ chance), he has lost most of his airborne strength. Even if he wins, the Germans can still counterattack with five infantry divisions, 1SS, and Lehr panzer divisions. You can consider Rouen pretty safe on turn one.

There is also the beach to worry about. 1SS in Dieppe contributes its strength to the defense of the first beach hex, Q28. The best attack from the beach is 8-14, or 1-2. Using two airborne, the Allies can get a 1-1, but this is very risky, and requires the third airborne division to make a soakoff against Rouen. Most Allied commanders won't take the risk.

The next hex is undefended! The Allies can get ashore free at R29, but we have quite a welcoming party waiting behind the beaches. See Figure 5 for one counterattack possibility.
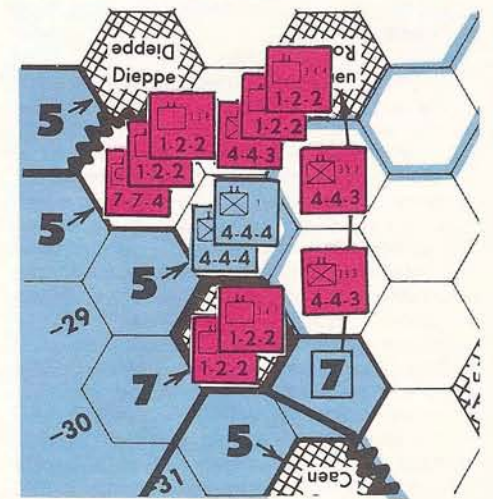
Figure 5: Counterattack vs. R29; welcome ashore.

The third hex, Le Havre, is a fortress garrisoned by two static divisions. It is worth 12 factors in defense. Using four infantry divisions, two airborne divisions on S30, and a factor of air support, the Allies can attack with 23 factors—not quite 2-1. The 352nd Infantry division discourages airborne units from landing across the Seine. Note that if the 352nd Infantry were on S30, it could be attacked from R29 in conjunction with airborne divisions, leading to a bridgehead across the Seine on Turn 1. However, in T30 it can only be attacked by airborne, a 2-1 at best, requiring three airborne divisions. If Le Havre falls, but there is no bridgehead across the Seine, the invasion can be halted along the lower Seine. If airborne seize a bridgehead but Le Havre holds, a counterattack can wipe out the invasion and isolate the paratroopers. Should Le Havre fall and the paratroopers be successful, you should be able to eliminate a few airborne divisions and fall back to the Seine—if you still hold Rouen.

The defenses of North Sea, Pas de Calais, and Le Havre all follow the same strategy. Depend on strong forces to hold the beaches or counterattack a lucky beachhead, with bottling up of the enemy only a last resort. In Normandy, Brittany, and South

France, our primary goal is to bottle up the Allies in a small area, rather than hold all the beaches and rely on counterattacks.

Normandy is the site of the actual invasion, and for that reason you can expect some Allied players to invade Normandy. After all, if it worked for Eisenhower, it should work for me. We will make that a lovely trap to fall into.

The key feature of Normandy is that it is a small peninsula, with good defensive terrain at the base. Our strategy consists of strongly defending the base of the peninsula against the initial seaborne invasion, and then to hold it against land attack from any beachhead that may be established. The key hexes to hold against the seaborne invasion are Caen and Bayeux. Five factors on each, doubled because of the cities and surrounded by antiparatrooper defense, are sufficent to prevent 1-1 odds. At 1-2, the Allied player would almost certainly be tossing away two infantry divisions, and he usually won't take the risk.

Part of the paratroop defense is the 12SS on Carentan, which serves a dual role of defending R34 and S35. The Allies can land at these hexes, but will have to fight to stay. The best that they can get against the 12SS is four infantry divisions, two airborne in T35, and an air factor, totalling 23 factors, one short of 2-1. Cherbourg must be held by a static division. Not only does that serve to slow down the Allies, but it prevents them from landing a paratrooper in Cherbourg in conjunction with a landing in Brittany or Le Havre, giving them two beachheads for the price of one.

A likely attack on Normandy would involve landing all around Cherbourg, and using airborne divisions and tactical air to gain 30-6 (5-1) odds against Cherbourg. Soaking off against 12SS from S35 and attacking Cherbourg from R34 will force the Germans to evacuate Carentan or come out into the open to fight for it. I advise retreating to an impregnable line along the Vire.

The key cities are now Bayeux again, and St. Lo and Avranches. Hold these with your armored strength nearby, protect them against paratroopers, and worry mainly about the second invasion. The Allies will have a tough time getting even a 1-2 anywhere, to make carpet bombing useful. See Figure 6 for the German defense at the end of Turn 1, and note that there are plenty of reinforcements on the way. A Normandy invasion will be bottled up with the cork welded on.
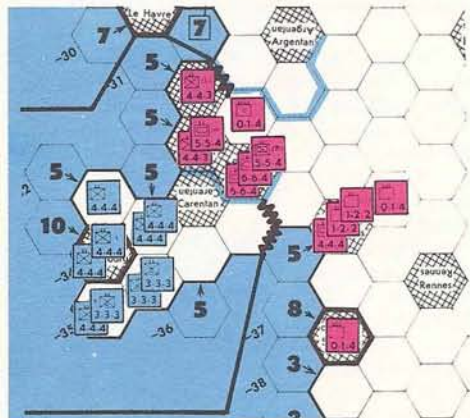
Figure 6: Allied beachhead sealed in Normandy on turn 1.

Moving around the coast of France we come to Brittany, which looks like a large Normandy. The method for holding Brittany is similar to that for holding Normandy, but on a larger scale. Since it is farther from Britain, the Allies have fewer troops landing and supply is less plentiful than in Normandy. On the other hand, since it is a larger peninsula, it will require much more of a commitment of German troops to hold a line at the base.

This latter fact requires the Brittany garrison to slow up the Allies for a few turns to enable reinforcements from Normandy, Bay of Biscay, and Pas De Calais to arrive to man the trenches. Since the Allies will have fewer troops and supplies, the task is easier.

We want to deny the Allies the use of a port on turn 1. The idea is to force them to use an extra turn to acquire a port with its large supply capacity before they can attack the main line. Avranches and St. Malo are well defended. Avranches is 1-1 proof; the best attack that the Allies can make against it is 12-14. This is important since Avranches is also the key to the main defense line. St. Malo is also needed for the main line. It can be attacked at 1-1, but not 2-1. (Would you believe another 23-12?).

Brest is of double importance. Not only is it the best port in Brittany, but its value as a sub base keeps the Allies from getting one replacement factor per turn. It is defended by a tripled 3-4-3. You can expect the Allies to eventually capture Brest, but the highest odds that they can get on Brest on the initial invasion turn is, of course, 23-12.

Lorient also has a high supply capacity. It can be attacked at 15-6 on turn one, which is a risky 2-1. The 712th Static defending there is important for delaying the Allies on Turn 2.

Normally, we can expect an Allied invasion of Brittany to involve four infantry divisions landing on the beach hexes from V39 to U42, with airborne landing to seal off Brest. It is tempting to counterattack this weak force with your nearby panzers, but this strategy could easily lead to disaster. Remember that the Allies have air power, airborne divisions, and six combat divisions landing every turn, fuelling their attack. The Germans will take a long time to concentrate, will be outnumbered in a short time, and the loss of a few key German units can hurt badly. In this case, discretion wins over valor. It is better to avoid combat and to fall back to the St. Malo-St. Nazaire line. The 712th Static Division is used here to delay the Allies for a turn, in X40, while other units move into position. See Figure 7 for the positions after turn 1.
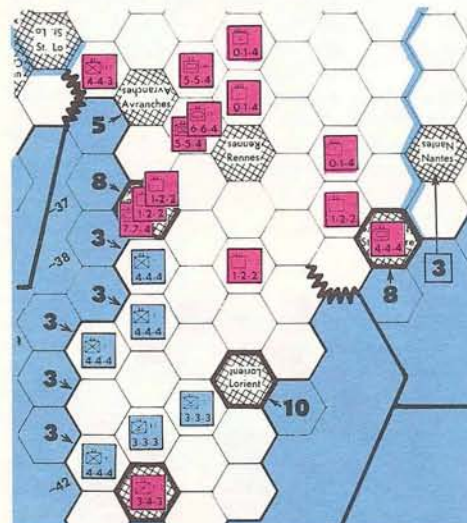
Figure 7: Allied invasion of Brittany and start of German withdrawal to St. Malo-St. Nazaire line at the end of turn 1.

Figure 8 shows the St. Nazaire-St. Malo defense line after Turn 2, ready for the first Allied assault. St. Malo can fall; if so merely retreat to Avranches. Rennes is the key point of the defense, along with St. Nazaire. If either city is taken by the Allies, the Germans must retreat to the Seine or fight the Allies in the open. Hex AA40 is undoubled. This isn't too dangerous because the Allies can attack it from only one hex, and the powerful German armor nearby can counterattack any Allied success against AA40.
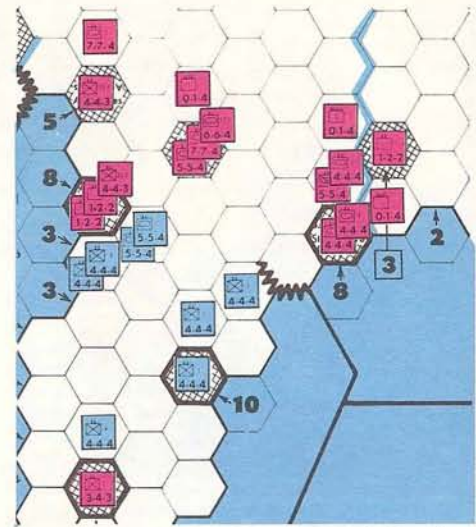
Figure 8: Allies bottled up by the St. Nazaire-St. Malo defense line at the end of turn 2.

Beware of paratroopers landing right behind your front line to surround your strongpoints, or landing deep to the rear to grab ports. Garrison Cherbourg, Avranches, and Nantes for certain. Keep units in La Rochelle, Bayeux, and Caen, just to be safe. Having an enterprising airborne capturing a port behind your back, followed by armor and infantry landing unopposed, can be embarrassing, to say the least.

You should be moving everyone available from South France, Pas de Calais, and replacement centers in Germany, to your critical line. Put additional units in W37, and Y38, to force the Allies to soakoff additionally if they try to attack St. Malo or Rennes. Counterattack any threat from your doubled and tripled positions. With any luck, the Allies will require a second invasion at Normandy, South France, or Biscay to spring the Brittany beachhead free, and you will be able to fall back to the Seine with no threat of a second invasion, and your replacements not too far away.

The Bay of Biscay is an enigma. On the surface, it looks like a poor choice for an invasion. It is very far from the Rhine. Troops landing there will wear out shoe leather and truck tires before they reach Germany. Since it is so far from England, the heavy shipping requirements severely limit the number of divisions that can land at Biscay to only four per turn. This is a mere trickle compared to any other invasion area. On top of that, the supply situation is not very good. The Allies must secure a port early to even have a chance of staying ashore. The open terrain behind the beaches makes it easy for the Germans to crush an invasion with a strong armored counterattack. The Bay of Biscay can be ignored as a feasible invasion area by the Germans.

But not safely ignored.

The danger of a German counterattack on the first couple of turns is negligible because the Germans cannot afford to commit much counterattack strength to such an out-of-the-way part of France. Similarly, they cannot put much strength there to prevent a landing. Infantry and static divisions in Biscay will be stranded by an Allied breakout anywhere else, and Panzers are needed to discourage landings in more critical areas.

But the wide open terrain that exposes Allied troops on the beach to a counterattack also prevents the Germans from forming a line to bottle up an invasion short of the Loire. Strategic movement will allow a division to rush from La Rochelle to Paris in only two turns, so it wasn't as far removed from critical areas as it seems. The shortage of supplies and reinforcements can be overcome by capturing a port in nearby Brittany or marching overland to Marseilles. No, comrades, the Bay of Biscay cannot be ignored.

The problem of defending Bay of Biscay is; how to defend a long stretch of beach with only a few mobile units that won't be trapped if the action is elsewhere. My solution is to hold the cities of St. Nazaire, Nantes, La Rochelle, and Bordeux, using only medium Panzer formations (4-4-4's) and a couple of static divisions.

St. Nazaire can at best only be attacked at 2-1 by two infantry divisions, the airborne division, and air support. Since it is a fortress, units can be pinned inside it, and there is a lot of counterattack strength next door in Brittany. Nantes can only be attacked at 1-1, and losing Nantes is meaningless if St. Nazaire holds, because the Allies can use Nantes as a port only if they own St. Nazaire and the far bank of the lower Loire.

La Rochelle is more promising, but the Allies can only get a 1-1 attack here also. A victory here would put the Allies solidly ashore; a defeat here would effectively eliminate the first invasion. If the Allies are going to risk it all on one die roll, they would be wiser to do it in the North Sea or the Pas de Calais, not in the Bay of Biscay.

Bordeaux is the soft spot of the German defense. Here the Allies can make a 3-1 attack (see Figure 9) without fear of counterattack or of being easily bottled up. Note that Bordeaux is very, very far from the Rhine. If you have to give the Allies a freebie, this is the best place. Nevertheless, if I had one more division, I would put it in Bordeaux or II42, to help hold the left flank of the Bay of Biscay.
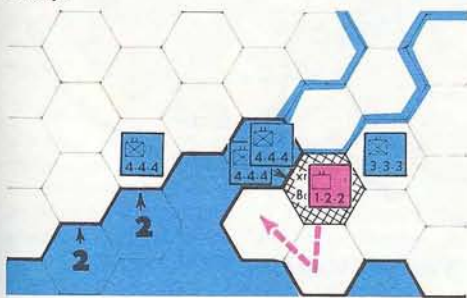
Figure 9: Allied 3-1 attack on Bordeaux requires TAC support. Germans retreat is shown in red.

If the Allies do attack in the Bay of Biscay, the German player must be careful to avoid two tempting traps. Do not get involved in a mobile battle out in the open. If you are not doubled, you can expect even attrition, which you cannot afford. Although the Allies get only four divisions per turn, they get those four divisions every turn, and don't forget about airpower and those sneaky airborne divisions, which can isolate half your attacking forces if you are not careful. And if second invasion time comes with your best troops slugging it out near Bordeaux, you are in trouble; the flower of the Wehrmacht can be cut off by a dash across France. Only attack if you are guaranteed to crush the Allied invasion immediately. Otherwise slowly withdraw.

The second trap is to attempt to bottle up the invasion with a line along the Loire, from St. Nazaire to Vichy. What works in Brittany will not work in Biscay, because the line is too long to hold. It is 24 hexes long, as compared with 21 hexes of the Seine line (Besancon to Le Havre), and you still have to defend Normandy and Brittany. A breakthrough at Orleans will trap everything west of there, and a successful invasion at Normandy will be equally fatal. With such a long line garrisoned, there will be barely enough troops available to hold North Sea and Pas de Calais.

The best move to handle an invasion of Bay of Biscay is a slow retreat all the way to the Seine River, using your panzers as a screen to prevent the Allies from utilizing strategic movement. If you are clever, the Allies will arrive at the Seine in strength only around Turn 9.

Our tour of the French coast ends at the Mediterranean beaches of South France. Long a favorite resort area it was also a favorite invasion area, until the 1965 rules made an invasion of South France futile because supply lines could not reach all the way from the ports to the Rhine. Now, in the 1977 edition, Marseilles can support up to 22 divisions up to 24 hexes away, far enough to include Strasbourg and 9 hexes across the Rhine. An invasion of South France must be reckoned with.

Since South France is so far from the other invasion areas, any troops committed there will be on their own for quite a while, until they can be reinforced from across France. Similarly, they cannot be used against an invasion at any other area for quite a while. For this reason, I do not defend the beaches at South France, nor do I plan a counterattack. Rather I use the same strategy as I use at Brittany: bottle up the invasion. The Rhone valley makes an excellent bottle, and Lyons makes a very good cork. However, beware of a very dangerous leak at Sete.

Initially, the Allies can walk ashore anywhere but Sete; they will be unopposed. At Sete they can only get a 1-1, which they will frequently pass up in favor of easier pickings to the East. However, Sete is the key to the whole area.

Figure 10: First German resistance to an Allied invasion of South France is established on turn 2.

Withdraw to Valence and the mountain hex MM31. This denies the Allies Strategic Movement on their second turn; the farthest they can get is Montelimar. Meanwhile, move up the infantry from Lyon to the Valence-Grenoble area, and rush everything that moves from the Atlantic to Lyons. On Turn 2, you can build a formidable line with units in Grenoble and Valence, with a delaying unit in MM30 (see figure 10). Be wary of putting anything in hex MM31 on Turn 2 if MM30 is vacant; if Valence is successfully attacked from MM30, everyone in MM31 is cut off.

On turn 3 the Allies will normally attack the sacrifice unit; they cannot mount effective attacks against Valence and Grenoble. Now you can put strength on hexes LL29 and LL30, continuing to hold Valence. Congratulate the Allied player if he takes Valence on turn 4; your delaying troops have done their job with light losses. You should be able to squeeze another turn or two out of this delaying action, allowing the Allies to hit your outposts (hexes JJ24 and KK30) on turn 6 or 7. By this time the Allied player will be wondering how you con-
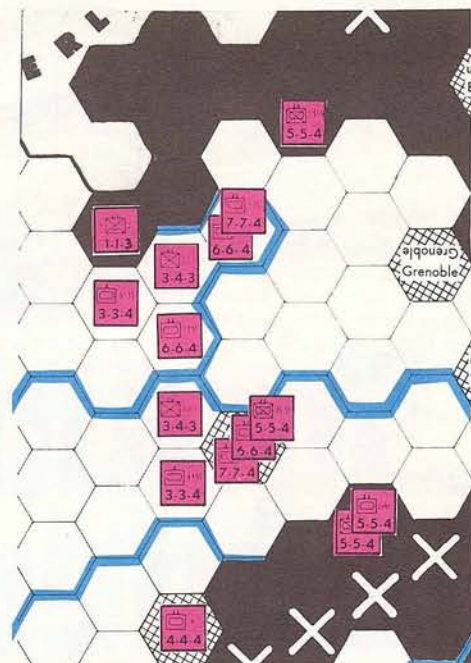
Figure 11: Main line of defense on the Lyons line, with outposts on JJ24 and KK30. Established on turn 5 or 6, with plenty of reinforcements on the way.

jured such an impressive line out of nothing (see figure 11). With four or five turns, you are able to build an unbreakable line along the upper Rhone, which will require a second invasion to crack.

Should the Allies attack at Sete and succeed, the above defense is outflanked and it's back to the Seine. He simply marches to the south and west, via Toulouse and Vichy, and he'll be comin' round the mountain in no time. You can manage to slow the advance with a screen of Panzers and headquarters, but there is no stopping it. It is possible to contain the advance with a line along the Loire-Eure-Seine, but there is no way that the German Army can hold that, hold the Lyons line, and still prepare for the second invasion.

Fortunately, defending Sete is not all that hard. If the Allies attack it on turn 1, the best that they can get is a 1-1. If they fail to take it then, you have a chance to rush some reinforcements up there. They can't attack Sete overland until turn 3 at the earliest, and that gives you a chance to put a back-up position on the mountain hex TT40, which effectively blocks the exit from Sete, and can only be attacked from one hex. Two 4-4-4's in TT40 can be attacked at 1-2 at best. In fact, if Sete gets threatened by an enemy on GG35, its garrison should immediately pull back to TT40 to make their stand.

We have completed the tour of my German defense. It is not an optimal defense—I doubt that a perfect defense exists—but it is a very good one. It makes North Sea, Pas de Calais, and Le Havre totally unappetizing. Normandy, Brittany, and South France present the Allies with an easy beachhead but nothing more, leaving the Bay of Biscay as the best bet of a sorry lot. Wherever the Allies hit the beach, the beach will hit back.

Comments and/or criticisms may be directed to Jim at his 6617 Mayfair Dr., Apt. T-1, Falls Church, VA 22042 address. Rule lawyers are urged to exercise caution however as Jim happens to be the author of the '77 edition rules.

☆

Squad Leader Clinic

BUNKERS

By Jon Mishcon

Mention "bunker" to a wargamer. Images course through his mind. Casemented guns at Pas de Calais. Serried rows of "Dragon's Teeth" entwined with squat concrete strongpoints in the West Wall. Perhaps a concealed log and rock command post within a reverse slope of Okinawa's Shuri line. Massive structures outside; inside Errol Flynn brushes off falling dust as the light bulb swings to the tune of a direct hit by a 12" shell. These are *not* the bunkers of *SQUAD LEADER*.

Most field bunkers were dugouts with a roof. Pits or trenches lined with whatever was close to hand. Coconut logs shared honors with crushed pumice on many a Pacific island. House foundations and simple wood patchwork were used routinely by the Germans. Relatively small, cheap, and easy were construction standards. Sure it took a lot of time to throw together but Organization Todt was busy elsewhere and a good squad leader used whatever was available.

Why bother to cheapen the *SL* bunker image? The value of a fortification is measured against its intended use. Avalon Hill did not provide you with a portion of the Maginot Line in its original counter mix. Understand the structure to get the best tactical use from it. Now that we've agreed on exactly what we're talking about let's review the *SQUAD LEADER* bunker's strengths and weaknesses.

A Bunker's Strengths:

53.2—If in a wire hex cannot be entered directly from an adjacent hex in one Advance Phase. It may enter the bunker in the next Movement Phase unless occupied by enemy units in which case it may enter during the next Advance Phase.

55.—Minefields (but not booby traps) may be placed in a bunker hex (i.e. on top of a bunker) to protect against closing infantry without hurting friendly infantry within the bunker.

56.1—Strong fire modifiers, especially from rear. Note the effect on firegroups listed in the Q & A section of page 34.

56.21—Units inside do NOT count against exterior hex stacking limits.

56.5—Indirect fire uses rear fire modifiers.

56.51—AP ammunition is treated as Area Fire and the most effective result which can be gained is a normal (M) Morale Check. This is a planned, but yet unpublished, modification of 134.12.

56.52—Flamethrowers outside the covered arc, add rear modifiers.

56.54—Overruns, use rear modifier.

56.6—Units may rout to a bunker as if it were a building and broken units within bunker may stay adjacent to enemy.

56.81—Units outside a bunker protect units inside from immediate Close Combat by advancing enemy units.

101.9—Units within get bonus for preStuka attack Morale Check.

105.3—Units within may remain adjacent to AFVs in pre-1942 scenarios even if they'll break.

106.1—May not be bypassed by infantry or vehicles (*112.3*).

111.8—Cost of entering bunker not doubled in Deep Snow.

111.93—Allows safer rally attempts in Extreme Winter.

114.52—Ski troops can't enter while on skis.

It is evident that being bunkered provides strong fire protection and allows real morale/rally advantages. That's why you built the damn thing. Now let's review the weaknesses.

A Bunker's Weaknesses:

25.3—Units within may not grow concealment counters.

37.37 & 37.48—Bazookas, Panzerfausts, Panzershrecks and the not yet released Recoilless Rifles may not be used from within.

54.2—No entrenchments in same hex.

56.1—Only placed in non-building or non-woods hex.

56.22—Costs 1 MF to leave bunker and units outside receive no benefit from bunker.

56.3—Units may only fire out along covered arc.

56.4—No vehicles, howitzers, or mortars may use.

56.52—Flamethrowers firing through Covered Arc, add no modifier.

56.81—Units within may never force Close Combat on units atop a bunker.

56.82—Units may NEVER leave bunker when enemy is atop.

56.83—Units within may never fire at own bunker top (and vice versa).

56.9—Concealment counters do not halve incoming fire.

75.9—Not placable in marsh.

105.2—No morale bonus for being next to AFVs pre-1942.

107.6—Suppression fire effects units within bunker same as those outside.

109.1—Subject to critical hit.

111.81—Snow smocks no advantage within.

Boil down the weaknesses. Bunkers are traps . . . alluring traps, but traps nonetheless. The essence of all-or-nothing defense. The only pre *GI* covering terrain they may occupy is orchard. That means the vast majority of the time your bunker

will be in open terrain. And that means you can't get out without moving in the open. Regardless of modifier are you sure you want adjacent units to be able to fire in when you can't fire back? Never forget that one lousy scout sitting atop can trap a platoon within the strongest bunker. Most players soon learn that bunkers are a nice place to avoid. Why did so many nationalities spend so much time building them?

The answer lies in balancing the various features a bunker offers. I will offer general usage ideas and how they may apply to specific scenarios in the following paragraphs before answering the above question.

The Backward Loner. This bunker faces toward your lines. Usually in front of your main line of resistance. Perhaps just within small arms range. If an enemy moves past it without neutralizing it, its covered arc may allow a rear ATR shot or may prevent a rout. Attempts to engage it through its Covered Arc Defense Modifier places the attacker between your forces. It is most vulnerable to entry during the Advance Phase from an adjacent hex. Consider this for covering the roads in Scenario 21.

The Command Post. This bunker is behind your lines in some covered spot. A reverse slope is ideal. Stick an 8-0 leader within and you've created a central rally point for an extended firing line. Stacked with an additional three squads it makes a powerful counterattack jumpoff point. Hex 3G4 in Scenario 21 can be used for all the troops entrenched atop hill 546.

The Magic Circle. Popularized by fighter pilots of a bygone era. Three bunkers may be placed in a triangle such that the covered arc of each has a clear LOS to the top and rear of its neighbor. Better still, six bunkers can be grouped in a perfect circle around a central open hex. Any attempt to approach the blind side of one is met by a hail of fire from the others. Review Scenario 9 in this light.

Why were so many bunkers built when their use is so limited? I believe there were two basic reasons. First *SQUAD LEADER* players have yet to experience a powerful preparatory bombardment. The roof of a bunker allows defenders to suffer through a Field Marshal Monty style blasting with minimal casualties. Further, if you don't trust your troops to be able to survive the rigors of fire and movement the plus modifiers of a bunker do substantially even the odds. Refer to Bob Medrow's excellent table on probability of unit survival in Volume 17, Number 2. A 6 morale unit is 8% less likely than a 7 morale unit to survive a 12FP attack at 0 DRM. Change the DRM to +3 for both and now the 6 morale unit is only 4% less likely to survive the same attack. Low morale units benefit more from cover than do crack troops.

Each of these ideas stresses the key points of bunker usage. A bunker must be protected; either by other bunkers in a mutual protection plan of interlocking fires or by outside troops. The fire and morale advantages are most valuable when used for troops with limited fire and morale abilities. Used properly they may add substantially to your defensive capacity. A new scenario has been provided in this issue's insert page to allow players to experiment with the ideas contained herein.

One last note on bunkers: the original rules booklet showed a bunker incorrectly facing a hex-*side* rather than a *spine*. Bunkers, like AFVs, must face a hex spine to determine their Covered Arc.

☆

nice—apart from the upgraded presentation, the only changes we are contemplating fall into the nature of "chrome" to jazz up play somewhat.

. . . Richard Hamblen

RED SKY AT MORNING

With the exception of *ARAB-ISRAELI WARS,* up to now Avalon Hill hasn't produced a single contemporary era wargame despite the fact that most gamers seem highly interested in the present military situation. Now we are taking a long overdue step to meet the demand for modern era games.

Keeping in mind our stated policy in favor of playable, competitive-oriented games, I have come up with a game that sounds too good to be true. This game simulates the course of a worldwide strategic naval contest between the Soviet Navy and the NATO naval forces now deployed at sea. As you might expect the game focuses on the distinction between the Soviet submarine sea denial strategy and the U.S. strategy based upon carrier task forces. The order of battle includes all the major ships and weapons currently in operation as well as ships and weapon systems being developed during the current decade.

Perhaps the most interesting aspect of the game, however, is the fact that the design is based on the immensely popular *VICTORY IN THE PACIFIC.* Thus the focus of the game is on action and playability, not complexity. And yet, we expect *RED SKY AT MORNING* to be one of the most interesting and innovative game systems we've ever developed as there are tremendous differences in contemporary naval weapons from the days of the U-boat and the battleship which dominated the Second World War; anti-surface and anti-submarine missiles, improved radar/sonar equipment, satellite and undersea detection, ballistic missile submarines, etc.

Since this game is still in the design stage, I invite any interested gamers to write to me if you are interested in playtesting, or if you have any information which will be of help.

. . . Frank Davis

PANZERGRUPPE

The revision of the *PANZER BLITZ, PANZER LEADER* game system is progressing very well. The playtest kits should be in the mail in a few months. The interest all over the country in this revision has been overwhelming. The general consensus of opinion is that it is a labor worthy of our best efforts and long overdue. The only problem with updating such a viable old system, is that sometimes I am reminded of the 90 year old grandpa who wanted to marry the 16 year old girl. "But Grandpa, what will you do in ten years," cried his children? "You'll be 100 and she'll be 26." "Well," replied the old coot, "I rec'on I'll have to get me another 16 year old."

The nuts and bolts of our rewrite can be broken down into several basic areas. All rules modifications and changes are designed to fit into one generic set of rules, intended to cover the European Theatre of operations for World War II from September of '39 to May of '45. The new rules provide a more realistic game and clear up many problems. The spirit of the game remains unchanged. The flow, ease of play and standard format remain as before.

Artillery effects have been modified to a system similar to *A.I.W.* This has been modified to reflect W.W.II unit densities and artillery tactics. Movement rates for vehicles have been reduced and a new terrain effects chart with some revised costs and effects produced. These changes correct

two of the most serious problems with the *PANZER BLITZ/PANZER LEADER* system.

A more drastic revision is the incorporation of a step reduction system with backprinted counters. The step reduction adds a new wrinkle to the C.R.T. and does away with all or nothing outcomes of the existing game system. The addition of morale rules increase the possible outcomes of any given combat.

The Weapons Effects Chart has been greatly expanded and the different weapon capabilities are more accurately portrayed. Long range shots are now more of a "hit or miss" affair. Infantry units have been brought into the Weapon Effects Chart with their firepower and weapons types adjusted by nationality and year of the war.

It is our hope with this revision to produce a simulation on the war in North Africa, as well as expansion kits for *PANZER BLITZ* and *PANZER LEADER.* On the negative side most of your counters with be obsolete, but on the plus side, all equipment, rules etc. will be 100% interchangeable.

. . . Kirk Bramlett

STRUGGLE FOR ARNHEM BRIDGE

The intense street fighting during the Market Garden Operation for control of the famous road bridge at Arnhem is depicted in graphic detail. The game is tactical in nature and deals with only that portion of the city in the immediate vicinity of the bridge where elements of the British 1st Airborne Division fought for its control and finally their very survival.

The mapboard is 22″ × 32″ with a scale of approximately 1″ = 100′, and units representing individual squads or two-three vehicles. To many this may sound like *SQUAD LEADER* all over again, but it has very little in common with the *SL* system. A first glance at the mapboard which lacks a hex grid of any kind will tell you that. Instead, the game uses a map divided into various city block areas—each based on the actual street configuration at the time of the battle. All the famous buildings and streets have been noted for added color, but there is a minimum of complexity associated with the terrain—such information having been factored into the configuration of the areas themselves.

The game itself revolves largely around the Movement/Fire phase of each game turn. Each one of these phases is divided into a variable number of alternating player impulses. During an impulse a player may either move or fire any number of units currently occupying a common area. Once a unit moves or fires it is considered committed and is turned over to show, in most cases, a reduced defensive factor. This also symbolizes that it may not move or fire again during that phase. If a player should decide not to perform any action, he may pass. Players must pass if they have no units eligible to move or fire and the phase ends if both players pass consecutively. The strategy and timing that must accompany a pass option is extremely important and keeps the excitement level high throughout. The net result is a game turn with a simultaneous feel, yet with the action-reaction of sequential movement games.

Combat is resolved without a Combat Results Table of any kind and requires both players to interact during each attack. The defender will usually have the choice of retreating from an area to conserve casualties or remaining in place and taking greater losses. Off-board artillery effects are also included, as well as the ability to set fire to buildings within a block to flush units from their positions.

Victory is determined by control of the all important areas surrounding the bridge ramp and the bridge itself. How fast and how thoroughly the Ger-

An Interview with Dale Sheaffer   By Alan R. Moon

ARM: What is your job at Avalon Hill, Dale?

DAS: Well, I was hired on as a graphics person and generally I turn out most of the components inside the game boxes.

ARM: Would you explain how a mapboard is put together?

DAS: Usually there's a prototype map to work from. To do the final map though, we start from scratch by first creating a base art which usually consists of the areas and symbols which will appear in black. Then overlays are added in order to create the other colors and terrain features.

ARM: Is there any limit to how many colors you can use?

DAS: What we use here at Avalon Hill is a four-color process which simply means we can only use four colors, but since the four colors are usually black and the three primary colors there is technically no color that we cannot create.

ARM: You are also in charge of doing most of the art for *THE GENERAL.* How do you recreate game components for articles in the magazine?

DAS: We don't really. What we do is have a velox shot, a kind of photocopy, of the base art, and then we just build up the mapboard using overlays again to recreate the original. We do the same thing for the colors of the counters, beginning with the black and white art and adding overlays for color.

ARM: Some people are probably a little confused by a lot of these terms. What do you mean by an overlay?

DAS: An overlay is a sheet of plastic acetate that is put down over the base art. The overlay itself is not the color you want it to be. It is merely a device to show the camera department where you do want the color. The material we use for overlays is called amberlith. This is a clear plastic with a kind of coating over it which can be cut away in areas. So, when we add colors to a black and white illustration we merely leave the amberlith in the areas where we want color. The camera department makes a negative from this which is the reverse of the overlay, which means that the amberlith becomes a clear area in the negative. The camera department

then makes a plate from the negative, with these clear areas becoming holes the printers run the color through.
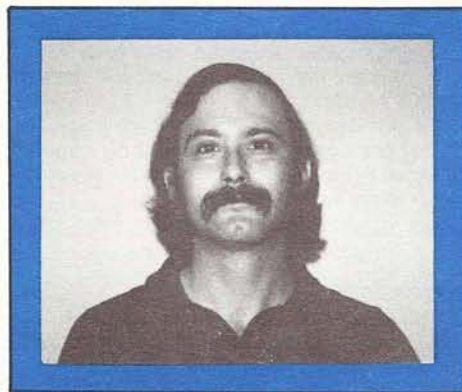
Dale A. Sheaffer
Born: 3/23/52
Started Wargaming: 1962
PBM Experience: None
First Wargame: Gettysburg
Favorite Wargame: Gettysburg ('77) and Russian Campaign
Favorite Non-Wargame: Go
Outside Interests: Music, Art, History
Employed by AH: 1979
AH Artwork: W&P, FE, COD, 3R, AW, SON, TLD, AF, DL, FT, BB, GOA, FITW, CM, GL

ARM: That sounds kind of technical. When I think of an artist I usually envision someone sitting in front of an easel with brush in hand. But there's really a lot more to what you do. How much of your job is technical vs. purely artistic?

DAS: The bulk of my work is technical. Before I came here I had a good grounding in commercial art but I didn't know very much about photographic procedures which is primarily what is used to create the game components. I spend a good deal of time with the camera department and the printers to learn their terminology and the things they can and cannot do.

ARM: Are the box covers done the same way as the rest of the components?

DAS: No. Since box covers are usually paintings, there is no base art so we can't use the overlay method. Instead, we shoot a color photograph of the actual painted artwork and then separate this photographically into four different colors; black, red, blue, and yellow. These four colors are then made into four negatives which reproduce the painting when printed. This process is called a color separation.

ARM: Which of the two methods mentioned produces the more vivid color?

DAS: There are advantages and disadvantages to both. Color separation eliminates the problem of constructing a base art and overlays which is probably its biggest plus.

ARM: Why isn't this method used for the diagrams for *THE GENERAL?*

DAS: Two reasons. It is much quicker and much cheaper to do it the other way. We have, on occasion, done full color illustrations in *THE GENERAL,* mostly mapboards that were hand painted originally.

ARM: Were you surprised at what your duties turned out to be at Avalon Hill, having been trained in art school for something completely different? Did that bother you in any way? Do you ever feel that your artistic talent is being wasted?

DAS: Not really. First off, I took commercial art which is exactly the kind of training you need for a job like this. I was a good pen and ink man which also helps. I haven't done much in the way of pen and ink illustrations yet, but you never know what I'll be doing in the future. As for my talent being wasted, I would also have to say no. It's been channeled into other directions. There is a lot of challenge in what I do now, especially in trying to reproduce exactly what I want through the photographic process.

ARM: I get a great deal of satisfaction from seeing the finished product of a game I've worked on. Do you get that same kind of satisfaction from working on the components?

DAS: I'm always glad when they finally come out right, but no real artist is ever truly satisfied with

any of his finished products. The minute I see a finished map, I immediately think of a new or a different way I should have done it.

ARM: Of all the things you've worked on, what is the one thing you feel most satisfied with?

DAS: To date, the things I am most pleased with are the *GUNS OF AUGUST* map and *FORTRESS EUROPA* counters.

ARM: What makes them better than some of the other things you've worked on?

DAS: In the case of the counters for *FORTRESS EUROPA*, they finally came out looking the way I wanted them to look. Almost all the little problems that we had with them were taken care of and we got a finished product that satisfied me. In the case of the *GUNS OF AUGUST* map, I was experimenting with new techniques and procedures and the end product, while not exactly one of our flashier maps, satisfied me personally because it meant that what I had attempted to do worked and worked well.

ARM: How much time did it take to do the *GUNS OF AUGUST* map?

DAS: If I could have sat down and done it all at once, it might have taken a week and a half or two weeks. As it was, the project extended over about two months due to the fact that we weren't sure until the very end what information was actually going to appear on the finished product.

ARM: How much time does it take you to put together all the art for an issue of *THE GENERAL*?

DAS: About a month or so, depending on the difficulty of the illustrations and the difficulty of getting the components themselves together.

ARM: Do you play games. Would you consider yourself a wargamer?

DAS: Yes. My father brought home an original *GETTYSBURG* one day, and my brother and I literally played it to death. My sister even got into the act. We were hooked from there on.

ARM: How do you think being a gamer effects you as an artist working on the components of the games?

DAS: I know what I would like to see in terms of graphics in games. I'm responsible for the grey Westwall symbols on the new *THIRD REICH* map, because I always forgot about them when I played it. I remember purchasing games when I was younger that used to startle me with some of their graphics so now I try not to startle myself.

ARM: Do you think its more important for a map to be functional or attractive?

DAS: I think there's room to make components both functional and attractive at the same time. When I do a map I'm not just interested in including all the pertinent information, although that's most important. I also attempt to create an appearance for the players so the pieces and the mapboard impart a suggestion of the period the game takes place in.

ARM: It sounds to me like you are also interested in history and games as simulations. Is that true?

DAS: Yes, both.

ARM: How does that relate to your work on a game?

DAS: In the case of a game from a particular period in history, I will try to find samples of maps that were in use at the time. For instance, for a World War II game I'll try to use the actual symbology that was in use then. This enhances the appearance of the components and increases the enjoyment of people who play the game.

ARM: You have to work pretty closely with the developers at Avalon Hill. Since everyone's artistic taste differs, does this pose any problems?

DAS: Only when I haven't been warned beforehand. I'm perfectly willing to do a map for a developer or designer according to his complete directions. The trouble that we sometimes get into is when the designer doesn't have a clear idea of what he wants. Usually, however, the finished product is the result of input from both the developer and the artist.

ARM: But aren't there times when you disagree artistically with what the developer wants and you just know that it would look better some other way. What happens in those cases?

DAS: You win some. You lose some.

ARM: Does that bother you. Or is that just part of the job?

DAS: It bothers me sometimes, but I also get a chance to tell the developer 'I told you so' later on.

ARM: Do you feel this restricts your artistic ability in any way?

DAS: Sometimes the designer or the developer will ask me to do something which I may feel is wrong or won't look right. The challenge then is to make whatever it may be fit in with what I may already have constructed. I'm always glad if it turns out well, for the players' sake anyway.

ARM: There's always a lot of talk about innovation in games and a lot of it has to do with how the components and the artwork are presented. How do you feel that Avalon Hill rates along the lines of innovation?

DAS: That's a tough question. All the components that are created at Avalon Hill are done from scratch. There is no hard and fast way of doing things. There are no two maps that look alike. We don't have any kind of standard symbology that we use or anything like that. So, it's very difficult to say. On the other hand, it allows me to be creative and experiment with new symbols for terrain, new color schemes, etc.

ARM: Are there restrictions on the format and size of the components?

DAS: Yes. We always have to work within the tolerances that have been created for the games. We have standard sizes from mapboard panels, charts, and counters. The main consideration here is the box. Avalon Hill has two standard boxes; the bookcase style and the flat box. These create their own limits, but you can usually get around any problems that might come up.

ARM: What game components are you working on at the moment?

DAS: Well, I've just finished *BATTLE OF THE BULGE*. Currently I'm working on components for *GUNSLINGER*. I am also working on the revised *FURY IN THE WEST*.

ARM: Can you tell us a little bit about the components for *GUNSLINGER*?

DAS: There will be eight double sided mapboards which were hand painted by an outside artist which have already been printed. The counters will be circular as well as square. There will also be a myriad of charts and two decks of cards.

ARM: Along with everything else, you're also doing the development of Battleline's *OBJECTIVE ATLANTA* aren't you? Can you tell us a little bit about that?

DAS: I have grandiose plans for *OBJECTIVE ATLANTA* but due to the press of my other work here it's a very slow process. At this date I have a revised set of rules in manuscript form, but that's about all. My long term hopes for the game include a hand painted mapboard and new counters.

ARM: It seems like anyone who plays games winds up trying to design them too. Do you design games on your own time?

DAS: Yes, but between working on games and playing them I don't have much time anymore.

ARM: We get a lot of letters from people who want to submit art for *THE GENERAL*. Do you have any tips for these people.

DAS: They should write to Don Greenwood first. He will send them a form with the guidelines, and let them know if we are looking for anything special in the way of artwork. It helps to know the tolerances and size limitations so we don't have to chop up someone's piece of art because it isn't the right size. Most illustrations that we use are pen and ink, done in black and white.

ARM: What do you think of the latest Avalon Hill boxcovers?

DAS: I think Avalon Hill boxcovers are constantly getting better. Rodger MacGowan and Mark Wheatley who we've used a lot lately continually impress me with the quality and professionalism of their work.

ARM: What do you think about the standard of art in the hobby?

DAS: As far as the industry itself is concerned, it has definitely been improving. Knowing what has been done in the past, all of us in the industry are constantly trying to do better.

☆

AREA TOP 50 LIST

Rank	Name	Times On List	Rating	Previous Rank
1.	K. Combs	22	2533XOR	1
2.	W. Dobson	24	2511RJP	2
3.	D. Burdick	21	2179FDL	5
4.	R. Chiang	30	2178GHN	3
5.	D. Garbutt	20	2161EGK	4
6.	T. Oleson	31	2069TTZ	6
7.	B. Sinigaglio	7	2037EGF	8
8.	P. Kemp	15	2034EEI	7
9.	R. Leach	24	2005HLQ	17
10.	J. Zajicek	25	2004GJP	19
11.	J. Kreuz	17	2001FFK	9
12.	L. Kelly	15	1999VWZ	15
13.	P. Siragusa	15	1999CEG	10
14.	D. Barker	29	1997GHM	11
15.	F. Freeman	15	1981EEF	12
16.	L. Newbury	24	1964EGK	14
17.	M. Sincavage	11	1964DDI	13
18.	J. Beard	11	1954EFL	16
19.	F. Reese	2	1886FDE	24
20.	D. Giordano	2	1854CEF	22
21.	I. LeBouef, Jr.	10	1853HJR	29
22.	P. Ford	2	1853ECK	20
23.	F. Preissle	19	1876JLV	23
24.	B. Remsburg	5	1832EGL	34
25.	B. Downing	11	1815EGJ	28
26.	W. Scott	18	1809HGP	25
27.	K. Blanch	24	1790GIM	18
28.	S. Martin	15	1790EGI	27
29.	N. Markevich	14	1782CEF	30
30.	G. Charbonneau	5	1775CEG	26
31.	F. Ornstein	5	1766EGK	33
32.	D.R. Munsell	17	1760FDI	35
33.	F. Sebastian	17	1758FNN	36
34.	D. Greenwood	22	1756FFI	32
35.	E. Miller	8	1739GJO	39
36.	R.M. Phelps	3	1738DFI	42
37.	W. Knapp	16	1723JLR	38
38.	J.D. Mueller	1	1723MJY	—
39.	R. Zajac	2	1719FGH	40
40.	D.L. McCarty	8	1713DEI	41
41.	W. Kolvick	7	1710DEH	43
42.	W. Letzin	18	1710DEH	44
43.	C. Braun	3	1706FIN	37
44.	N. Cromartie	7	1693FGM	47
45.	G. Smith	2	1679CCI	48
46.	R. Rowley	3	1666EGK	50
47.	D. Tierney	1	1660CEI	—
48.	P. Carson	1	1650FCE	—
49.	D. Stephens	1	1636HIP	—
50.	L. Jerkich	1	1627CCF	—

AH Philosophy . . . *Continued from Page 41*

man player can wrest control of these vital areas at the end of eight game turns determines the winner and the level of victory attained.

STRUGGLE FOR ARNHEM BRIDGE is, above all else, a simple game to learn, but is filled with countless opportunities for the application of different tactics and that is what makes it so fascinating—the complexity lies in the play of the game—not the reading of the rules. Players must concentrate on the action taking place as it unfolds on the mapboard, rather than in endless pages of charts and rules. At this time, the rules are quite tight with final blind testing about to begin to assure proper play balance.

. . . Courtney Allen

G.I., ANVIL OF VICTORY

G.I. should be approaching the blind playtest stage in about a month. The basic rules have undergone about ten drafts in pre-playtest "scrimmage" with a few hand-picked experts from the *SL* playtest crew. Actual testing of the twelve scenarios now remains the largest hurdle to publication.

Aside from the press of other duties, the biggest delay in getting *G.I.* onto the presses has been an extensive revision of the game system itself. The next project in store for the *SL* game system is a completely rewritten compendium of the entire system. This set of *Advanced Squad Leader* rules will be published in loose-leaf binder format inside a bookcase sleeve. The net result should be a much *shorter* set of rules and a much cleaner set with no leafing through page after page of rules to decipher the differences between the basic rules and the advanced rules. Along the way, many design improvements will be made to the existing game system (some of which are unveiled in *G.I.*) to make the game more playable while maintaining the rigid attention to detail that *SL* players seem to crave so much.

Plans to establish a system of CE reverse side armor counters have been dropped, although a set of wreck counters will be provided to distinguish burning wrecks from the more palatable variety. Similarly, plans to expand the Covered Arc in order to improve the performance of non-turreted vehicles have been shelved in favor of a new stream-lined TO HIT system which is infinitely cleaner than the old version.

G.I. will have much more of everything than anything in the preceding series (except perhaps rules). The game will include five mapboards, terrain overlays to alter existing mapboards, 12-14 scenarios, and more unit counters than I care to admit. Consequently, you can expect the highest price you've yet encountered for a *SL* item—but it should represent the best value of the series. Look for it next spring.

Many of you have written us requesting to be allowed to become a *SL* playtester. Usually, we've had to turn down such requests as the existing playtest crew is a large and experienced group. However, we are constantly on the lookout for people whose actions back up their boasts and are happy to expand our existing playtest crews for people who demonstrate they have what it takes to be a valuable contributor. An opportunity for such a display occurred at the *SL* seminars at both ORIGINS and GEN CON EAST this year when volunteers were given copies of the existing *G.I.* rules and asked to submit critiques. Those who do a creditable job will be "rewarded" with an invitation to join the actual blind playtest that will start this fall.

Hold on fellas . . . it's coming, and it will be worth the wait.

. . . Don Greenwood

NEWS FROM THE SPORTS DEPT.

With the hiring of Joe Balkoski, we expect to be able to speed up both your production of new sports games and accessories, and to finally get *ASR* onto some sort of a regular schedule. Of course this last requires the magazine not being given the bottom priority it has received for the past four years, when *every* other project was deemed more important. The most recent issue (the "March" issue, which was first delayed because of the Spring releases, and then later because of the Summer releases!), which with luck was mailed out before the end of June, was the last quarterly issue, and from now on *ASR* will be bi-monthly. Please don't laugh—we are serious.

Moving onto more cheerful matters, the *STATIS-PRO FOOTBALL* game is near completion, and we hope to have it printed and on sale in August. It will include individual cards for every member of every NFL team, with even third-string quarterbacks being rated. We believe that it will be the best and most playable statistical football game on the market.

Other works in progress include a tennis and hockey game, both in their early stages, and some discussion of whether or not we would like statistical golf and horse racing games. Joe Balkoski is in the process of writing a narrative history of the 1961 baseball season, which will accompany our set of player cards for the season for *MAJOR LEAGUE BASEBALL*, and if our typesetters are able to get to it, we also have a set of great teams of the past for *SUPERSTAR BASEBALL* which have been provided by Bob Biscontini.

. . . Bruce Milligan

☆

Gentlemen:

Have you ever purchased a really neat and nifty new game and then discover that you have nobody to play with. So you play it solitaire a few times, get bored, and put the game up on a shelf to gather dust. I have several dust gatherers on my shelf. Recently I took *TOBRUK* off the shelf, dusted it off and began experimenting with scenario 1. Scenario 1 is fairly simple and readily lends itself to computerized play. I decided to develop a program that would play the German side.

The computer plays a fast hard-hitting game. The turn sequence will have to be modified, first the computer plays, then you do. This is one game turn. Limit the game to 30 turns. If any of the computer's panzers leave the board, simply remove them, but don't count them as victory points. You should also remove all tanks that have been k-killed. Any other instructions needed are found at the beginning of the computer program.

This program has specific beginning, mid, and end game routines similar to a chess program. A certain amount of random variation is built into the program to keep a human opponent from second guessing the computer too often. *Tobruk Panzers* occupies about 4500 bytes of memory. If the instructions are left out it might fit into a 4k machine. This program is written in Level II Basic.

I hope you have as much fun playing this variation of Tobruk's Scenario 1 as I did creating and play testing the program. I also hope that this program sparks interest in other possibilities for home computers in gaming. We have only begun to scratch the surface.

Bruce Duthie, Ph.D.
Richland, Washington

```
10 REM     TOBRUK PANZERS
15 REM     Bruce Duthie, Ph.D.
              October, 1980
17 Print "Tobruk Panzers"
25 Print
30 Print "This program is designed to play the
German side in scenario"
35 Print "one of Avalon Hill's Tobruk Game.
Randomly place Panzer"
40 Print "III-H's on hexes B-R. The Panzer IV's
will not be used. To"
45 Print "make it more fair for the computer, all
German Panzers are"
50 Print "assumed to be shooting APCR shells.
All 'K' killed tanks"
55 Print "should be taken off of the board as soon
as they have been"
60 Print "knocked out. The turn sequence has to
be somewhat simplified"
65 Print "The Germans move first then you do,
you may move or shoot, but"
70 Print "not both. The computer will tell you
when it is your turn."
75 Print "The computer will ask you a question
from time to time, you"
80 Print "will answer with a number. Your
answer should follow the ques-"
85 Print"tion mark on the screen, then you press
enter. If a question"
90 Print "mark appears with no question, just
press enter."
100 Input
120 CLS
140 Print "Move all PZJ's to J-2 9"
150 Print "move Panzer-H, number S 1-17 three
forward"
210 Print "Your Turn"
300 A = RND(4)
310 If A = 1 then B = 8
320 If A = 2 then B = 10
330 If A = 3 then B = 12
340 If A = 4 then B = 14
400 Print "type in the number of hexes to the
closest grant"
410 Input C
420 If B = > C then 430 else 150
430 Print "how many grants are within 10 hexes
of some PZH?"
440 Input A
450 If A > 6 then GOSUB 5000 else
460
455 go to 150
460 If A< 4 then go to 6000
470 Print "How many PZH's are 'M' or 'K'
killed?"
480 Input K
490 If K < 6 then 150
500 Print "all 'M' killed Panzers continue to fire
at acquired targets,"
510 Print "or fire at the closest grant if you have
no target."
520 A = RND(6)
```

```
530 If A = 1 then Print "all Panzers move back
three squares"
540 If A = 2 or 3 then Print "fire at the closest
non 'M' killed grant"
550 If A = 4 then Print "PZH 1-8 move right
front two hexes and pivot to face the closest grant.
PZH 9-17 move left front  two hexes and pivot to
face the closest grant."
560 If A = 5 then Print "all Panzers move three
hexes forward"
570 If A = 6 then Print "PZH 1-8 move left from
two hexes and pivot to face the closest grant. PZH
9-17 move right front two hexes and pivot to face
the closest grant."
580 Print "Your Turn"
590 Input
600 Print "Type the number of grants 'M' + 'K'
killed"
610 Input K
620 Print "How many Panzers can still move"
630 Input M
640 If K > 8 and M > 2 then 650
645 Go to 500
650 Print "All movable Panzers move directly
toward the closest grant"
660 Print "that presents a flank or rear shot."
670 Print "Your Turn"
680 Input
690 Print "Fire if within 7 hexes of your target, if
not continued to move"
700 Print "toward your selected target, if you 'K'
kill your target, pick"
710 Print "the closest grant and move toward it."
720 Print "Your Turn"
730 Input
740 Go to 690
5000 Print "PZH 1-2 fire at grant 1, PZH 3-4 fire
at grant 2, PZH 5-6 fire"
5002 Print "at grant 3, PZH 7-8 fire at grant 4,
PZH 9-10 first at grant 5"
5004 Print "PZH 11-12 first at grant 6, PZH
13-14 fire at grant 7, PZH 15-16"
5006 Print "fire at grant 8, PZH 17 fire at grant
9"
5030 Print "Your Turn"
5040 Input
5050 Print "continue firing at acquired grants"
5060 Print "Your Turn"
5070 Input
5080 Print "type in number of grants 'M' + 'K'
killed"
5090 Input B
5100 If B>6 then Print "pretty good shooting for
a dumb machine huh."
5300 If B>6 then Print "all 'M' killed PZH's
keep firing at acquired grants. Each PZJ acquire
the closest non "M" killed grant and fire at it until
it is 'M' killed. Move all PZH's back three
hexes."
5305 Print "Your Turn"
5308 Input
5310 If B< 5 then 5000
5320 If B>6 then 5300
5330 Return
6000 If A = 3 then Print "PZH 1-6 fires at closest
grant, PZH 7-12 fires at next closest grant, PZH
13-17 fires at next closest grant"
6010 If A = 2 then Print "PZH 1-8 first at closest
grant, PZH 9-17 fires at next closest grant"
6020 IF A = 1 then Print "all PZH's fire at closest
grant"
6022 Print "Your Turn"
6025 Input
6030 Print "How many grants are now within 10
hexes of a PZH?"
6040 Input B
6050 If B > 6 then GOSUB 5000
6060 Print "How many grant have been 'K'
killed"
6070 Input C
6072 A = A-C
6080 If C > 2 then 150 else 6000
```

★★★★★

Mr. Greenwood:

Two hot-shot reporters covering the New York Yankees, were vociferously arguing, "who was the best Yankee right-fielder of all time?" It seems they couldn't decide between Tom Tresh and Roger Maris. Their argument went on hot and heavy for a few innings when the hot-dog vendor came along, overheard their discussion and said, "What about Babe Ruth." There was stunned silence the rest of the game.

Moral: When trying to prove how smart you are, don't ignore the obvious.

Wargamers have never been at a loss for words. Articles abound on game variations, analysis of play, strategy, tactics, as well as trick play and rule exploiting. Lately, two writers have emphasized in-depth analysis (Lockwood in 17.3, Angiolillo in 17.6), and have targetted chess as the game to be emulated. They want to analyze wargames the way chess is analyzed. They break play down into openings, middle game, and end-game; use terms like "positional player", "lines of play", "gambit declined", and "combinations". Apparently they "know their competition", as it were.

But let's not kid ourselves—WARGAMES ARE NOT CHESS! Lockwood and Angiolillo are simply putting on airs—"Oh, aren't we erudite and estimable because our games are like chess!" It reminds me of the TV commercial where the Ford Granada is compared to a Mercedes; the reasoning is that if a Ford can masquerade as a really *good* car, it's somehow elevated in stature. The situation is laughable at best.

Everybody wants to say they're an expert at something, I suppose, and to many it's playing wargames. Initial reaction by the non-wargamer has usually been "so what". And, despite the non-gamer's alleged ignorance, his response is not so far out of line. To master a wargame, assuming concerted study and tournament play over an unbroken time period, might require three years (if that) depending on the game. To attain master level in chess has been known to require a lifetime of dedicated, full-time study and tournament participation. *The point is that any one wargame is so, so shallow compared to chess,* that you may do better trying to compare a birdbath to the Atlantic Ocean.

Analogous arguments would apply to the idea that our games have a "state of the art", or that there should be an academy of art and design. Now really, would you call the designer of a miniatures figure a sculptor? (Oh yeah, wasn't Michaelangelo one of them?) And with rare exception, artwork, particularly in the fantasy/s f field, has been sophomoric and unskilled. The only thing an academy will provide is a chance for certain people to feel elitist (while they stand in their birdbath).

Why don't we face it? Wargaming is a *hobby* for the great majority of its participants. We have fun, we enjoy ourselves and the camaraderie, we maybe learn something about history (definitely about dice probability), and we may even create a line of miniature figures. But then we go back to our regular jobs until next time. There's nothing wrong with being devoted to gaming, but let's not fool ourselves into making a bigger deal out of it than it is.

Robert Morss
Westerville, OH

★★★★★

Dear Sir:

The ideas developed by Craig Burke in his "Air Power in VITP" (THE GENERAL, Vol. 17, No. 3), and discussed in "Return Fire" by Richard Hamblen, are tantalizing to any gamer who enjoys playing the *WAS/VITP* system. They offer further expansion and increased flavor to a game I personally enjoy very much, and I was happy to see them appear.

In reading Hamblen's "Return Fire," in which he rebuts most of the ideas and comments favorably on one or two, I was struck by the thought that in a game of strategic scope—as *VITP* must be considered—a strict adherence to historical accuracy, while commendable in setting combat values and speed for individual ships, effectively deprives the players of historical options available to the respective supreme commanders whose roles they play.

One could argue, for example, that the development of a "High Seas Supremacy" policy on the part of the *Kriegsmarine* at the war's beginning would have stimulated increased shipbuilding in Germany; the presence of the *Graf Zeppelin* in the game of *WAS* implies that this had been considered. Would it not have been almost equally logical to infer that an increase in naval appropriations might have led to the successful completion of *Seydlitz* (a *Hipper*-class CA hull), *Europa* and *Gneisenau* (both passenger liners) as aircraft carriers? Or that the *Scharnhorst* and *Gneisenau* BC's might have had their main armament upgraded to 15-inch caliber, with corresponding increase in gunnery factor value?

In *VITP*, assuming that the Japanese player manages to carry his power play on into the end game, it might be logical to infer that American naval policy might have changed to respond to this (essentially ahistorical) situation. If the IJN fights successful night actions in the early game, battering even the fast battleships built after the Washington Treaty disappeared, the U.S. high command might well decide to go ahead, full-speed, on the *Alaska* CB's, allocate priority in the shipyards to the *Iowa* BB's and rush them into action, even build the *Montana* "Super-BB's" designed to meet and defeat the *Yamato*'s.

Moreover, changes in the strategic situation might alter entirely the times at which units enter the game. If a rule could be evolved, for example, giving the U.S. player the ability to choose between expending repair points and "pushing" the construction of new ships, or between providing the shipping for a new Marine unit and speeding up the arrival of a capital ship, I believe it would go far towards capturing the feel of occupying the post of C.N.O.

Parenthetically, I might mention that the "jeep carriers"—the CVE's that showed so superbly off Samar—could be figured into *VITP* as carrier task groups, and into *WAS* as "hunter-killer" and escort groups. If *Hermes* can show up in the counter mix, why not *Card*, *Bogue* or *Guadalcanal* (even if only in abstracted form)?

I look forward to receiving the revised, completed *WAS* Expansion Kit and strongly urge that, after another year or two, you turn your talents towards the composition of a similar kit for *VITP* (with, possibly, additional fillips for *WAS* as they evolve and present themselves); I've no doubt that it'll find its market.

Rich Bartucci, D.O.
Bridgeton, NJ

P.S.: Suggested Values for the *Montana* BB's might be (6)-9-5, inasmuch as they would have probably been as fast as the *Washington*'s and slower than the *Iowa*'s. One could even argue for a defense factor of 10 on the strength of various construction refinements planned for incorporation into the *Montana*'s as well as on the increasing sophistication and efficacy of U.S. damage control methods.

★★★★★

Gentlemen:

As a short time but loyal AH fan, I would like to express my opinions on what I feel has been an inordinate amount of attention devoted to the *SL/COI/COD* game system in the pages of *THE GENERAL*. Since I've never owned any of these games I've been disturbed to see no less than 11 articles (including scenario evaluations, scenario recounting, game system design and analysis and series replays) in the last six issues of *THE GENERAL*. This is far more attention than any other game or games have received in these same issues (Volume 17 as a whole), and I wonder whether this trend will continue? At the risk of receiving tons of hate mail from the game system loyalists, I hope not.

To be perfectly honest, I think you have done an excellent job with the format of *THE GENERAL* overall. I especially applaud your feature articles recently on such oldies-but-goodies as *STALINGRAD* and *AFRIKA KORPS*. Nevertheless, my reaction upon seeing a new article on either *SL*, *COD*, or *COI* (or more than one) has been one of "Oh no, not another one!" I realize you can't please all the people all the time, and I realize the enormous popularity of this still-developing game system. I just wish to point out that such popularity with tactical WWII infantry combat is far from universal. And while I continue to look for far more articles or variants on my personal favorites (*AIW*, *AAOC*, and *CL*), I'm instead accumulating page upon page of what to me is useless information on *SL* and its' variants.

To conclude then, I'd just like to ask, on behalf of all of us non-*SL* fans out here to consider us in future publications and not let *THE GENERAL* become *SQUAD LEADER WORLD*. Perhaps I'll even purchase *SQUAD LEADER* one day, just to see what I'm missing. Who knows, I may even like it.

Mark Cotter
Old Town, ME

I try to present as varied a format as possible but we must weight the coverage to those games which appeal to the bulk of our readership. Based on "What Have You Been Playing" surveys thus far that answer has been overwhelmingly SQUAD LEADER.

AIR FORCE ERRATA

Charts & Tables:

A number of modifiers, though specified correctly in the text of the rules, do not appear or are stated incorrectly on the Charts (page 31). For Players' convenience they ought to make a note on the appropriate Charts.

Nr. 1b Optional Modifiers, add

Target in Slip	−1
Dive Speed Firing	−1
Slip, Loop, Roll	
Firing (each)	−2
Spin Firing	−4

Spotting Modifiers, add

Inverted	−2
Altitude: Towards	+1
Away	−1

Dive & Glide Bomb Modifiers, correction

These modifiers are for the *1st* die.

Example of Loaded Modifiers (page 17)

Maneuver, level and dive speed increments . . . would be "3-4", "5-6", and "7-8" respectively.

Aircraft Identification, Procedure (page 20)

Subtract "one" from Identification die roll for "F" guns.

Inline Engine Table (page 20)

(Add the result on each die together.)

Scenarios (page 25ff)

Map edge sides are referred to by the numbers on the compass rose pointing toward that side.

Altitude Loss at Non-Level Bank (page 11)

A number of conditions have been applied to the mandatory altitude loss. An aircraft which ends the Game Turn in a non-Level Bank attitude must lose 100 feet of altitude unless:

1. The a/c was plotted to perform a Turn, Slip, Half-loop or Half-Roll [as before].
2. The a/c spent half its turn (rounding fractions down) in Level bank.
3. The a/c has not expended enough Movement Points to conduct a Maneuver.

The rule applies at the end of the first Game Turn in which the aircraft is capable of performing a maneuver, but has not, and every subsequent turn after that, until #1 or 2 apply.

This altitude loss is determined during the Status Determination Phase following the plot of aircraft, and affects its next turn's altitude. As this is an "administrative adjustment", the following rules apply when using the Optional Nose Altitude Rules for combat:

1. The 100' loss still leaves the aircraft in a Nose-Level altitude.
2. If a player plotted a climb of 100' to adjust for the loss, the aircraft is still Nose-Level attitude. (If however, more than 100' were plotted, then the Nose-Attitude. Rule takes precedence).

THE QUESTION BOX

QUESTIONS & ANSWERS

Q. In Scenario 4, are the flak guns specified a total amount divided among all the flak counters specified, or does each counter contain the specified amount of flak guns?

A. The amount is a total divided among all the flak counters.

Q. Do all the guns in a flak counter fire as one unit, or may they all fire separately?

A. They must all fire as one unit.

Q. Does each flak counter have to spot an enemy plane before they can fire on that plane? In other words, must 16 flak counters make spotting attempts on the same plane?

A. Once spotted, an aircraft may be fired upon by any unit in the game; an aircraft need not be spotted by the unit firing on it.

Q. Do ground targets have to be spotted to be attacked (or bombed)?

A. No; bombardiers were usually provided with maps.

Q. If three planes on the same side are flying individually and only one spots an enemy, does movement have to be logged in advance for the other two?

A. No. All aircraft are freed from their pre-plotted movement.

Q. If a plane becomes spotted because it fires, can enemy planes fire on that plane in that turn?

A. Yes.

Q. What happens when an aircraft already at its maximum dive speed makes a further dive?

A. The aircraft is destroyed. In order to dive the aircraft would have to reduce its airspeed first, probably by applying brake factors.

Q. Does the procedure for spotting through clouds take different altitudes of the aircraft into account, similar to sighting over a hill?

A. No. You cannot sight over a cloud.

Q. The optional rules state that a plane must stay in the "maneuver" speed until it spots an enemy plane. The corresponding altitudes of the maneuver speeds seem to be too low . . . I thought bombers usually flew the highest altitude they could.

A. You may start bombers at maneuver or level speed.

Q. Will a plane that spreads a half-loop over two or more turns have to climb or dive it's maximum rate *every* turn included?

A. Yes.

VICTORY IN THE PACIFIC:

7.72 Does a damaged CV lose its airstrike attack bonus?

A. No

READER BUYER'S GUIDE

TITLE: AIRFORCE   Avalon Hill revision only
SUBJECT: Plane to Plane Combat in the European Theatre of WWII

AIR FORCE was the 53rd game to undergo analysis in the RBG. Its Cumulative Rating of 3.43 placed it a disappointing 46th.

While not the first Battleline game to be rated (that honor going to *CIRCUS MAXIMUS*), *AIR FORCE* is a good example of peoples' natural resistance to change. Indeed, the actual rule changes to *AIR FORCE* were far less than those to *CIRCUS MAXIMUS*. The only big change in the AH version of *AIR FORCE* was in the presentation of the aircraft data cards, but this change seems to have irked many of the game's diehard fans. *AIR FORCE* has always had a large, and somewhat fanatical, following who were against any change right from the beginning. It is not surprising that this feeling is reflected in the RBG. However, this casts some serious doubts on whether these ratings are a true reflection of the game. And since the Battleline version was not rated, the ratings do not really tell us how the two differ.

The game received its best rating for Play Balance (2.42), which is not surprising since most players design their own scenarios and try to establish equal sides. The other two above average ratings were for Excitement Level (2.77) and Realism (2.81).

On the negative side, the game garnered poor ratings for Physical Quality (3.77) and Components (3.79). While these ratings are probably aimed at the data cards, it should be pointed out that the artwork, particularly on the boxcover and counters, is top notch. The worst rating was for Mapboard (4.94) which also seems somewhat unfair. It isn't easy to make a mapboard representing the sky look very interesting.

Other below average ratings were for Ease Of Understanding (3.69), Completeness Of Rules (3.29), and Overall Value (3.40).

The Average Playing Time (9.6) of an hour and a half is about right for a small scenario with four to eight planes.

The majority of discontent with the Avalon Hill revision as opposed to the original Battleline version seems to have been aimed at the multicolored graphic presentation of the data cards; original owners of the game claiming that the black & white linear charts were much easier to understand. This is ironic as it was this very concept which delayed our publication of the AH version.

To keep the RBG list at 50 titles, the long suffering and discontinued *KRIEGSPIEL* has finally been dismissed from its rightful place at the bottom of the chart.

COMING UP NEXT

GUNS OF THE AUGUST

AVALON HILL RBG RATING CHART

The games are ranked by their cumulative scores which is an average of the 9 categories for each game. While it may be fairly argued that each category should not weigh equally against the others, we use it only as a generalization of overall rank. By breaking down a game's ratings into individual categories the gamer is able to discern for himself where the game is strong or weak in the qualities he values the most. Readers are reminded that the Game Length category is measured in multiples of ten minutes and that a rating of 18 would equal 3 hours.

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. CRESCENDO OF DOOM	2.04	1.93	1.64	2.33	3.20	2.31	2.18	1.36	1.56	1.82	19.5
2. CROSS OF IRON	2.17	2.09	2.04	1.88	3.37	2.52	2.44	1.60	1.69	1.94	20.5
3. RUSSIAN CAMPAIGN	2.24	1.98	1.85	2.02	2.24	3.07	2.78	2.41	1.78	2.07	28.5
4. SQUAD LEADER	2.25	1.97	1.85	1.82	3.58	2.94	2.36	2.02	1.82	1.92	13.6
5. CIRCUS MAXIMUS	2.27	2.53	2.13	2.93	2.27	2.33	1.13	2.26	2.14	2.28	11.6
6. W.S. & I.M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
7. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
8. BISMARCK	2.37	2.16	3.00	1.69	2.97	2.63	2.72	1.84	2.09	2.31	18.8
9. WAR AND PEACE	2.43	2.37	2.32	2.54	2.34	2.56	2.61	2.54	2.29	2.32	17.0
10. FORTRESS EUROPA	2.44	2.21	3.29	2.57	2.50	2.64	2.43	2.35	1.93	2.07	44.1
11. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
12. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
13. CAESAR—ALESIA	2.53	2.92	2.71	2.78	1.71	1.85	3.36	2.64	2.71	2.07	27.9
14. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
15. 3rd REICH	2.57	2.12	2.47	2.34	4.15	3.22	2.59	2.24	1.95	2.05	34.9
16. PANZERBLITZ	2.58	2.00	3.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
17. KINGMAKER	2.60	2.26	2.84	2.34	2.83	3.07	1.86	3.65	2.14	2.41	20.2
18. DIPLOMACY	2.60	2.35	2.26	3.13	1.87	2.39	2.09	4.57	2.30	2.43	32.6
19. CAESAR'S LEGIONS	2.64	2.32	2.36	2.31	2.14	2.23	3.73	3.05	2.86	2.73	13.5
20. SUBMARINE	2.65	2.58	3.48	2.42	2.90	2.87	2.55	2.38	2.22	2.47	12.1
21. STARSHIP TROOPERS	2.67	2.27	3.11	2.07	2.43	2.70	3.57	3.39	2.20	2.32	17.3
22. ARAB ISRAELI WARS	2.68	2.34	3.03	1.86	3.31	2.70	3.57	2.31	2.51	2.52	13.5
23. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
24. VICTORY—PACIFIC	2.70	2.47	2.36	1.85	2.21	2.79	3.38	3.91	1.94	2.53	18.0
25. DUNE	2.76	2.45	2.40	3.00	1.98	2.43	2.75	4.20	2.80	2.83	11.9
26. NAPOLEON	2.77	2.04	2.96	2.03	2.25	2.86	3.25	4.18	2.46	2.89	9.1
27. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
28. The LONGEST DAY	2.83	2.23	2.60	2.40	3.20	3.53	3.30	2.28	2.80	3.15	171.
29. JUTLAND	2.83	2.84	—	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
30. RAIL BARON	2.87	2.98	2.82	3.45	2.07	2.29	2.05	4.69	2.76	2.68	21.6
31. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
32. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
33. AFRIKA KORPS	2.90	3.04	3.10	2.92	2.12	2.29	3.39	3.57	2.91	2.77	13.5
34. FURY IN THE WEST	2.91	3.36	4.01	3.00	2.55	2.45	2.99	2.82	2.09	2.91	17.8
35. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
36. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.00	2.22	4.00	4.06	3.11	3.40	9.6
37. WIZARD'S QUEST	3.03	2.63	2.21	3.25	2.62	2.60	2.23	5.13	3.42	3.21	13.2
38. CRETE—MALTA	3.04	2.80	3.10	3.00	3.03	3.05	3.43	3.18	2.76	3.05	18.8
39. GETTYSBURG '77	3.04	2.52	2.48	2.50	4.32	3.79	3.07	2.46	3.02	3.21	27.6
40. D-DAY '77	3.07	3.72	4.54	3.69	2.19	1.94	3.00	3.19	2.94	2.44	20.2
41. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
42. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.6
43. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	3.27	4.32	3.21	3.01	16.2
44. WAR AT SEA	3.21	3.18	3.96	2.74	1.74	2.35	3.73	5.12	2.93	3.15	6.9
45. BULGE	3.21	2.93	2.80	3.31	3.08	3.40	3.53	4.11	2.81	2.95	20.0
46. FEUDAL	3.25	3.18	4.33	2.64	2.28	2.33	2.12	5.38	3.58	3.38	7.5
47. AIR FORCE	3.43	3.77	4.94	3.79	3.69	3.29	2.42	2.81	2.77	3.40	9.6
48. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
49. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
50. MAGIC REALM	3.54	2.74	2.81	3.13	5.29	4.42	2.80	4.06	3.39	3.26	19.9
AVERAGE	**2.78**	**2.60**	**2.86**	**2.59**	**2.81**	**2.75**	**2.93**	**3.16**	**2.57**	**2.66**	**21.4**

Vol. 17, No. 6 polled a 3.27 score for the issue making it the fourth best issue of the preceding year. As usual, the feature article got the lion's share of the votes in our 200 random sample system which awards three points for a first, two for a second, and one point for a third best selection. The complete results were as follows:

The Charles Roberts Awards were presented at ORIGINS VII on July 3rd. This marked the first time that the final voting was done by members of the Academy of Adventure Gaming Arts & Design and already petitions are circulating to return the vote to the public. Membership in the Academy however is not all that exclusive and we urge interested parties to request membership information by sending a stamped, self-addressed envelope to Academy, POB 656, Wyandotte, MI 48192.

Avalon Hill was well represented among the nominees. Both *CIRCUS MAXIMUS* and *WAR & PEACE* were on the ballot for Best Pre-20th Century Boardgame but lost out to SPI's *EMPIRES OF THE MIDDLE AGES*. *CRESCENDO OF DOOM* beat out *FORTRESS EUROPA* and three other nominees in winning Best 20th Century Boardgame. The entire 1980 line of AH computer games was nominated in the Computer category but lost to *TEMPLE OF APSHAI* by Automated Simulations. *THE GENERAL* was a bride's maid for the 7th time in as many tries as *FIRE & MOVEMENT* again took top honors in the Professional Board-gaming Magazine category. Gary Gygax gained long overdue admittance to the Hall of Fame as its 7th inductee. *SQUAD LEADER* added *CAMPAIGN* magazine's Best Game of All Time award to its collection of Kudos.

The second annual Northeast Gaming Association Playoffs will consist of a between-club single elimination wargame tournament based on popular 2-player war boardgames. The rules for *TEAM GAMING* will govern play. Teams will consist of four players competing in four independent six-hour matches. Each of the two teams in a meet will be able to "veto" one of the six eligible wargames, thus leaving four games to actually compete in. Suggested (but yet to be finalized) "base" games to be played in NGAP '81 are: *Squad Leader, Victory in the Pacific, The Russian Campaign, Chickamauga, WSIM, Alexander*. An 8 team tournament is planned. There are absolutely no player eligibility rules. Anyone may play including somebody who has already played for another team! In this manner, it will specifically encourage the formation of "all-star" teams and help to guarantee the best possible play in the final stages of the tournament. The tournament is scheduled to begin in September. A registration fee will be charged for the tournament ($10.00 per team). The registration fee will pay for a copy of the 1981 revised rules for *TEAM GAMING* as well as a contribution toward the trophy fund. More details on the scheduling of the tournament will be announced later. Send all directory requests and NGAP correspondence to Jeff Cornett, 11 Robert Frost Drive, Shelton CT 06484 (203-929-6147).

Infiltrator's Report

Avalon Hill, always on the lookout for new product offerings, has recently released a line of seven "Puzzle Stick Games." Although not typical fare for wargamers, they may make an interesting gift idea for the non-wargamers in your life who are nonetheless into puzzle solving. Puzzle sticks are far removed from traditional table puzzles, and may well represent the only new puzzle idea to be patented in several decades. To solve one of these multi-solution puzzles calls for a keen sense of perception. Your eye must single out related shapes, color, shadings, and density of print. To make a whole out of seemingly unrelated parts containing minute bits of information is challenging to a high degree. Each individual stick is almost exactly alike. Since each puzzle has more than one solution, the Puzzle Sticks player must soon decide which picture to attempt first. Often the puzzle is almost finished before disclosing the beauty of its complex subject . . . and once complete the picture on the other side might be hopelessly scrambled. An interlocking frame is enclosed in each package. Puzzle Sticks are playable either as solitaire devices or in a variety of versions with opponents. Current subject offerings in the Stick Puzzle line include; *GIBSON GIRLS, PRESIDENTIAL MUNCHIES, HAND SCAPES, AUGUST FRUIT, THE BUCK STARTS HERE, STICK PUZZLE POKER*, and *WIND, WHEELS and STEAM*. All are priced at $6.00. For more information on the Puzzle Stick line send us a stamped, self-addressed envelope.

The Hobby Industry Association of America included the "Adventure Gaming" category in their Annual Hobby Industry Report for the first time this year. An Adventure Gaming division was formed within the Hobby Association for the first time in 1980 marking the coming of age of adult games (be they wargames, simulations, fantasy, role playing, or whatever) in the hobby industry. One of the benefits of division status within the Hobby Association is that the Association will match all funds raised by the division for purposes of hobby-wide promotion of that category. With these funds advertising making the public more aware of "adventure games" as a category can become a reality. Thus far, the division's only means of raising funds for this purpose has been the sponsorship of the national ORIGINS convention by the Games

Manufacturing Association (GAMA) who indirectly tax their membership by levying a $50/booth fee for attending exhibitors. In any case, the HIA reports that the "Adult Fantasy and Strategy Games" category grossed $36,000,000 in 1980. This figure compares with $16,000,000 for "Military Miniatures, Dioramas, and Structures", $34,000,000 for "Dollhouses", $134,000,000 for "Model Railroads", and $298,000,000 for "Needlecrafts, Macrame, and Yarns". Never fear—the HIA reports that if you adjust the definition of the category to include the sales of such industry giants as Parker Brothers, the Adult Game category tips the scales at $213,000,000.

Due to the difficulty of answering game questions correctly on two very different sets of rules, Avalon Hill will no longer answer questions pertaining to out-of-date rulebook editions. Questions must be based on the current rulebook edition, or they will be returned unanswered. This policy is aimed specifically at *THIRD REICH*, but also applies to games such as *D-DAY, AFRIKA KORPS, BATTLE OF THE BULGE, GETTYSBURG* and *BLITZKRIEG*. Where rule changes in current editions are only of a minor nature this policy will not apply, but where changes are extensive such as in the above mentioned titles we can only answer questions based on play of the most current editions.

Avalon Hill has been busy acquiring games from other companies again. The latest acquisitions are ex-OSG products *PANZERKRIEG, ROBIN HOOD, NAPOLEON AT BAY, AIR COBRA, BONAPARTE IN ITALY, BATTLE OF THE 100 DAYS, NAPOLEON AT LEIPZIG*, and *DEVIL'S DEN*. It is not known at this time when these titles will be made available from Avalon Hill, or to what extent—if any—they will be revised from their original versions.

Anyone interested in applying for a playtest position for the 2nd Edition of *STARSHIP TROOPERS* should address their inquiries to Alan R. Moon. Both expert *STARSHIP TROOPERS* players and inexperienced players will be used. Please state which category you qualify for in your letter.

A line of copy was erroneously omitted from the *WAR & PEACE* rulebook. Players may want to make the following addition to their rulebook; Page 29, Section F, part 5: "Non-French Player Reinforcements." Add to subsection f. "January, 1814—All English, Portuguese, and Spanish forces listed in Scenario VI. January-August, 1814—Each turn . . ." etc

The winners of Contest No. 100 who correctly surmised that the German's best chance of final victory lay in a low odds attack taking Rostov were: A. Battaglin, Chicago, IL; S. Packwood, Tuba City, AZ; R. Bouvier, Portland, OR; G. Hendrix, Houston, TX; R. Papandrea, Warren, MI; C. Drong, Spring Grove, IL; D. Kaiser, Lawrenceville, NJ; G. Phillies, Ann Arbor, MI; F. Preissle, State College, PA; and P. Siragusa of Houston, TX. Merchandise credits were awarded to all of the above despite their resemblance to a list of semi-finalists at the AH 500.

The solution to Contest No. 101 consisted of listing the following game titles in the correct order; 1. Blitzkrieg, 2. Alexander, 3. Dune, 4. Chancellorsville, 5. Cross of Iron, 6. Caesar Alesia, 7. Anzio, 8. 1776, 9. Napoleon, 10. Starship Troopers, 11. Air Assault On Crete, 12. Midway, 13. Origins, 14. Squad Leader, 15. D-Day, 16. UFO, 17. Arab-Israeli Wars, 18. Russian Campaign, 19. Magic Realm, 20. Tactics II, 21. Gettysburg, 22. Bismarck, 23. Alpha Omega, 24. War and Peace, 25. Panzerblitz.

OPPONENTS WANTED   OPPONENTS WANTED   OPPONENTS WANTED

GENERAL BACK ISSUES

READER BUYER'S GUIDE

GLADIATOR $9.00

Man to Man Game of Gladiatorial Combat

INSTRUCTIONS: Rate all categories by placing a number ranging from 1 through 9 in the appropriate spaces to the right (1 equating excellent; 5-average; and 9-terrible). EXCEPTION: Rate item No. 10 in terms of minutes necessary to play game as recorded in 10-minute increments. EXAMPLE: If you've found that it takes two and a half hours to play FRANCE 1940, you would give it a GAME LENGTH rating of "15."

Participate in these reviews only if you are familiar with the game in question.

1. Physical Quality _____
2. Mapboard _____
3. Components _____
4. Ease of Understanding _____
5. Completeness of Rules _____
6. Play Balance _____
7. Realism _____
8. Excitement Level _____
9. Overall Value _____
10. Game Length _____

The review sheet may be cut out, photocopied, or merely drawn on a separate sheet of paper. Mail it to our 4517 Harford Road address with your contest entry or opponents wanted ad. Mark such correspondence to the attention of the R & D Department.

Opponent Wanted — 50¢

1. Want-ads will be accepted only when printed on this form or a facsimile and must be accompanied by a 50¢ token fee. No refunds. Payment may be made in uncancelled U.S. postage stamps.
2. For Sale, Trade, or Wanted To Buy ads will be accepted only when dealing with collector's items (out of print AH games) and are accompanied by a $1.00 token fee. No refunds.
3. Insert copy on lines provided (25 words maximum) and print name, address, and phone number on the appropriate lines.
4. Please PRINT. If your ad is illegible, it will not be printed.
5. So that as many ads as possible can be printed within our limited space, we request that you use official state and game abbreviations. Don't list your entire collection, list only those you are most interested in locating opponents for.

Afrika Korps—AK, Air Force—AF, Alexander—AL, Alpha Omega—AO, Amoeba Wars—AW, Anzio—AZ, Arab-Israeli Wars—AIW, Armor Supremacy—AS, Assault On Crete/Invasion Of Malta—AOC, Bismarck—BIS, Blitzkrieg—BL, Battle Of The Bulge—BB, Caesar Alesia—CAE, Caesar's Legions—CL, Chancellorsville—CH, Circus Maximus—CM, Cross Of Iron—COI, Crescendo Of Doom—COD, Dauntless—DL, D-Day—DD, Diplomacy—DIP, Feudal—FL, Flat Top—FT, Fortress Europa—FE, France 40—FR, Fury In The West—FITW, Gettysburg—GE, Gladiator—GL, Guns Of August—GOA, Insurgency—INS, Jutland—JU, Kingmaker—KM, The Longest Day—TLD, Luftwaffe—LW, Machiavelli—MA, Magic Realm—MR, Midway—MD, Napoleon—NP, Naval War—NW, Objective: Atlanta—OA, Origins—OR, Outdoor Survival—OS, Panzerblitz—PB, Panzer Leader—PL, Rail Baron—RB, Richthofen's War—RW, The Russian Campaign—TRC, Samurai—SA, Squad Leader—SL, Shenandoah—SH, Stalingrad—STAL, Starship Troopers—SST, Source Of The Nile—SON, Submarine—SUB, Tactics II—TAC, Third Reich—3R, Tobruk—TB, Trireme—TR, Victory In The Pacific—VITP, Viva Espana—VE, War and Peace—W&P, War At Sea—WAS, Waterloo-WAT, Wizard's Quest—WQ, Wooden Ships & Iron Men—WSIM.

NAME_____ PHONE_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

WHAT HAVE YOU BEEN PLAYING?

Top ten lists are seemingly always in vogue these days. Whether the subject is books on the Best Seller List, television's Nielsen ratings, or even games, the public never seems to tire of seeing how their individual favorites stack up numerically against the competition. Our preoccupation with this national pastime is almost akin to routing the home team on to victory every Sunday. So to further cater to your whims (and to satisfy our own curiosity) we unveil *THE GENERAL's* version of the gamer's TOP TEN.

We won't ask you to objectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or less) games which you've spent the most time with *since* you received your last issue of *THE GENERAL*. With this we can generate a consensus list of what's being *played* . . . not just what is being bought. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.

Feel free to list any game regardless of manufacturer. There will be a built-in Avalon Hill bias to the survey because you all play Avalon Hill games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual's discretion.

The games I've spent the most time playing during the past two months are:

1. _____
2. _____
3. _____

CONTEST NO. 102

Merely write the winning move in the appropriate space of the contest form in this issue's insert. Ten winning entries will receive certificates redeemable for free AH merchandise. To be valid an entry must be received prior to the mailing of Vol. 18, No. 3, and include a numerical rating of the issue as a whole, as well as list the best three articles. Remember that in our rating system the lower the number the better the rating, and vice versa. The solution will be announced in Vol. 18, No. 3, and the winners in Vol. 18, No. 4. One entry per subscriber.

Assume that both aircraft have executed enough forward movement in previous turns to perform any maneuver. The actual versions of the aircraft concerned are the FW190A and P47D.
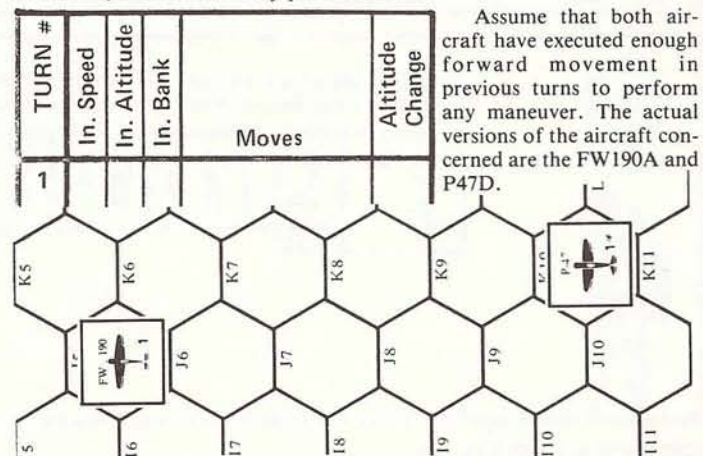
Ten winning entries will receive certificates redeemable for free AH merchandise. To be valid an entry must be received prior to the mailing of the next GENERAL and include a numerical rating for the issue as a whole as well as list the best 3 articles. The solution will be announced in the next issue and the winners in the following issue.

Issue as a whole . . . (Rate from 1 to 10, with 1 equating excellent, 10 equating terrible)

Best 3 Articles
1. _____
2. _____
3. _____

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____

SEMPER PARATUS

OORDEREN, SOUTHERN HOLLAND, September 27th, 1944: Lieutenant C.P.J. Des Groseillers urged his straining men to push again. D Company had found a German 75mm antitank gun in the ruins of Oorderen. The breech had been hidden and the weapon had been left in the town center with some 200 rounds of ammunition. Well it just so happened that an enterprising scrounger had found this curious metal block. Lt. Des Groseillers did a little work. Now D Company had its own artillery. Everyone knew that C Company was going to be attacking the German bunker line north of the town. D Company would make sure that Jerry got back his 75mm shells. Perhaps in a slightly used condition. The Rileys looked out for their own.

Board Configuration

◄ N
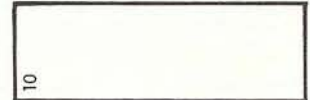
VICTORY CONDITIONS

The Canadian player to win must control 3 bunkers at game's end.

TURN RECORD CHART

✠ German sets up first		1	2	3	4	END				
⊙ Canadian moves first										

857th Grenadier Regiment of 346th Infantry Division. Must set up within bunkers North of row O inclusive:

2+3+5	1+3+5	1+5+7	4-6-7	4-3-6	8-1	8-0	HMG 6-16 B12	LMG 2-8 B12	?
2	2	2	5	2				2	6

Royal Hamilton Light Infantry Regiment (RHLI or "Riley"). May set up in any building hex South of row Q inclusive and enter on either (not both) East or West board edge any troops and support weapons not setup on board:

② 75L AT	4-5-8	9-2	9-1	8-1	HMG 6-14 B12	LMG 2-7 B11+	③ Mtr #1-8 51 S6 2PP
	10						

SPECIAL RULES

1. All buildings are wooden and first level except hex 10W8 which is wooden and second level.

2. German 75mm is a captured weapon and must be setup on board. Smoke is available.

3. There are no wheatfields.

4. All German units have just survived a suppression bombardment. All of rule 107.6 applies as if the Germans have undergone two consecutive game turns of FFE.

5. Fire is allowed against a bunker's Covered Arc Defense Modifier only from hexes the bunker may fire out at.

AFTERMATH: Division HQ had ordered a brief but heavy barrage that would creep northward through the German lines. Lieutenant-Colonel W.D. Whitaker didn't believe the bombardment would affect the bunkers. Therefore, using covering fire from the town, he sent C Company around the west flank of the bunkers. The plan was to attack away from the bombardment while the Germans concentrated on their front.

The bunkers easily withstood the blast effects but the Germans directed their defensive fire southward against the town while the Rileys swept in from the rear. Within one hour the attack was successful at a cost of four Canadian dead. The entrapped Germans had been isolated and destroyed. Regretfully, Lt. Des Groseillers used up all his ammunition in attempts to reduce some of the bunkers, and D Company had to leave their private artillery behind as the Rileys advanced to the Scheldt Estuary.