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★ ★ The AVALON HILL GENERAL

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THE LAST HURRAH

September 1st, 1939...War had come to Europe again, and the Polish Army was fighting for survival as the Germans unveiled a new form of warfare...*blitzkrieg*. In the so-called "Polish Corridor", the German 20th Motorized Infantry Division was surging eastward toward the vital crossroads at Chojnice. The Polish 9th Infantry Division had fought the vanguard to a standstill, but casualties were mounting and ammunition was low. The famed Uhlans of the "Pomorska" Cavalry Brigade were ordered to extricate their countrymen. Little did they realize that German armor was also nearing the scene.

April 9th, 1940...Now it was Norway's turn. The capture of the Norwegian King Haakon would be a coup of the first order, and plans were instituted to take him at his capital. But German plans were torn asunder by the torpedoes that ripped the *Bluecher*. In desperation, the German air attache to the embassy in Oslo rushed to Fornebu, commandeering two companies of German paratroopers landing there. Loaded aboard buses, they set out to capture the King—who was fleeing to the Norwegian Army headquarters at Hamar. But, along the way, the Germans ran headlong into a rag-tag band of heroes who were determined that they would not pass.

May 10th, 1940...Operation Niwi was an audacious German plan to land several hundred men of the SS Regiment "Deutschland" by light plane to seize vital crossroads deep in the Ardennes. One group, coming to ground near the village of Witry, moved forward through the deep woods. Would boldness and cunning be enough to overcome the Belgian *Chasseurs d'Ardennais* charged with denying the roads of the region to the enemy? Or would the elite Belgian troops, adept at operating in the forests of their homeland, give the SS a bloody nose?

April 9th, 1941...Caught unprepared by the invasion of 49 enemy divisions, the Yugoslavian army was trying desperately to mobilize. But in this country of divided loyalties and poor communications, confusion and despair were endemic. On the third day of the Balkan *blitzkrieg*, leading elements of the 8th Panzer Division descended on Alibunara—mobilization center for several Yugoslavian formations. Never short of courage, the 5th Yugoslavian Cavalry Regiment launched a desperate charge to divert the German iron fist.

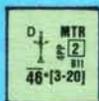


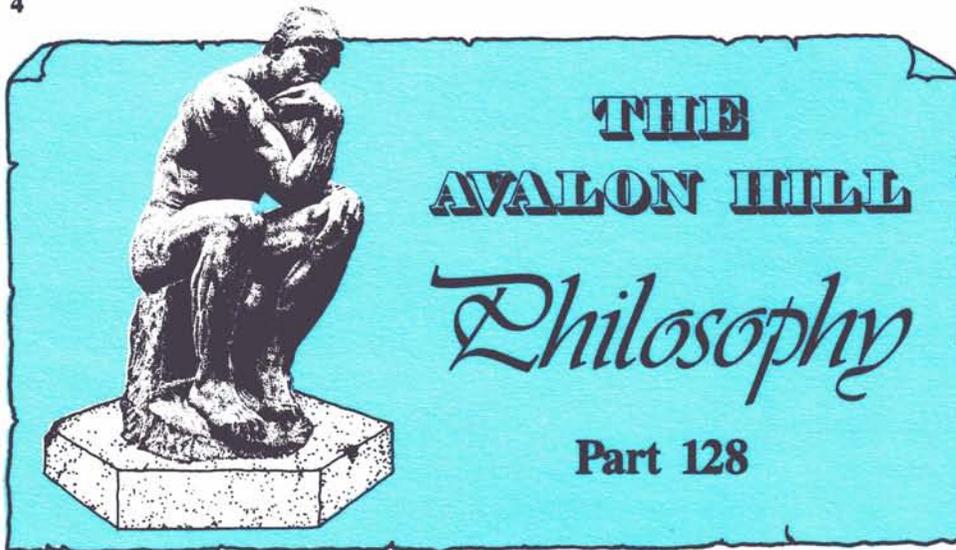
This is THE LAST HURRAH—the sixth ASL module.

The eight scenarios contained herein focus on historical situations involving the early German *blitzkriegs* of World War II and the many nationalities that fought against the invaders. Paratroopers, armor, air power, audacity and courage were the tools with which Germany planned to overrun the neutral nations of Europe. And in less than two years, in actions as far apart as Norway and Crete, the German military accomplished all they had set out to do. For the most part, the invaded neutrals (Poland, Norway, Belgium, the Netherlands, Yugoslavia and Greece) were defended by hastily-mobilized reservists stiffened by a few elite units. The actions depicted in **THE LAST HURRAH** will challenge veteran ASL players to match the tenacity, audacity and victories on both sides in eight scenarios, recreating the German march of conquest. Experience—as only ASL can let you—the desperate fighting of these first days of World War II. Whether commanding German armor, Polish cavalry, Greek infantry, Belgian *Chasseurs*, Norwegian reservists or Luftwaffe paratroopers, if you're an ASL grognard, you're bound to find something pleasing in the wide spectrum of scenarios included in **THE LAST HURRAH**. There is even a scenario pitting those age-old foes, the Poles and the Russians!

THE LAST HURRAH contains eight scenarios, one countersheet of Allied Minor infantry and support weapons—and two boards: 11, with revised artwork; and 33, which features open terrain and a large grainfield. ASL, **BEYOND VALOR** and **YANKS** (for two scenarios) are needed to play these scenarios.

THE LAST HURRAH is now available for \$18.00 from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Please add the usual 10% for shipping and handling expenses (20% for Canadian orders; 30% for overseas). Maryland residents please add 5% state sales tax.





The response wasn't impressive (only some 323 forms returned, representing less than 3% of the subscriber base), and a fair number of titles (20 to be exact) didn't garner enough to be listed, but the latest effort to update the *Readers Buyers Guide* gives us some new numbers to chew over. Since only two of the titles that didn't make the "cut" can be considered wargames that have been in our line long enough for players to be familiar with them (*PLATOON* and *KNIGHTS OF THE AIR*), and since I suspect that 300+ hard-nosed reviewers still give a pretty accurate and impartial collective judgment, we can certainly incorporate the updated RBG into our pages to help give buyers considering an Avalon Hill or Victory Games title some indication of its strengths and weaknesses.

Before proceeding with the number crunching, a word on the RBG is in order to preface this discussion. As explained in AH Philosophy 125 (Vol. 24, No. 5), the titles here evaluated have been ranked according to the reader-generated **Overall Value**, ranging from the best accepted downward. In general, the lower the numerical rating for a title in a category, the better the cumulative view of the respondents. However, in the case of **Complexity**, the lower values represent games of adjudged ease in mastering; in the **Game Length** category, the lower values indicate shorter times necessary to play the game to conclusion (in terms of ten-minute multiples). The column **Sample Base** merely lists the total number of readers who rated that particular title, and is not to be taken as any form of popularity rating. The entries for **Year** and **Type** are self-explanatory. Now let us turn to comparison of some of the ratings.

It appears that the "sizzle"—the packaging and artwork (in short, the appearance)—of the game is still of great importance to players. The components often form, and dominate, the first impression of a game for many buyers. The attention to detail and graphic excellence of Avalon Hill's fine cadre of artists has long been acknowledged; I make no bones about my views that Charlie Kibler is the industry's leading master of mapboards and counters. Supplementing his talents are the efforts of a number of free-lance artists as well, meaning the designers here have the best of both worlds in presenting an eye-pleasing gaming treat. But components have to be functional too, or the game degenerates into an unplayable mess of pretty pictures. No matter how nice the rulebook or counters appear, if you can't make heads or tails of them, they serve no purpose. The close cooperation between Mr. Kibler and the various designer/developers is reflected by the fact that the maps and counters and rulebooks, as pretty as they are, are all extremely utilitarian. It is not surprising, therefore, that many of the same titles that are among

the "top ten" components-wise also appear on the other lists that follow. The following, the ten titles with the best ratings in each of the **Components** categories, are therefore truly remarkable in utility and artistic appeal:

Components:

1. ADVANCED SQUAD LEADER	1.77
2. 1830	2.00
3. SQUAD LEADER	2.11
4. FLIGHT LEADER	2.20
5. UP FRONT	2.24
6. RUSSIAN FRONT	2.33
7. MAGIC REALM	2.44
8. EMPIRES IN ARMS	2.45
9. FLATTOP	2.47
10. DUNE	2.48

Mapboard:

1. RUSSIAN FRONT	1.68
2. SQUAD LEADER	1.69
3. ADVANCED SQUAD LEADER	1.76
4. FLIGHT LEADER	1.87
5. MAGIC REALM	1.91
6. TITAN	1.95
7. RAID ON ST. NAZAIRE	1.97
8. FLATTOP	2.12
9. 1830	2.39
10. THUNDER AT CASSINO	2.40

Counters:

1. ADVANCED SQUAD LEADER	1.68
2. SQUAD LEADER	2.06
3. EMPIRES IN ARMS	2.12
4. FLIGHT LEADER	2.20
5. 1830	2.32
6. 7th Fleet	2.44
7. GLADIATOR	2.56
RUSSIAN FRONT	2.56
9. UP FRONT	2.60
10. MAGIC REALM	2.63

Rulebook:

1. ADVANCED SQUAD LEADER	1.92
2. 1830	2.33
3. CIVILIZATION	2.41
4. THUNDER AT CASSINO	2.64
5. BRITANNIA	2.81
6. STORM OVER ARNHEM	2.82
7. 7th Fleet	2.83
8. PANZERGRUPPE GUDERIAN	2.85
UP FRONT	2.85
10. B-17	2.92
DEVILS DEN	2.92

To my mind, as I've said before, the software—the rules and systems—of any game are vastly more important than the hardware—the components. The physical components of a game can be updated

with relative ease; not so the intangibles. Often no amount of development skill can save a game with unplayable systems, vague and contradictory rules, or that is neither competitive nor enjoyable to play.

Nothing is more exasperating for the novice (and the veteran too, for that matter) than rules which raise more questions than they answer, or that have flaws and faults obvious even to his untrained eye. The newcomer could do no better than to look to the **Completeness**, **Playability**, **Excitement Level** and **Play Balance** categories on our RBG if he is entertaining thoughts of making wargaming his hobby, and using our games as his vehicle. Again, the lower ratings indicate a truly superior game for him to cut his teeth on, depending on which of these aspects he values most. These categories, rather than judging the artists' efforts, looks at the skills of the developers. Many game submissions, in the raw form that they arrive from the designers, are truly horrendous examples of fuzzy thinking and fractured English and *ad nauseum* trivial detail; but the developers here have developed the knack of looking past all this to see the gem that may be buried below. Their task is to retrieve it and polish it. When they succeed, you have games like the following:

Completeness of Rules:

1. CIVILIZATION	2.03
2. ADVANCED SQUAD LEADER	2.11
3. TITAN	2.66
4. DIPLOMACY	2.69
5. 1830	2.72
6. THUNDER AT CASSINO	2.75
7. B-17	2.83
UP FRONT	2.83
9. AFRIKA KORPS	2.84
STORM OVER ARNHEM	2.84

Playability:

1. NAVAL WAR	1.60
2. CIVILIZATION	1.72
3. WAR AT SEA	1.87
4. AFRIKA KORPS	1.88
5. VICTORY IN THE PACIFIC	1.91
6. B-17	2.00
7. 1830	2.04
8. BRITANNIA	2.07
9. WIZARDS QUEST	2.15
10. WATERLOO	2.21

Excitement Level:

1. UP FRONT	2.00
2. THUNDER AT CASSINO	2.24
3. RUSSIAN FRONT	2.36
4. ADVANCED SQUAD LEADER	2.37
5. FLATTOP	2.40
6. EMPIRES IN ARMS	2.42
7. 1830	2.43
8. STORM OVER ARNHEM	2.52
9. SQUAD LEADER	2.55
10. BRITANNIA	2.57

Play Balance:

1. CIRCUS MAXIMUS	1.47
2. 1830	1.81
TITAN	1.81
4. GLADIATOR	1.93
5. BLITZKRIEG	2.08
6. WIZARDS QUEST	2.12
7. AIR FORCE/DAUNTLESS	2.20
8. ADVANCED SQUAD LEADER	2.32
UP FRONT	2.32
10. DOWN WITH THE KING	2.36

For the historian-gamer, the "simulation" is the key to enjoyment. And, make no mistake, the historical aspects of our titles provide much of the fascination for novice and expert player alike. Avalon Hill has often been criticized for the "accuracy" of

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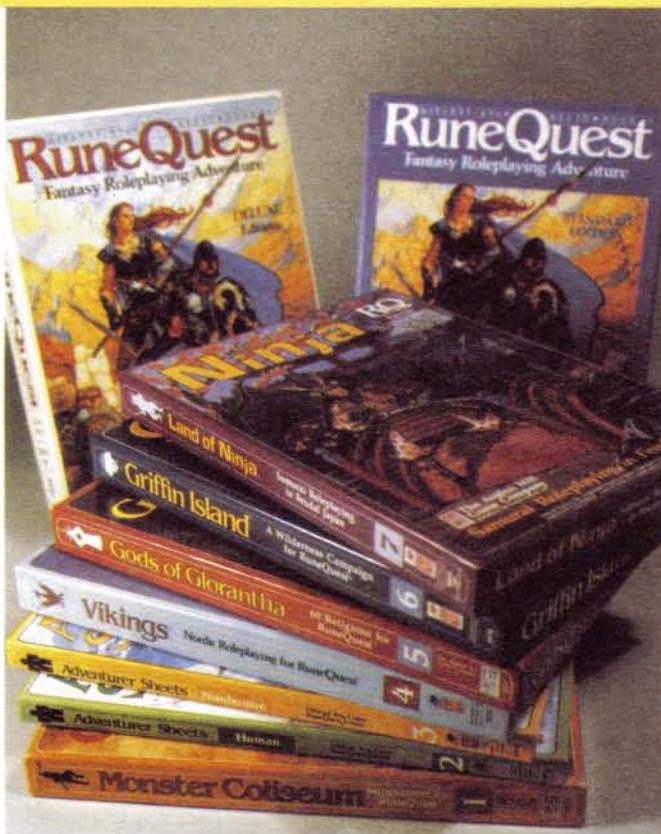
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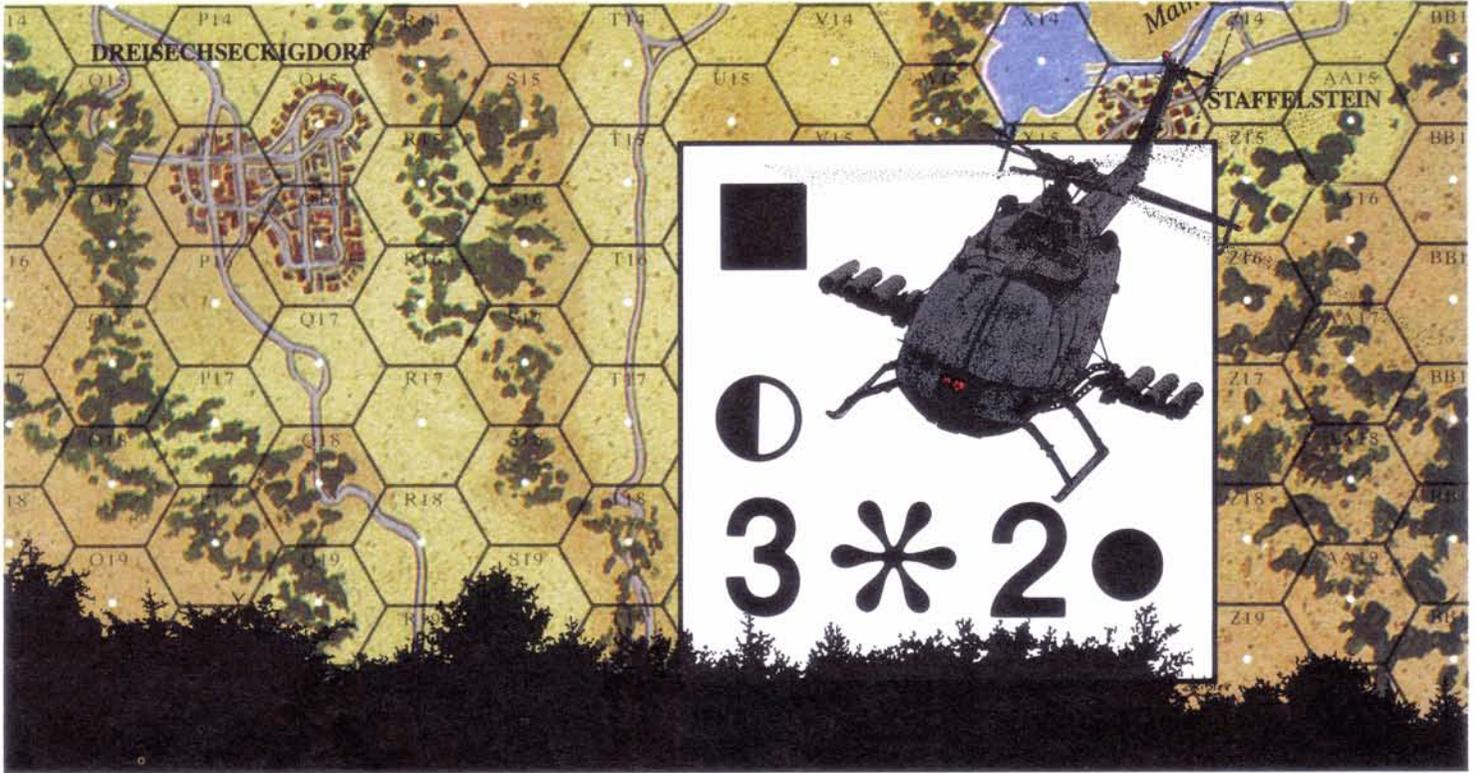
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TACTICAL AIRPOWER DOCTRINE

Guidelines for Managing Airpower in TAC AIR

By Gary C. Morgan

TAC AIR, short for TACTical AIRpower, was created to fill the void which has existed in modern operation wargames—they don't realistically replicate tactical airpower, including troop air defenses. Some games have approached a good simulation of individual jet/flight airpower and small company/battalion air defense on the tactical level, but only covering the Close Air Support (CAS) role right on the front lines. Examples include aircraft like A10s and MiG27s against man-portable shoulder-fired Surface-to-Air Missiles (SAMs), armored personnel carrier mounted infra-red SAMs of the SA-9/13 and Chapparral class, and an occasional ZSU 23-4 Self-Propelled Anti-Aircraft Artillery.

Prior to the past couple of years, very little tactical airpower or opposing air defenses were seen in conflict simulations. Airpower was a factor considered in the games, but highly abstracted and unrealistically applied. It was considered as off-map artillery with some small regard to counter-air or air superiority, and little or no concept of penetrating an Integrated Air Defense System (IADS). *TAC AIR* now gives the wargamer all the classic tactical air missions, representative air units to use, and detailed troop air defenses for engaging hostile airpower, all on top of an intense mechanized ground battle! This article will describe the combat air functions that the game simulates, and should give you some basic guidelines for the tactical air missions your fighters will need to fly to achieve success in the game.

THE GROUND WAR

All air missions in some way support the soldier on the ground. Only the army can take and hold ground; aircraft only support these efforts. "If you take off and shoot down every MiG in the sky, return to your base and find a Soviet T-80 sitting in your aircraft shelter, you've lost the war, Jack!"

The preceding is a favorite quote, and is certainly appropriate to lead off discussion on how the air battle and the ground battle interrelate. *TAC AIR* functions on two dimensions: first the ground war on the operational level, replete with armor, mech infantry, artillery and attack helicopters (which are a hybrid of the ground and air environment, and can be considered belonging to both). To complement the ground battle, tactical fighters support their ground forces by performing the myriad classic air missions, and troop air defenses accompany the ground units to engage hostile airpower. This creates a second dimension of an air battle which overlays the ground battle and interacts totally.

The player must think in both ground and air commander frames of reference. Fixation on one, to the exclusion of the other, will lose the game. This special feature makes *TAC AIR* a superb multi-player game. With at least two players to each side, one can act as air commander while the other acts as ground commander. Winning at *TAC AIR* is accomplished by refining the subtle cooperation required in the prosecution of modern air-land combat. It is highly challenging and difficult to master . . . but easy to learn. One can quickly appreciate the years of experience, judgment and vision required of a tactician in either the army or the air force. *TAC AIR* poses many of the decisions, challenges, and considerations these generals could face on the battlefield of tomorrow.

While many *GENERAL* readers may feel confident playing mechanized ground wargames from World War II to modern day, some caution is advisable when playing *TAC AIR*'s ground battle. The Advanced Game adds command and supply units to the combat battalions of the Basic Game. These are very "soft" and are vulnerable to attack from either air or ground, thus creating the opportunity to have penetrating missions ("Air Interdic-

tion"). The player must keep them just far enough to the rear to preclude concerted attack by hostile maneuver battalions in a breakthrough attempt, or by artillery or aircraft. However, they must be far enough forward to perform their mission or the ground units they support/command will lose their momentum and staying power. Similarly, air defense units are almost as soft if caught by maneuver battalions too far forward. They are critical protection for your ground units against hostile air attack. Unlike many mechanized wargames, there is now some "tail" to the "teeth" of your divisions. You must now begin to think about logistics, C2 (command and control), and air defense of your rear areas where in the past players focused on just their front lines. You can rest assured that your opposing air commander is watching as well! As you read the following information on the tactical air missions and how they are employed, keep also a ground commander's viewpoint on how hostile fighters will perform these missions against your own ground forces.

THE AIR BATTLE

Tactical air operations are divided into five combat air functions—Counter-Air, Close Air Support, Air Interdiction, Tactical Air Reconnaissance, and Tactical Airlift. The order of precedence of these five functions is dependent on the threat and the results desired. The fundamental principle is to neutralize the enemy threat having the most profound and continuing influence on the total battle situation. Normally, all five combat functions are performed concurrently because they are mutually supporting.

Tactical airpower is employed to attain a common objective. Selecting, and adhering to, a common objective is critical to successful employment of tactical airpower. Plans need to be continuously

evaluated for their contribution to attaining the objective, which must be clearly defined. Tactical airpower must take advantage of the principles listed below:

Initiative. It is necessary to create opportunities and to take advantage of those which present themselves. Initiative enables airpower to apply force at the time and place deemed advantageous. The inherent flexibility of tactical airpower enables it to rapidly shift between the various missions and exercise initiative. Keeping an enemy on the defensive may preclude his ability to mount offensive operations.

Surprise. Surprise can be achieved through speed, deception, concentration, audacity and originality. Concentration of force at an unexpected time and place has a high probability of success.

Concentration. Tactical airpower can concentrate power in precise times and locations due to the speed and mobility of flying platforms. Care must be taken not to needlessly concentrate more combat power than is necessary to accomplish the desired objective, or conversely fail to commit adequate resources to get the job done. Air forces must be organized as an entity, and centrally controlled to enable them to be employed in a concentrated manner.

Security. Adequate intelligence is required and the threat must be minimized for the opportunity of success to be realized in any air operation.

Tactical air operations must be planned with consideration to the three factors listed below:

Objectives. The objectives must be set by the ground commander based on the battle situation. Objectives for a force on the attack may differ from the objectives for a defensive stand.

Threat. The threat drives planning. Operations must consider the best intelligence available to minimize the threat to the force. The advantage of tactical airpower is its capability to regenerate, by returning to base to refuel and rearm and repeatedly return into battle. Losses of aircraft have a geometric effect, since aircraft are not only lost for the current mission, but will also be unavailable for any future missions.

Force Capabilities. The number and type of forces must be considered to attain the objective with minimal losses, particularly from SAM and air-to-air threats. The targets, routes, weather, defenses, aircrew skill, and weapon systems must all be factored in planning to insure adequate, but not wasteful, application of combat power.

COUNTER-AIR OPERATIONS

The objective of counter-air operations is to gain and maintain air superiority, preventing enemy forces from interfering with friendly ground and air operations. This requires destruction or neutralization of the enemy's offensive and defensive air systems. Counter-air operations are targeted against the enemy air threat and may not necessarily directly relate to ground operations. Control of the air is desired. The absence of both hostile aircraft and missiles permits friendly aircraft freedom of movement and offers opportunities for offensive action. Air superiority may be total and permanent if the entire enemy air defense system is destroyed.

Often, air superiority may be local, in a certain area for a certain time period. Suppression of Enemy Air Defenses (SEAD) involves, for the Americans, specialized "Wild Weasel" aircraft which can seek out ground-based electromagnetic emitters and destroy or disable them using standoff weapons or direct attack. This is considered an Offensive Counter-Air (OCA) mission, by seeking out and destroying hostile air power as close to its source as possible. Other OCA missions may include attacking airfields, command and control facilities, fuel and munitions storage for hostile aircraft or SAM systems, aircraft either flying or on the

ground, and SAM defense sites. Defensive Counter-Air (DCA) operations consist of employing an IADS of tactical fighter/interceptor aircraft, SAM, and AA artillery, all controlled to protect friendly forces from hostile air engagement.

Air operations over friendly forces require positive coordinated airspace control to minimize interference and fratricide, while efficiently identifying, intercepting and destroying/neutralizing any hostile air attacks. This is normally accomplished by construction of airspace control plans or orders and integration of these orders and plans throughout the friendly AID. Counter-air operations take the form of several types of missions:

Counter-Air Strikes against surface targets of the enemy airpower complex may be directed against defensive systems, but should concentrate on destroying the enemy's offensive air capability if feasible.

Fighter Sweeps have the mission of finding and destroying enemy air forces in the air. As enemy fighters are destroyed, friendly air control increases and the threat of hostile air attack decreases.

Fighter Screens restrict enemy air movement by placing airborne tactical fighters between friendly forces subject to hostile air attack and the threat, either in friendly territory or along the line of contact.

Combat Air Patrol (CAP). Fighters may be tasked to intercept and destroy enemy aircraft in a localized area. CAPs are usually over or near the area/force to be protected while screens are imposed between the threat and friendly area/force.

Air Escort. Friendly air forces enroute to an objective area subject to enemy air attack may be accompanied by friendly tactical fighters configured for air-to-air combat. The escorting fighters will engage hostile aircraft in order to allow escorted aircraft to pursue their missions with minimal interference.

Air Intercept of enemy and unidentified aircraft should be accomplished when hostile offensive air action is threatened. This interception is normally accomplished over friendly territory, but forward from vital target areas to permit defense in depth. Fighter aircraft and an integrated ground/air radar control system are normally essential.

CLOSE AIR SUPPORT OPERATIONS

CAS is air action against hostile targets in close proximity to friendly forces, and requires detailed integration of each air mission with the fire and movement of those forces. Tactical air forces are applied against targets of immediate concern to surface forces when surface combat cannot produce the desired effect with organic weapons. The task of CAS is to provide selective and discriminate firepower, when and where needed in support of ground forces. Thus, CAS must be available, responsive, integrated and controlled.

Availability. The joint force commander (who commands both air and ground forces) daily determines the proportion of tactical air effort to be applied to CAS. The air commander notifies the ground commander of the daily number of aircraft sorties (missions) he will commit to the CAS effort. The ground commander then prioritizes his CAS requests from each ground unit to correspond with the number of missions allocated.

Responsiveness. CAS missions are flown to support the ground force commander. Communications must rapidly process requests. Fighter wings must maintain aircraft on various states of alert to insure rapid reaction and immediate response. Alert aircraft may be selectively launched based on ordnance loaded and target characteristics. CAS missions may be either *preplanned* or *immediate*. Preplanned missions are targeted against fairly static targets, while immediate missions employ alert aircraft against fleeting targets as they become available.

Integration. CAS missions must be closely integrated with the organic fire of the ground forces to achieve mutual support. CAS must also be closely integrated with the movement of ground forces to insure air support is provided when and where required, and to minimize fratricide of friendly troops. This integration is accomplished by air and ground liaison/control systems. Air and ground units exchange personnel to perform these functions.

Control. The mobility of ground forces and the fluidity of modern battle require positive control of CAS aircraft. Target area control is performed by a Forward Air Controller, who insures direct coordination with the ground unit being supported and target identification by the CAS aircraft. The Air Controller may be flying in special aircraft or may be on the ground with the supported ground unit.

CAS aircraft are most effective against hard, mobile targets. Typical targets are enemy troop concentrations, fixed/hardened positions, and mechanized/airmobile elements in the immediate battle area. Favorable opportunities for CAS occur when enemy forces are on the move and exposed to air attack. There are several CAS Operations Concepts to govern the action:

Support of Offensive Ground Operations. Ground forces on the attack provide one of the best opportunities for CAS. It can provide the firepower needed to breach enemy strongpoints, creating an ideal opportunity for exploitation by friendly ground units. Attacks are directed against strong defensive positions, enemy troop concentrations, suspected ambush sites, and other centers of resistance. The enemy must not be permitted to regroup or initiate a counteroffensive.

Support of Ground Exploitation Operations. Breakthrough opportunities must be immediately exploited. Enemy forces on the move attempting to reinforce the breakthrough area will be vulnerable to air attack.

Support of Defensive Ground Operations. CAS may be used to prevent friendly defensive positions from being overrun. CAS can also be used to cover forces pulling back in retrograde movements, and may also cover friendly reconnaissance elements probing into enemy territory for information. These types of missions require positive identification of targets and maximum delivery accuracy to minimize friendly casualties.

As for specific CAS missions:

Airborne/Airmobile Operations. CAS is essential for drop/landing zone preparation and suppressive fire since organic artillery is normally not available during the early stages of the drop/landing. CAS may be required to continue necessary fire support of light troops inserted by parachute or helicopter.

Amphibious Operations. CAS may be necessary to support amphibious forces when they exceed the range of naval gunfire, or if naval gunfire is inadequate or unavailable. Air attacks are conducted prior to the assault to reduce enemy resistance. Further support for the establishment of the beachhead, and assisting the landed troops to break out, are additional CAS tasks.

Column Cover. Movements of columns may require air cover which can detect ambushes, provide warning to the column, and attack the threatening enemy forces while ground units deploy from column to battle formation.

Counter-Mechanized Operations. CAS can disrupt and destroy hostile mechanized forces and formations. Special CAS aircraft are optimized with weapon systems effective against armored vehicles. CAS can attack mechanized forces which are enroute to the battle area, or while grouping together in assembly areas.

AIR INTERDICTION OPERATIONS

Air Interdiction operations can destroy, neutral-

ize or delay the enemy's military potential before it can be brought to bear effectively against friendly forces, and can restrict the mobility of enemy forces by disrupting their lines of communication. Air Interdiction missions do not require detailed integration with fire and movement of friendly forces since strikes are conducted beyond the range of ground artillery support. The effects of a concerted Air Interdiction campaign may not be immediately apparent; however, enemy forces will lose logistical resupply capability and cannot sustain high tempo offensive operations without appreciable supplies of POL, ammunition and replacement personnel and equipment.

Identification of the enemy's lines of communication is essential to a successful Air Interdiction effort. Air Interdiction may also delay or pin reinforcements moving toward the front lines. Denying the enemy the swift employment of exploitation forces may bring a breakthrough offensive to a halt, and will allow friendly forces to continue to engage first echelon enemy forces without being overwhelmed by the enemy's second echelon units in reinforcement. The objective(s) of Air Interdiction must be planned in relation to the ground situation, and will require good reconnaissance and intelligence support. Normally, only a limited amount of aircraft sorties are available for Air Interdiction, and must be concentrated against specific targets to have significant effect. Air Interdiction missions must penetrate into enemy territory and inherently are the riskiest since they may be engaged by the full extent of the enemy's IADS. Penetration support and air escort may be required to give the Air Interdiction aircraft reasonable probability of survival.

Air Interdiction may not achieve complete isolation of the area of conflict, but may rapidly reduce the enemy's battlefield reserves to critical levels and seriously limit his capability to continue effective action. When offensive friendly ground operations are conducted in combination with Air Interdiction, it accelerates the consumption of the enemy's material and capitalizes on his reduced combat effectiveness.

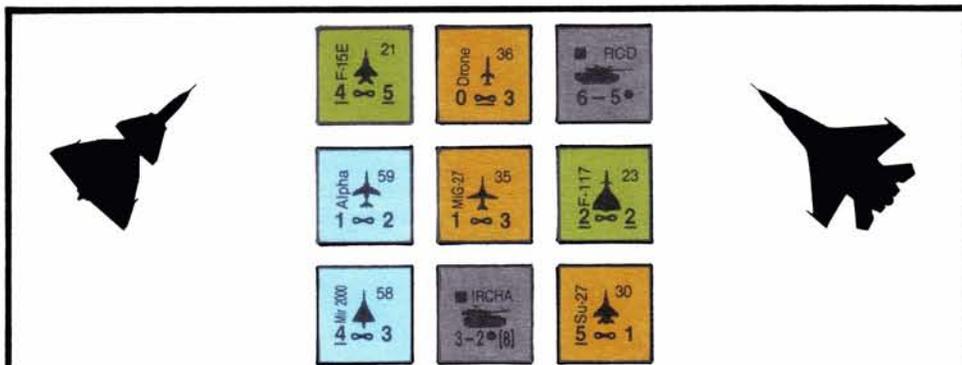
Air Interdiction operations reduce the enemy's capability to mount an offensive, restrict the enemy's freedom of action and increase his vulnerability to friendly attack, and prevents the enemy from countering an increase in friendly strength. Interdiction is never complete or permanent. Friendly ground action forces the enemy to use up what forces and material that do arrive. Once the Air Interdiction objective has been reached, the amount of effort required to maintain the campaign may be disproportionate to the results achieved. Enemy defenses eventually will be optimized against the Air Interdiction routes and targets. Air Interdiction takes the form of two types: Air Strikes and Armed Reconnaissance.

Air Strikes. Strikes against specific targets require target intelligence information for planning. The size of the strike force must be calculated along with target aimpoints, attack/navigation routing, and appropriate weapons to be delivered. Targets may be preplanned (bridges, crossroads, etc.) prior to development of the battle.

Armed Reconnaissance. Armed Recce missions are planned when the exact target location is not certain. Armed Recce missions are flown with the objective of locating and attacking targets of opportunity. The objectives may be located in general areas, or along main lines of communication.

TACTICAL AIR RECONNAISSANCE OPERATIONS

Tactical Air Reconnaissance (*Recce*) provides an airborne means for collecting intelligence for the ground commander. Classic Recce has utilized cameras mounted in high speed tactical fighters to overfly target areas, then have the film analyzed by



SUPPLEMENTARY UNITS

TAC AIR depicts operational Air-Land battle in the VII Corps area of responsibility in the southeastern Federal Republic of Germany. The game includes the units most likely to engage in combat in that area. Not included in the game, but comprising additional forces located near the area are the 4th Canadian Mechanized Brigade and the French I/II Corps, and supporting French air units.

While the Canadian brigade may be used as a reserve in the U.S. V or VII Corps areas, the French ground forces' appearance is more problematical. They could be used *anywhere* along the Allied Forces Central Europe (AFCENT) front, depending on French commitment, strategy and the progress of the war. Since the use of the Canadian brigade and the French air units in the VII Corps area is the most likely possibility, these are the extra units provided with *THE GENERAL*. In addition, there are a number of new aircraft counters showing airpower which may find its way over the VII Corps skies during the next few years.

ADDITIONAL TAC AIR UNITS

1. French Aircraft: If France fights near the VII Corps area, several types of French aircraft could augment the 4th Allied Tactical Air Force (4ATAF). These French air units can be added to the NATO forces in any of the Master Scenarios *if* the additional PACT aircraft (see 2. and the SU-27 entries below) are also used to counterbalance them:

Jaguar (NATO 51-53): The Jaguar flies in the air forces of France and Great Britain, and would be a regular in the skies further north. The Jaguar is primarily an attack jet (DAS, Interception, and possibly SEAD orders) which carries a limited bomb load.

Mirage F.1C (NATO 54-55): The Mirage F.1C is France's standard air defense interceptor. It is capable of night/all-weather air combat operations and carries radar homing missiles (see 11.4.1) on air control missions.

Mirage F.1R (NATO 56): This is the reconnaissance version of the Mirage F.1C. It is a dedicated recon aircraft that is used only for reconnaissance missions (RF).

Mirage 2000 (NATO 57-58): The Mirage 2000 is the replacement for the Mirage 3 and 5 series, and is just entering French service. Very flexible, it carries radar homing missiles on air control missions, but is also useful for close air support.

Alpha Jet (NATO 59-60): The French have significant numbers of these combat-capable trainers and they are the same as the West German units already included in *TAC AIR*.

2. Additional PACT Aircraft: The new MiG-23 (PACT 31-33) and MiG-27 (PACT 34-36) units can be added to the PACT forces in any of the Master Scenarios *if* the French aircraft are also used.

3. Future Aircraft: Air orders of battle are constantly changing as new equipment replaces old. These aircraft could be deployed in the near future by both sides.

SU-27 "Flanker" (PACT 25-30): This is a new air superiority fighter/interceptor currently deployed inside the Soviet Union. It is the size of the F-15 and similar in capability, although it looks more like an F-18 in shape. It is capable of night/all-weather air combat operations and carries radar homing missiles on air control missions. Eventually, it should be deployed into the Central Region and could augment forces at war in East Germany or Czechoslovakia. They can all be added to PACT forces in Master Scenario #12 *if* the NATO future aircraft are used to replace older units in cases where this is possible. Two units can be added (with the additional PACT aircraft above) in any of the Master Scenarios where the French aircraft are used.

Reconnaissance Drones (NATO 61-62 and PACT 36): These units represent unmanned camera platforms and can be added to the forces of both sides in any desired scenario when option 21.0 is used. The units must be used only with "RF" orders and gather "information" the same as manned recon flights. Because these drones use television cameras for "real time" transmission, no collected "information" is lost if the unit is eliminated. Because of their small size and low radar signature, radar air defense units may *not* be used to engage them in air defense combats and aircraft with radar homing missiles cannot use them to attack drones. A drone unit is eliminated by a half-flight or entire flight combat effect, but abort results are ignored.

Additional Tornados (NATO 43-44): The West German F-104s were included in *TAC AIR* largely for variety and historical interest. They may be replaced by these additional Tornado units (which have the same numerical designations) in any scenarios in which they appear.

F-4F ICE (NATO 33-36): The West German F-4Fs are currently being updated with new wings and radar to permit their effective use into the next century. The updated aircraft will be able to carry radar homing missiles on air control missions. The F-4F ICE units can be used to directly replace the F-4F units with the same numerical designation in any scenarios in which they appear.

F-15E (NATO 21-22): The F-15E "Strike Eagle" is approaching "Initial Operational Capability" and should eventually be deployed to U.S. Air Forces Europe (USAFE). The F-15E has a two-man crew, has night/all-weather capability, Synthetic Aperture Radar for almost photographic ground mapping ability, computer aided weapons delivery and navigation, and an awesome weapons payload and range. Useful for close air support, the F-15E can alternatively be changed from mission-to-mission for use in recon (RF) missions, or can carry radar homing missiles for air control missions. The F-15Es can be used to directly replace the A-10 units with the same numerical designation in any Tournament or Master scenario in which they appear.

F-15G (NATO 10-11): Strike Eagle Follow-On Wild Weasel (FOWW) variant is also being considered for the future. These follow the usual Wild Weasel rules except that they can exploit their large bomb load to launch an ARM attack up to every *Air Round*, rather than only once. The F-15Gs can be used to directly replace the F-4G units with the same numerical designation in Master Scenario #12 only.

F-117A (NATO 23-24): The supersecret F-117A "Ghost Rider"/"Frisbee" stealth fighter, on which hard data is unobtainable, invites speculation regarding its probable capabilities. Hard to "see" electronically, it would have to carry a very limited load of ordnance to keep its low radar cross-section. Its relative invisibility would be useful while using its laser designator to guide other aircraft's attacks using laser guided bombs. The F-117As can be used to directly replace the A-10 units with the same numerical designation in any scenarios in which they appear. Special rules required for this unique aircraft are as follows:

- a) The F-117A basically can't be seen by radar, thus it cannot be attacked by radar air defense units or by radar homing missiles. Still a target for guns or infrared missiles in daylight, the planes are almost invulnerable at night or in bad weather.
- b) Despite its underlined "A" factor, the F-117A does not carry radar homing missiles. The underlined "A" factor is, in this case, to show that it can attack for air combat (fly air control missions) at night or in bad weather.
- c) To use its laser designator to guide other aircraft's laser guided bombs, an F-117A unit's "B" factor may be added to that of any other single air unit's factor for air support combat by that other air unit if the F19A unit is within two hexes of the target when the other unit attacks. This can be done repeatedly with different other air units and in addition to the F-117A's own attack.

4. Canadian 4th Mechanized Brigade: This formation can be added to the NATO forces on in Master Scenario #12.

Editor's Note: The counters for these new units are found on the accompanying die-cut counter sheet (enclosed for SUBSCRIBERS only). Those readers who are not subscribers may purchase the counter sheet—which contains 130 variant counters for upcoming articles in future issues as well—direct from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Please specify the counter sheet "The GENERAL, Vol. 25, No. 2" and enclose \$3.00 (usual shipping and handling charges apply).

photo-interpreters. Photographic Recce is still a primary mission for most Tactical Air Reconnaissance units. It is being supplemented by new sensors which can detect information at night or at greater distances than were possible with standard photographic means. Also, new means of getting the information back in real time, or near real time, have made it possible to minimize the delay inherent with a returning aircraft and photo processing/analysis. Even if the aircraft is lost to enemy defenses, the information has already been sent back for utilization.

More emphasis is currently being placed on unmanned recon drones which make smaller targets and can overwhelm adversary air defenses by sheer numbers. Modern technology has continued to introduce more strategic recon platforms (such as the U-2, SR-71, FOXBAT, etc.) which collect imagery or electronic emissions from deep battlefields at long range. With detailed airborne intelligence, ground and air commanders are better able to plan friendly operations and counter enemy offensives. Air reconnaissance supplements the intelligence and recon information derived from ground sensors and units such as Long Range Recon Patrols, electronic intelligence, forward observers, and combat reports from ground units in action.

Tactical Air Reconnaissance is a dedicated operational mission to many squadrons in air forces worldwide with specially configured aircraft mounting cameras and other recon sensors. Other air forces prefer to add this as an additional mission to attack or air superiority squadrons by mounting special recon pods on the aircraft when reconnaissance missions need to be flown.

The former concept offers usually more capable, dedicated aircraft and crews who excel in the recon mission. The latter concept offers flexibility by configuring aircraft for another role when it is not flying Recce missions. Dedicated recon platforms usually need all the speed possible, and the phrase "Alone, Unarmed, and Afraid" has become the motto of reconnaissance. Aircraft flying recon pods may or may not be armed, and adversary fighters may avoid engaging such Recon sorties, mistaking them for armed aircraft on other missions.

There are several Tactical Air Recon missions, among them:

Battlefield Surveillance. Recon aircraft may be tasked to overfly or fly near suspected enemy assembly areas, to identify possible attacks. Overflight of assault objective areas and routes may reveal the presence of enemy defenses, their type and strength. Reconnaissance missions over marshalling yards and along lines of communication may show enemy intentions for an upcoming offensive, or the flow of reinforcements/replacements in a particular sector of the battlefield.

Pre/Post Strike Reconnaissance. Pre-strike recon is used for the "before", while post-strike recon is used for the "after" when airstrikes are planned and conducted against enemy targets. By comparing the condition of the target just prior to attack with its condition just after the attack, an accurate assessment of actual target damage can be concluded.

Strike Control and Reconnaissance (SCAR). SCAR is a concept which puts a recon aircraft in the role of a type of flying forward air controller, only against interdiction-type targets farther behind enemy lines. The recon arrives in the target area first, identifies targets, and passes targeting information to the inbound attack aircraft for engagement.

TACTICAL AIRLIFT OPERATIONS

Tactical Airlift performs the obvious mission of aerial resupply. This may be the movement of material and men from airheads or ports to forward

staging/resupply points. Other resupply may be to airborne, airmobile or amphibious forces who may depend totally on airlift for logistical support, having no other lines of communication. Tactical Airlift may also be used to evacuate wounded or troops cut off from any other form of retreat. Tactical Airlift's most direct contribution to combat is the airborne delivery of special forces, airborne or airmobile troops—normally behind enemy lines.

BALANCING THE TACTICAL AIR MISSIONS

This article can't presume to tell you how to specifically employ your fighters in *TAC AIR*. The above synopsis of tactical air doctrine will give you some general guidelines for smart ways to approach the problems. If you read and understand what has been presented above, you will have an advantage over an opponent who has never heard of these concepts and is unfamiliar with the missions over a modern battlefield. Doctrine differs from tactics in that it lists things to consider which should work well in the majority of situations. Tactics specifically apply doctrine to the particular situation at hand. When you begin to formulate your own doctrine or apply that described in this article, bear in mind two things: what is happening with your own forces, and the enemy's forces/intentions. One of the secrets of successful employment of tactical airpower is second-guessing what the opponent has and what he's up to.

The Advanced Game of *TAC AIR* has the full gamut of tactical air missions. We have tried to give you at least a small appetizer of each mission when possible in the Basic Game. Of vital significance even in the Basic Game is CAS! Whether you are the Soviets on the roll, or NATO on defense, CAS will be a major factor in the ground battle with immediately apparent results. Each side has a limited number of special CAS jets (A-10 or FROGFOOT). Major CAS efforts will necessitate drawing your other fighter-bombers away from Counter-Air or Air Interdiction missions.

Tank and Mech Infantry battalions are fairly hard targets, and it will take some significant CAS assets to hurt them severely. Artillery is somewhat softer and CAS can damage it more effectively. Depriving your opponent of his artillery will make a big difference! CAS attacks on soft command units can be deadly and can cripple a combat formation of brigade/regiment size. If brigade/regiment supply units poke too far forward, CAS can quickly eliminate them, causing maneuver units to lose their staying power. This is called "Battlefield Air Interdiction", which is a hybrid of CAS and Air Interdiction. When employing your CAS forces, watch out for the deadly troop air defenses! Concentrations of mobile SAMs can quickly devastate your vital CAS aircraft. Also, watch out for major counter-air efforts by your opponent to clear the skies of your jets so he can begin his attack campaign. Remember the principle of *concentration*! Identify the big payoff CAS target(s) and put your forces there, along with some SEAD to keep the defenses down. You won't achieve much by spreading your CAS aircraft thinly all along the front.

Before ground forces engage, one of the best missions for your airpower is Counter-Air. The shallow depth of the *TAC AIR* battlefield doesn't depict the airfields in the rear areas, nor does it allow attacking them. *TAC AIR* was designed to show combat in the Forward Edge of the Battle Area (*FEBA*)—its former name as an Air Force game. With airfield attack out of the picture, you may elect to fly Fighter Sweeps with your jets loaded up for air combat, or you might try to conduct a SEAD campaign by knocking out some key SAM sites which will later take their toll on your CAS and Interdiction missions. If you think the enemy will be trying to soften up your forces in anticipation of an impend-

ing attack, you may decide to send up some CAP flights to stay over your own lines and engage enemy attack flights. Again, concentration is essential. Task your strongest air combat jets in the Counter-Air role—normally jets are strong in either air combat (air-to-air) or air attack (air-to-ground), but usually not both. Newer aircraft like the F-16, F-18, F-15E Strike Eagle, and Mig-29 FLUCRUM are being produced with strong capability in *both* roles and offer the air commander ultimate flexibility.

Air Interdiction and CAS both come into high demand once the battle has been joined, and the primary main effort has been identified. Counter-Air continues to be significant, both for intercepting and destroying enemy attack missions and for the escort of friendly attack missions against hostile intercept. Escorting fighters are limited in flexibility by being tied to the attacking aircraft, but can help insure the success of their mission against enemy engagement. Combining escorted attack forces with Fighter Sweeps will give the hostile air commander a dual problem. The secret is to have enough good air combat jets to do both. You can't fly your jets every game turn; they must stand down the following game turn for fuel and ordnance. You must have a plan in mind for which jets will fly particular game turns. You can opt for constant air over the battlefield by rotating flights in the air and on the ground. Your other option is to surge and fly *everything* all in one game turn—"The Gorilla".

Although you as the player can see most of what's going on down on the battlefield (unless you are playing an "Umpired" game), you would need some tactical intelligence about what is happening behind enemy lines to consider launching Air Interdiction missions. While they have little or no combat power, Tactical Air Recon aircraft provide you with the capability to attack targets deep in enemy territory. Recce missions will detect targets behind the lines and allow you to plan Air Interdiction missions on following game turns. Again, you can attack hard combat units on roads moving toward the front and cause some minor disruption, or you can hit division command and supply units with catastrophic effects. Everything that was mentioned above about CAS is applicable with Air Interdiction, only it happens deep behind enemy lines. Air Interdiction flights are exposed to more SAMs, AA and enemy Counter-Air flights, so send enough airpower to get the job done, and give them some support so they can make it home. Expect some losses on a big operation.

Don't forget about Electronic Combat (EC) aircraft. They can make a big difference against enemy air defenses. Putting your SEAD effort and jammer aircraft against the defenses on the route your Air Interdiction flights plan to fly may mean the difference between hitting the target or aborting/being destroyed. Again, concentration is fundamental since your EC assets are very limited. Applying them piecemeal may result in barely any effect across the battlefield. If you expect to use your EC assets more than one game turn, you'd better give them some air combat protection, either by launching CAPs or escort. You can mount a major SEAD effort by tasking CAS flights to take out forward air defense units, and launching Weasel missions against areas/units you feel will be troublesome to your attack flights. It is possible to strip a brigade/regiment or even a division of its air defenses, making it vulnerable to air attack later on. Don't forget to use your artillery and attack helicopters if they can be spared to assist in the SEAD effort.

Your whole air strategy will be driven by the scenario, what your adversary is doing, and the development of the battle each game turn, with objectives and priorities in a constant state of change. Further complicating the operation are the unpredictable elements of weather and airborne/

airmobile forces. Just when you are ready to launch the big air gorilla, suddenly the weather grounds all of your jets! You can predict when the weather has a higher probability of being good and bad, and may plan accordingly. You may also see the effect of your limited numbers of Night/All-Weather aircraft during night and bad weather game turns to keep constant pressure on the enemy. The possibility of an airborne or airmobile assault on your enemy's flanks or rear areas will definitely keep him on his guard. This is one of the most powerful trump cards you have. Even if you never use it, the threat of it will keep the enemy worrying.

SUMMARY

Hopefully, this article has given experienced *TAC AIR* players some food for thought on past successes and mistakes, and given the beginning players some hints for future play, and—most importantly—given those readers who haven't played *TAC AIR* an idea of what is available in this revolutionary game. If modern day Air-Land battle is what you seek, *TAC AIR* should satisfy your desire for realism, authenticity and playability. Just about everything on the modern operational European battle is included in a game which is fairly easy to play/teach and won't take weeks to finish. It is especially suitable for the gamer who plays with several friends, although it can be played easily by two opposing players. It is the first game to offer all of the tactical air missions and detailed integrated air defense forces on both sides. The hints on play described above should convince you that *TAC AIR* is one game that will continue to teach you lessons on the subtle considerations for employment of tactical airpower and ground forces, and you should find it challenging for years as you perfect and refine your mastery of modern combined arms warfare. ☆

SO THAT'S WHAT YOU'VE BEEN PLAYING

Titles Listed: 154

Total Responses: 681

Rank:	Title	Pub	Rank Times		
			Last	On	Freq.
			Time	List	Ratio
1.	Advanced SL	AH	1	16	4.4
2.	Third Reich	AH	3	45	3.1
3.	Britannia	AH	—	1	3.0
4.	St. Nazaire	AH	2	4	2.5
5.	B-17	AH	10	17	1.9
6.	Russian Campaign	AH	11	45	1.8
7.	Up Front	AH	5	3	1.7
8.	Diplomacy	AH	16	17	1.6
9.	Squad Leader	AH	6	45	1.6
10.	World in Flames	ADG	—	1	1.5
11.	Guns of August	AH	17	3	1.4
12.	Civilization	AH	14	4	1.3
13.	Empires in Arms	AH	15	8	1.2
14.	Gettysburg '88	AH	—	1	1.2
15.	Partisan	AH	—	1	1.1
16.	Patton's Best	AH	13	6	1.1
17.	War & Peace	AH	—	1	1.1
18.	Yanks	AH	7	7	1.1
19.	Panzer Leader	AH	—	1	1.0
20.	VITP	AH	9	3	1.0

The appearance of an issue devoted to highlighting *BRITANNIA* brings it to the top, and seems to have caused a few more folks to break out their copy of *CIVILIZATION*. Among the several games finding their way onto this survey of what the readership is playing is the surprising *WORLD IN FLAMES*, one of the few non-Avalon Hill/Victory Games titles to ever show up here. Solitaire games—in the form of *B-17*, *RAID ON ST. NAZAIRE*, and *PATTON'S BEST*—continue to make a strong showing. Another pleasant surprise is the appearance of the new *GETTYSBURG*, Craig Taylor's introductory design. As usual, a number of titles failed to make the list, but other equally fine games show up for the first time in awhile.

THE AVALON HILL GAME COMPANY'S BEST SELLER LIST

As is our custom, the editor's once again present sales rankings for our line of game titles based on totals for the 1987 Fiscal Year, which began May 1987 and ended April 1988. Figures for the All-Time List include all versions of a title sold to date, provided the game system has not radically changed in any subsequent printing over the years. *D-DAY* and *FOOTBALL STRATEGY*, by way of example, have collectively passed through eight different editions—but each retains its original system. *GETTYSBURG*, on the other hand, has changed dramatically in each of its five versions and is therefore omitted from the list—even though the collective totals of its various incarnations would normally grant it a place. Titles are placed on the All-Time List only after having sold in excess of 100,000 copies while under The Avalon Hill Game Company's ownership. Readers should note that there are several games that qualify under this restriction but have not, as yet, surpassed the sales of *WAR AT SEA*.

1987 BEST SELLERS

Rank:	Title	1986 Rank
1.	STATIS-PRO BASEBALL	2
2.	PLATOON	—
3.	PATTON'S BEST	—
4.	STATIS-PRO FOOTBALL	4
5.	SQUAD LEADER	7
6.	RAID ON ST. NAZAIRE	—
7.	YANKS	—
8.	FLIGHT LEADER	3
9.	BRITANNIA	—
10.	PARTISAN!	—
11.	CIVILIZATION	14
12.	THIRD REICH	12
13.	DIPLOMACY	8
14.	STATIS-PRO BASKETBALL	11
15.	RAIL BARON	18
16.	ADVANCED SQUAD LEADER	—
17.	HEDGEROW HELL	—
18.	PAYDIRT	9
19.	PARATROOPER	6
20.	THUNDER AT CASSINO	—

ALL-TIME BEST SELLERS

Rank:	Title	1986 Rank
1.	OUTDOOR SURVIVAL	1
2.	FACTS IN FIVE	2
3.	PANZERBLITZ	3
4.	SQUAD LEADER	4
5.	PANZER LEADER	21
6.	THIRD REICH	5
7.	TACTICS II	6
8.	LUFTWAFFE	7
9.	BLITZKRIEG	8
10.	STATIS-PRO BASEBALL	10
11.	FOOTBALL STRATEGY	9
12.	ACQUIRE	11
13.	DIPLOMACY	12
14.	MIDWAY	13
15.	PAYDIRT	14
16.	STARSHIP TROOPERS	15
17.	D-DAY	16
18.	AFRIKA KORPS	17
19.	WIZARD'S QUEST	18
20.	WAR AT SEA	19

SERIES REPLAY

TAC AIR, Scenario 1

American Player—Bruce Korn

Soviet Players—Jay Wissmann and Mike Montemorano

Neutral Commentator—S. Craig Taylor



In the past, we've dazzled you with the brilliance of experienced players maneuvering skillfully in more "Series Replays" than we care to count. This is fine if you've mastered a game sufficiently to follow the flow and understand what the heck the "experts" are talking about; but what if your level of play is less exalted (i.e., you've never played the game)? What can you really expect from a first playing? That's why Mr. Taylor decided to try something completely different when I pestered him for a SR for this issue.

In this article, a bizarre experiment that slipped by a napping editor, we look at a dark side of wargaming that few wargamers wish to discuss in mixed company. Yes . . . we're talking less-than-brilliant play. Before anyone can play really good, even the most experienced gamer must first, sometime and somewhere, have played really bad—even if only in his first session with a new game. Any game is mastered through repeated playings and the hard knocks delivered by unforgiving opponents. This replay is the reporting of a game in which three experienced gamers flailed around until they had completed playing TAC AIR for the first time. Craig and they have concentrated less on their exact movements and tactics than previous replays (although the chart reports all these), and more on first impressions: what the newcomers liked, what they disliked, and what they learned during their first playing. These observations might save the attentive reader from making the same common mistakes during his own first playing of this fascinating new game.

Bruce Korn took the part of American commander. The Soviet comments are the combined observations of Jay Wissmann (who commanded the Russian ground forces) and Mike Montemorano (who ran the air defense and air units). All three are long-time players from our weekly miniature game sessions, and though perhaps unfamiliar with this particular game as yet—have many years of gaming experience behind them. And all three are quick at thinking on their feet. Craig Taylor provides the voice of calm reason; his comments are in italics.

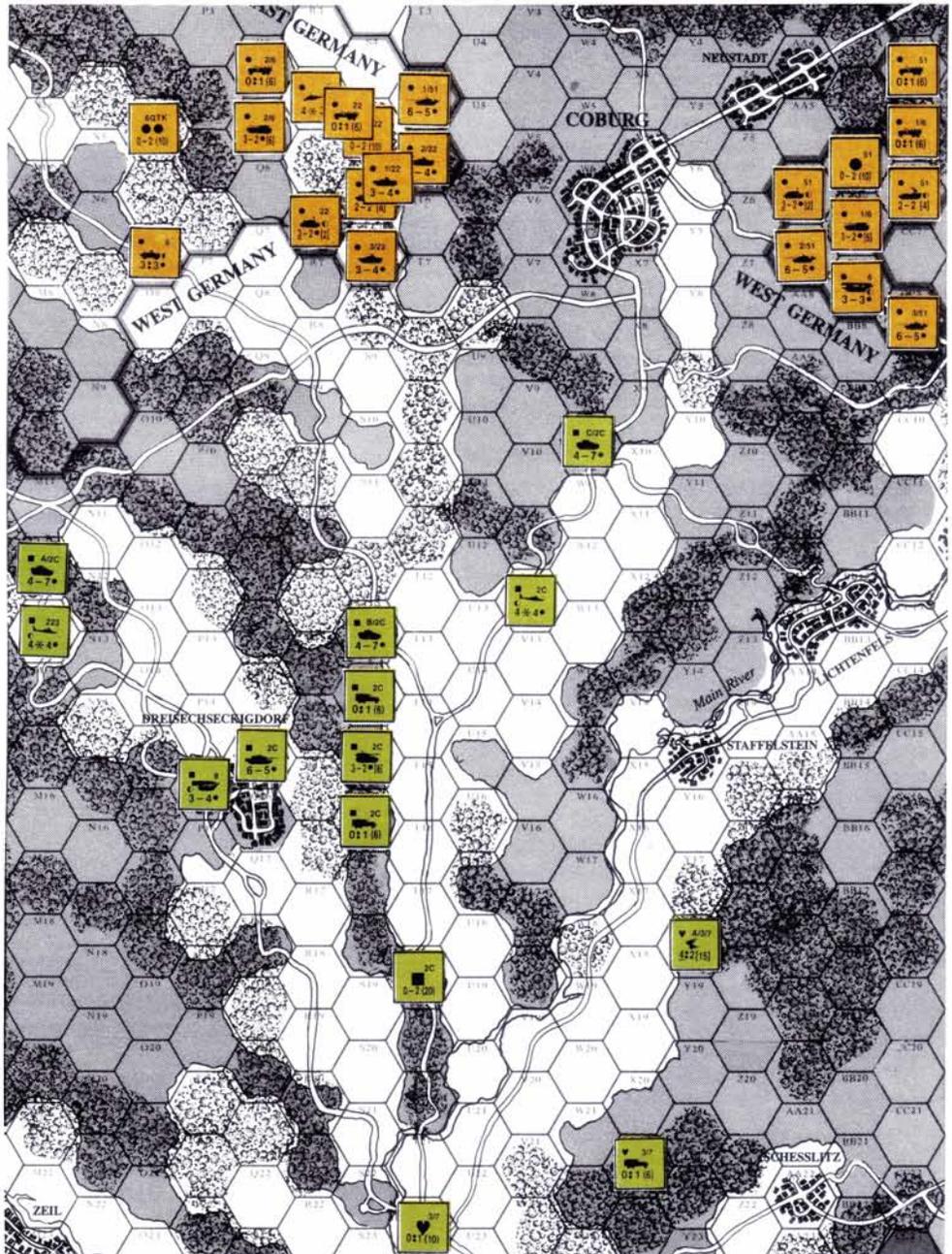
TAC AIR integrates direct land combat, artillery, air defense, command and supply with air operations through some unique mechanics and the sequence of play. Briefly, to help in understanding the game, these systems operate as follows:

Preparation Stage: Basically, this is a "busy work" stage, with a number of steps. "Disruption" (combat hits on units) can be removed automatically (by being a headquarters unit or being adjacent to one) or by a die roll that can be made only if supplied (i.e., within the supply span of a supply unit). Supplied air defense and artillery units may be flipped from their depleted/fired sides. Air units are advanced on their readiness tracks (effectively, this means air units are available for operations every other game turn) and, if ready, moved into boxes that define their missions for the upcoming turn. Just before moving his own ground units, each player flips all the eligible ground and helicopter units to their "moving" side. Units which are

beyond their headquarters' command span and all those with "2+ Disruption" must be flipped to their non-moving side.

Maneuver Phase: One side does this, then resolves all resulting combats, followed by the other side repeating the procedure. During this phase, all ground and helicopter units capable of movement (flipped to their moving side) are moved. Helicopter units in range and line of sight of air defense units may be fired at as they are moved. Everytime an air defense unit fires, there is a roll for "depletion" to see if it expends its ammunition, but otherwise

these units may fire as many times as desired and possible. Before maneuver combats (i.e., direct ground combats between adjacent units) are resolved, any artillery in range may be fired at involved units, or for the non-phasing side use "counter-battery fire" to neutralize firing enemy artillery. Since disrupted units cannot attack, successful defensive fire can seriously influence the odds of an attack (or even totally prevent it). Successful offensive artillery fire can result in extra disruptions on a defending unit and "set it up for the kill" when the ground forces roll in. Artillery



Right: Initial placement of all on-board NATO and PACT units.

may be fired only once per turn, after which it is flipped to its "fired" side. Ground and helicopter units may not be stacked—since every unit is in full view, this makes determining command control and supply relatively quick and simple.

Air Phase: After both sides have performed their Maneuver Phases, the Air Phase is performed in ten "Air Rounds". All air units must enter or and exit the mapboard from prescribed board edges during the course of this phase. During each air round, the players move their air units alternately. As with helicopters, air defense units may be fired at air units in their range/line of sight as the air units are moved. Air units that were placed in the "Air Control" box during the Preparation Phase are basically used to intercept and attack enemy aircraft. Air units that were placed in the "Close Air Support" box during the Preparation Phase can have a variety of air missions (air defense suppression, reconnaissance, interdiction, etc.), but in a scenario of this size are most likely to have a "Direct Air Support" mission to attack enemy ground units. An air unit may be used to attack only once per turn, and there may be one or two air units per hex. A "Direct Air Support" mission requires a cavalry/recon, headquarters or helicopter unit close enough to the enemy target to act as a "forward air controller" for the attack. This FAC unit was secretly noted during the Preparation Phase (if eliminated, the air units cannot attack).

Probably the most unusual feature of *TAC AIR* is the number of times a unit may be attacked in one turn. The same target unit can be blasted by artillery, directly attacked by ground units, then repeatedly bombed by air units. Four disruptions equal an elimination. Other important factors for players include taking a close look at the command and supply structures and the locations and ranges of the air defense units of the enemy force—looking for vulnerable targets for air attacks that can greatly affect his play. New players frequently concentrate their air support on enemy frontline units but, as Bruce shows on Turn 3 of this game, there are often more valuable and more vulnerable targets.

INITIAL OBSERVATIONS

After cleaning out the Taylor larder like so many ravenous wolves, the players arrange themselves carelessly around the table and prepare to play Scenario 1. Ignoring the instructions to play the Basic Game first, the players are going right into the Advanced Rules.

American: The game appears pretty challenging. I'm impressed by the overall look of the game, especially by the amount of information on the counters. Unfortunately, Carig's lighting system throws a glare and the map and hex numbers are somewhat hard to read here. [*Someone must like these cheap dining room chandeliers; there's been one in almost every apartment that I've ever rented.*] The game system looks pretty straightforward, but I wish I knew the rules better before playing a "game of record".

Soviets: Neato! The game system seems an interesting mix of old reliable concepts and new innovative ones. Simulating the mixing of air and land units has always been difficult at best. One either gets generic "air points", or—at the other end of the spectrum—provides ground units only as targets for plunder. *TAC AIR* looks like it may be a bit more . . . we shall see.

SET-UP

The Americans are set up first in this scenario, followed by the Soviets. Experienced players of this scenario fall into two schools of thought for setting up the NATO forces. One school favors setting up a forward defense (the strategy adopted by Bruce in this game) for maximum delay but risking unit

losses; the other favors a tight defense around the objective that is easier for the air units to support (but risks a quick defeat with no room for maneuver and the consequent Soviet capture of the objective).

American: I will attempt to set up a perimeter defense, "collapsing" (hopefully, not a poor choice of words) toward the objective hex T22. The engineer can be used to stiffen the defense of the town at Q15, then fall back to blow the bridges around T22. I foresee problems in my air defense, since I have only the one unit—although it is very long-ranged.

Soviets: 6th Guards Tank Division Briefing stresses that Hex T22 is the objective hex. Each ground unit we can push through it is worth a victory point. The biggest problem is the large section of "dirty" terrain in the center of the board. The possible approaches are: 1) the road M11 through Dreisecksgidorf to T12, 2) the road R6 to T22, 3) a wide right hook through Hassfurt, or 4) breach the Main at Lichtenfels and motor down the left bank. Option 1 runs through a three-hex city, so we'll avoid that. Option 2 has merit—maybe. Option 3, running around grandmother's house with a time limit—no, not tonight. Option 4 sounds good, especially coupled with a secondary force using Option 2 to keep the capitalist swine off our right flank.

Americans (Again): Oops! Mistake number one. As the Soviets set up, I realize that the corner of Board A is actually part of East Germany and is, in fact, eligible for enemy unit placement.

TURN 1

The Soviets move first in this scenario.

Preparation Phase: *Not much to do during this phase at the game's start. The Soviets give both MiG-29 flights direct air support orders. The American puts F-16 flight #14 into air superiority and gives direct air support orders to A-10 flight #10.*

Soviet Maneuver Phase: The 3/51 Tank Battalion is moved adjacent to the Main River, and the 2/51 Tank and 3/22 Motorized Rifle units are threatening the C/2C Armored Cavalry Squadron with encirclement. The only weak point is our holding the west flank with just the recon troops. No combat.

American Maneuver Phase: Some adjustments to cover those forces coming out of the corner that I didn't realize was East Germany. I'm using my helicopters to cover the Main River approaches.

Soviet Air Phase: Entering at hex Y1, the two MiG-29 flights operate together. I'm sending them in to lift some scalps in front of our heroic ground-pounders. They take their lumps (a half-flight loss), bomb the C/2C unit (one disruption) and clear out before the F-16 can intercept them.

American Air Phase: The F-16 fails to catch the MiG-29s and the A-10 unit attacks 2/51 Tank Battalion and misses. At least my air defense unit managed to fire three times and took out a half-flight of MiGs. There is a lesson here: keep plane types together (i.e., two flights per hex) to maximize their effect for each mission type. If I had sent both A-10 flights in together, I would have gotten a hit.

TURN 2

The NATO defense line looks very porous. Bruce is trying to hold a very long line and may get some units encircled.

Preparation Phase: *The 2/C2 Armored Cavalry Squadron is unable to remove its one disruption (a unit with one disruption cannot attack). The Soviets give direct air support orders to both SU-25 units and the American decides to keep his two available flights on the ground while the aircraft used on Turn 1 are readied.*

Soviet Maneuver Phase: Bruce is moving to cover

my approach but, perhaps, not quickly enough. C/2C's disruption remains—we attack! The 2/6 Artillery Battery breaks C/2C—a miss. Then the 1/51 and 2/51 Tank Battalions attack C/2C in maneuver combat—a "D2", yeah! This makes for a total of three disruptions, so C/2C is in big trouble. The 1/6 Artillery misses the enemy 2C helicopter unit, but the maneuver combat against it by the 3/51 Tank causes "D2" (on a roll of "1"). However, the American sky artillery fired defensively to put a "D2" on our own Hind unit (the 6th Helicopter) and took it right out of the attack. [*Any number of disruptions prevents a unit from attacking.*]

American Maneuver Phase: Unit C/2C is starting to look like it's commanded by Custer, and now the 2C helicopter unit is in trouble. Two disruption levels means that the unit cannot move or attack and loses its zone of control; it also had to be flipped to its non-moving—weaker—side. At least a disrupted unit doesn't have to attack adjacent enemies due to its lack of a ZOC.

Soviet Air Phase: Drat! I missed the moving Apache helicopter unit with my SA-13s (air defense unit 51) as Bruce moved it during his Maneuver Phase. My capitalist-seeking air defense missiles must get revenge for that lost MiG-29, but frankly I get scared everytime the air raid klaxon goes off. My Frogfoots manage to avoid the Hawk air defense unit (A/3/7) this time and get a "D1" on the 2C Armored unit.

American Air Phase: No air movement this turn. It's amazing how even one disruption can turn a unit in this game in a "munitions magnet". Can I blame this one on the dice?

TURN 3

Preparation Phase: *Since C/2C has three disruptions and is in an enemy zone of control, disruption recovery is impossible (a die roll of "1" is required to remove a disruption level of D3 and a "+1" modifier applies when in an enemy zone of control). The American 2C Armored unit sheds its one disruption, and the 2C helicopter unit recovers one disruption level (retaining one). Soviet air (since a half-flight cannot be used, there is only one MiG-29 flight available for operations this turn) remains on the ground. Both flights of both the A-10s and F-16s are given direct air support orders, and the 223 helicopter unit as their FAC.*

Soviet Maneuver Phase: Knowing that no air units are on the way, the American has no hesitation in blasting my 6th helicopter unit when I exposed it to a shot, and he gets one disruption. The 1/6th Artillery blasts the 2C helicopter unit for "D1", followed by a ground attack using the Engineers and 51ZSU units that scores only another "D1"—for a total of three disruptions on the Apaches, but missed the elimination. Drat! The engineer officer responsible has been shot by our fun-loving Commissar. Meanwhile the 3/51 Tank attacks the 223rd helicopter and gets an "A1" (attacker gets one disruption) result. The 3/22 Motorized Rifle, 1/51 Tank and 22nd ZSU units all attack the battle-weary Joes of C/2C. The accursed American artillery puts a disruption on 22nd ZSU, taking them out of the attack. The dice result is "B1" (both sides get one disruption). This finally kills off C/2C, and I put the Soviet disruption on (my choice of involved units) the 3/22 Motorized Rifle Battalion. The 2/6th Artillery blasts B/2C with no effect, and the 2/51 Tank and 2/22 Motorized Rifle battalions then attack, getting a "A1" (which I put on the 2/22nd).

American Maneuver Phase: Well, my 2C helicopter unit survives for another turn, but just barely. My line is certainly "collapsing", but not as I had hoped. However, there is a chink in his armor that I hope to exploit during the Air Phase. His 51 SAM unit missed my moving helicopters again—guess

he'll just have to shoot the battery commander. My 223rd helicopter attacks the 1/6th Artillery Supply unit [each artillery battalion has its own supply unit, and a supply unit with two or three disruptions cannot be used to flip the artillery unit from its fired side—i.e., no supply] and puts "D2" on it [both supply and headquarters units have low factors, being "soft targets" and almost any combat unit can easily get a good attack on them], as well as moving within six hexes of their division headquarters (i.e., close enough to "see" it, so acting as a FAC).

The Soviets have nothing in the air this turn. The Americans have all four flights ready to attack in two groups—one with the two A-10s and one with the two F-16s.

Soviet Air Phase: I just came to the horrible realization that we left the divisional headquarters back too far. It's not covered by our air defense umbrella and the entire USAF seems to be coming in loaded for bear this turn.

American Air Phase: Using my 223rd helicopter unit as my forward air controller, I figure there is about a one-third chance that I can destroy the Soviet division headquarters and stop his advance in its tracks. [The Soviet division headquarters is the Soviet's "overall" headquarters in this scenario. If eliminated, the other subordinate Soviet headquarters will have to be flipped to their non-moving sides and left there for the duration. Although this will not totally stall the Soviets, it will prevent any of their combat units from advancing beyond the ten-hex command spans of these immobile headquarters and greatly restrict the Soviet ability to maneuver.] The F-16s lose a half-flight to his only in-range air defense unit, but go in and get "D1" on the headquarters. Then, the A-10s roll in and get "D2" on the headquarters—a total of three disruptions, but I missed the essential elimination.

TURN 4

Preparation Phase: The Soviet divisional headquarters automatically removes one disruption level—it will not be able to move this turn, but still exists. Die rolls also remove a disruption from the 6th helicopter unit. All other die rolls fail or recovery is not possible and the units maintain their disrupted status.

Soviet Maneuver Phase: The KGB pushes me forward, ignoring the 223rd helicopter unit. I surround it from a distance, cutting it off from its headquarters so it won't be able to move anymore. My attacks have some small success, and the American cavalry should now retreat precipitously.

American Maneuver Phase: The 223 helicopter unit is cut off and unable to move; the 2C helicopter unit, now with three disruptions, is doomed, but will last a turn longer than I thought. My engineer also absorbed three disruptions—they're great fighters in towns but (with these die rolls) in woods they have the defensive skills of typists. Craig thinks we have enough for a fair article now [full scenario length is eight turns] so I am allowed to surrender gracefully.

FINAL COMMENTS

Bruce: To paraphrase, "Getting there is half the fun." I liked the game, but was really expecting *TAC AIR* to be more in the mold of *FLIGHT LEADER*. More accurately, it should be titled "OP (for Operational) AIR". The game definitely has some unusual features. The rules are well written, which is frustrating to the dedicated "rules lawyer". Many of the optional rules look very interesting.

Without simultaneous movement, the side with the initiative gets essentially an extension of their air mission ranges. Thus, on Turn 1, the Mig-29s were able to come on, bomb, and get away before

my air control F-16 could reach them. For this scenario, this may make it more attractive for the NATO player to set up south of row 17.

The inability of units with two or more disruption levels to move (to retreat, in my case) takes some getting used to. In combat, the attackers seem to have quite a large advantage. The worst that can happen to an attacking ground unit is an "A1" result. This enables a single battalion to "soak off" any number of defenders, while other attackers mass to get large "D" results.

All-in-all, with just a little imagination, it is easy to see that the key to this game is combined arms attacks/multiple air attacks. This can eliminate units in large numbers. Pure defense has to be combined with judicious counterattacks for the Americans to win this scenario.

Jay: In general, my initial impressions were borne out. *TAC AIR* displays the interaction of air and ground units. I do have some reservations (I served for two years with the 11th Armored Cavalry Regiment in Germany) concerning the cavalry's ability to disengage. I think that the flank selected for our attack is the best for this scenario, but I'll reserve final judgment until I've tried the others in future games.

Mike: I think the result would be very different if we were all more familiar with the system. I think Jay picked up the mechanics more quickly than anyone else, and coupled with his magnificent die-rolling that magnified Bruce's early errors, it showed in the final result. Next time, we could easily leave the countryside littered with burning BMPs. Of course, the invaluable assistance of Madman Michael, the Commissar, was priceless. I'm going to play this again soon, and next time I'll remember to cover the headquarters with air defense units. Even Russkies can learn from their mistakes!

TURN-BY-TURN POSITIONS

The following charts show the hex location of each unit—NATO and PACT—following movement during their respective half of each game turn.

NATO Unit	Initial Set-Up	Turn:			
		1	2	3	4
9th Engineer	P15	R20	V21	W18	W18
223rd Helicopter	M13	W15	Z16	AA11	A11
3/7 Air Def HQ	T22	T22	T22	V22	W22
A/3/7 Air Def	Y18	Y18	Y18	W21	W21
3/7 Supply	X21	W18	W18	V21	V23
2C HQ	T18	T18	T20	T20	S24
2C Artillery	S15	S17	S17	S17	—
2C Art. Supply	S16	S18	T18	S18	S22
2C Helicopter	V12	Y15	Y15	Y15	—
2C Armored	Q15	Q16	S16	R16	S20
A/2C Cavalry	M12	O15	Q16	Q17	Q19
B/2C Cavalry	S13	S13	U16	U17	T18
C/2C Cavalry	W10	—	—	—	—
2C Supply	S14	S16	T19	T19	T23
PACT Unit	Initial Set-Up	Turn:			
		1	2	3	4
6th GTK Div HQ	O5	W6	X5	W10	V14
6th Recon	O7	P9	N12	O16	O18
6th Engineer	BB7	BB10	AA13	Z15	BB15
6th Helicopter	R4	T10	W12	W12	W13
1/6 Artillery	BB6	BB9	Y12	W14	W15
1/6 Art. Supply	CC5	CC8	CC10	AA12	AA12
2/6 Artillery	Q5	T8	T10	S14	S14
2/6 Art. Supply	Q4	R6	T8	S12	S12
22nd GMRR HQ	S5	S6	R9	S13	T14
22nd Air Def (SA-13)	R6	T7	V9	U14	U15
22nd Air Def (ZSU-23)	S6	R9	S10	U12	S15
1/22 Mot. Rifle	Q6	R11	R11	R14	Q15
2/22 Mot. Rifle	T5	X8	X12	U15	U16
3/22 Mot Rifle	S7	U10	U11	U11	Y14
22nd Supply	S5	S7	U8	R11	S13
51st GTR HQ	BB5	AA9	Z11	X12	W14
51st Air Def (SA-13)	AA6	Z9	Y13	W15	W16
51st Air Def (ZSU-23)	CC6	CC10	AA13	Y14	Y15
1/51 Tank	T4	X7	W11	V12	T16
2/51 Tank	AA7	Y11	V12	V15	W17
3/51 Tank	CC8	BB11	Z14	Y16	Y18
51st Supply	CC4	CC7	BB9	AA14	AA15

Well, there you have it—the likes, gripes and lessons learned in the initial contact with an innovative new game. Despite the fact that I was present at the game, the boys picked up on it very quickly and I had few questions to answer. As a matter of fact, I spent most of my time reading a book. As stated at the start, this type of article is a new approach to Series Replays, so we'll be very interested in seeing how it rates with the readership. In some ways, even though he lost, Bruce did much better than I did the first time I played *TAC AIR*, but I'll just end this article on that observation and not elaborate.



CONTEST #144

Every wargamer knows how important the initial set-up can be, and for *TAC AIR* this may be even more true than usual—especially when playing the oft-outnumbered NATO forces. As the Series Replay in this issue points out, an overlooked factor can lead to a disaster that even the best play cannot avoid. Game-winning strategy demands efficient use of all assets, and this begins with the set-up. The premise of this contest is fairly straightforward: set up the NATO ground forces for Scenario One of *TAC AIR* in the best possible manner to win. All rules of the game and for "Deployment" for this scenario must be adhered to in crafting a set-up. (Note that, while there is no "perfect" or "correct" set-up, there are certain precepts of good strategy we will be using in judging the entries.)

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Simply indicate the hex location of each NATO unit in the space available. Ten winning entries will receive a merchandise credit voucher from The Avalon Hill Game Company. To be valid, an entry must include a numerical rating for this issue as a whole and a listing of the three best articles in the judgment of the contestant. The solution to Contest 144 will appear in Vol. 25, No. 3 and the list of winners in Vol. 25, No. 4 of *THE GENERAL*.

REVOLUTION

If you've played and enjoyed *KREMLIN*, but miss all the fun fellows that brought Communism out of the dusty corridors of academia and into the hearts of the people, we've just the thing for you. You'll want to expand your horizons with Avalon Hill's deck of historical variant cards for the game, depicting caricatures of such lovely folk as Joseph Stalin, Leon Trotsky, Laurenti Beria, and old Vladimir Lenin himself. In all, 26 new politicians crawl out of the pages of history to help you purge, plot and power your way to the top in *Revolution*, the *KREMLIN* variant. And if you need help getting them to the top, Don Greenwood included a complete set of new Intrigue cards, designed to reflect their times. Even if adding the historical characters doesn't appeal to you, the *Revolution* variant cards will greatly enhance your play of the contemporary game through the added possibilities of a combined Intrigue deck to draw from.

The *Revolution* Variant Kit is available for \$8.00, plus the usual 10% for shipping and handling (20% for Canadian, and 30% for overseas orders). It can be ordered direct from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Maryland residents please add 5% state sales tax.

Dear Editor,

I realize of course that *THE GENERAL* is primarily a wargaming magazine, and as such concentrates primarily on the "games" aspect of wargaming—as well it should. But in Vol. 24, No. 6, Jon Mishcon's "Squad Leader Clinic" strayed into the realm of reality when he described how hollow- and shaped-charge weapons work. Unfortunately, he left readers with the wrong impression on how HEAT really works.

The first thing one must realize is that "HEAT" is just a useful acronym and shaped charges do not burn through anything. Ask a welder or anyone who makes their living with an oxy-acetylene torch how long it would take to melt or burn through the armor plate of an AFV.

Like I said at the outset, *THE GENERAL* is foremost a wargaming magazine and perhaps technical accuracies can be glossed over. However, I'd venture to say that most wargamers are in the hobby as much for the simulation of reality as for the gaming. If you're interested, what follows is how a HEAT round actually works:

When a HEAT projectile strikes a target, detonation is initiated and a wave passes through the explosive and collapses a hollow cone toward a hollow axis. Molten metal, plus the detonating wave and explosive gases, all center on this axis and jet forward at tremendous speed (about 3300 fps for a modern RPG-7 round) and pierce the target by sheer momentum—not heat.

Mr. Mishcon is correct when he says that proper positioning, rotation of the projectile, etc. all affect the effectiveness of HEAT projectiles. This is why you'll often find sandbags, wire mesh fence, and other common items on tank turrets, as this increases the standoff distance for HEAT rounds. He just got the reason wrong.

Tom Slizewski
Thornton, Colorado

★★★★★

Dear Sirs,

In Vol. 24, No. 6 you list the "correct" response to Contest #141. This answer works fine, but there is another, higher scoring possibility. If one proceeds as in the actions listed in the first possibility, Blue can win. By killing both Harald and Harold, William will become sole king by Rule 12.5. The Normans now hold three areas (Devon, Cornwall, Avalon). The Norwegians with five areas cannot contest the kingship. This then gives the Blue player the win. This was certainly a challenging contest; thank you for the fun.

Jared Roach
Ithaca, New York

★★★★★

Rex:

Since I've not hesitated to give you a lashing when I think the magazine deserves it, I'll give you my compliments on your most recent issue. Holy cow!—ANZIO, THIRD REICH, B-17, ASL, PG GUDERIAN! I own these! These are actually war-games, and I haven't hit the jackpot like this since the days you guys only made ten games. Keep more of this type of stuff coming, and the hell with MYSTIC WOOD and MOONSTAR. I was so "moved" by this issue that I honestly pulled ANZIO and PG GUDERIAN off the shelf and looked through them—and, after all, that's what's supposed to happen, right? Good job! Except that a third of the print devoted to one article is a bit much; perhaps two articles on the same game is better.

Lindsey Murillo
Nuremberg, Pennsylvania

★★★★★

Gentlemen:

I am the owner of E&E Games and very interested in the future of my business. On an average, I sell at least three to eight Avalon Hill games a week, not to mention *THE GENERAL* magazine. I started asking my customers questions on what their likes and dislikes were in the hobby, subjects they like, what they played regularly, etc.

I asked if they filled out the "So That's What You've Been Playing" questionnaire and mailed it. Most said that they didn't want to because they didn't want to tear up the magazine (loses its

value) and go through the trouble. What I've done therefore is xeroxed (several) sheets of the questionnaire and had my regular customers fill them out as they wished. Many of the customers play the game AIR FORCE and DAUNTLESS here at the store on Saturdays, as you can tell. Other games played here are ANZIO, UP FRONT, TOBRUK, SQUAD LEADER, SUBMARINE and a few other games from other companies. I hope this helps in some way for future projects and the continuation of a fine product.

E. Visnowski
Los Angeles, California

It is all too rare that gamestore owners and operators are also wargamers, and even rarer that they make any effort to promote the hobby. Mr. Visnowski has expended a few cents and some time, and in the process helped a number of gamers make their views known to the designers here. And his support for wargaming doesn't end there, as his reference to a gaming session in his store indicates. I feel that it is important to acknowledge his effort, for only by such from the retail merchants—in addition to those by the game manufacturers and hobbyists—will wargaming continue to expand and prosper. Unlike so many of his compatriots, Mr. Visnowski has refused to simply sit back and decry the deterioration of our hobby. Instead, he makes every attempt to foster its growth, perhaps recognizing that the health of the hobby cannot but mean the health of his business as well.

★★★★★

Dear Don:

I agree with most everything you had to say about the Avalon Hill Championships. I like tournaments where I can compete against the best players, but I no longer have the time to commit to a PBM tournament. I like the camaraderie of a small group of veteran gamers like Burno Sinigaglio, Phil Evans, etc.

I too prefer the atmosphere of college campuses to downtown convention centers. I have no desire to attend a holiday weekend convention in a busy tourist area like Harborplace. A number of veteran gamers, including myself, did not attend the July 4th weekend convention in Baltimore this year primarily for this reason.

I prefer Avalon Hill game tournaments—primarily of the older, more established titles. I prefer true double-elimination tournaments, but have no problem with two or three single-elimination ones. As I'm sure you are aware, grognards like myself have no problem with playing two games at one time. One of the events I would most like to see is a tournament where the participants would have to play more than one game. A true champion should be good at more than one title, or even one side of a single game. Such a tournament could consist of several classics, plus RUSSIAN CAMPAIGN. Where possible, a player could not repeat a game or side.

Robert Beyma
Pocomoke, Maryland

Unfortunately, as we delved deeper into the matter, economic considerations forced us to forego holding any AH Championships in 1989. Perhaps next year, with a bit more lead time to operate in, we can look at hosting such an extravaganza for the hard-core competitors.

★★★★★

Dear Mr. Rex Martin,

I have to admit I was amazed at the fact that you responded to every point in my previous letter to you. I thought you put those kind of letters in your circular file. Even though you did not agree to anything I had suggested, it's nice to know you cared enough to write back. Thank you!

Before I get to the reason I'm writing this letter, let me tell you a little bit about what has been going on in the Chicago area this past year. In December of 1987, I ran an ad in *THE GENERAL* wanting to start a club in my area. A year later we had 50 members, with a current roster of 45. We call ourselves the "Windy City Wargamers". We are going to meet twice a month in three different locations in 1989. While looking over the games we have played in the past

Letters to the Editor . . .

year, I see that 98% of them are Avalon Hill products. Five of us (myself included), if we put our games together, own over 200 of your games.

Now the reason for this letter. The members of Windy City Wargamers would like to help you out if you ever need playtesters in the future. We also have a request. We print a newsletter 18 times a year, and would like to know if we could get some inside info on what's going on at "the Hill." This would be shared with our members through our newsletter. Are you interested in receiving this newsletter? Again, thank you for your time.

Rich Wiet
Schaumburg, Illinois

To Mr. Wiet, and to all the other club newsletter editors, many thanks for your interest in our doings. I am always willing to drop a short note to any who may wish to write; at the very least, I can keep you apprised of some of our ongoing projects, calls for playtesting, and new releases. I have always felt that the mark of a healthy hobby is a healthy amateur press, for it is these that make our common interest much more personal. And it works both ways. I would certainly like to receive any club newsletters; these keep us abreast of your doings and your likes and criticisms.

★★★★★

Dear Editor,

After receiving Vol. 24, No. 6 of *THE GENERAL*, and being informed that my subscription had expired, I immediately sent in my renewal—as I have for the past 13 years or so. I like a lot of things about *THE GENERAL*—it's "first class" in artwork, writing, etc. In fact, I was truly honored when you selected my article "CIVILIZATION—Quo Vadis" for publication in Vol. 21, No. 5 and was elated when it was voted 3rd best in that issue!

However, I am sometimes hesitant to renew my subscription. There are a few things that bother me, one of which I have written about before. Here they are:

1) Do not concentrate too much on one game. Vol. 24, No. 4 on *ST. NAZAIRE* was almost useless unless one owned the game. Instead, spread the wealth among many games—no more than two articles per game.

2) Your announcements are premature. For example, about a year ago, you said you'd have an *ALAMO* game out early in 1988. I was really looking forward to this one—but I'm still waiting. Also, in Vol. 24, No. 5 you stated that 2nd Edition *KINGMAKER* rules were for sale. I sent in my check within a week, and was sent a voucher stating the rules weren't ready yet! If they weren't ready, why were they advertised?

3) Your new game announcements aren't always very descriptive. For example, in Vol. 24, No. 6 you advertised *KREMLIN* with no indication of its complexity, or how many people are needed to play it, or if it's suitable for solitaire (meaningful for me). I bought *STELLAR CONQUEST* not knowing these things, and wound up giving the game to Goodwill because it was totally bad for solitaire and had a very onerous record-keeping system which detracted from the game's being fun.

Despite the above, I renewed again—and look forward to six more issues.

Daniel Ferens
Fairborn, Ohio

While pleading guilty on some counts (notably that our advertisements don't always give all the detail a potential buyer might wish), I would like to make a couple of points. First, readers must remember that I am dependent upon the information and writing of a great many other folk in this company; despite my best efforts, I couldn't possibly set down every word in this magazine. Thus, the advertisements are often the work of others, as is much of the information on new products (the new KINGMAKER rules edition, and Bruce's announcement of his effort on the proposed Alamo game). While I try my best to insure that the information is correct, I have no control over the production schedule of such new items and certainly not over the actions of the designers/developers here (Bruce's depart-

ture brought the Alamo project to a halt). As for the article mix, that is squarely on my shoulders, and especially on a featured game I will print all that I think is necessary to give the readership the most complete basis for judgment possible. Indeed, I will point out that such articles give the readers, better than any ad, the type of information to satisfy all their questions on a new purchase (number of players, complexity, systems, artwork, and some of the other things Mr. Ferens mentions). Of course, with the expansion of the magazine, this complaint of over-saturation may be lessened.

★★★★★

Dear Rex:

Enclosed is our 1988 RBG ratings sheet. Sorry about the delay in filling it out. We want to take the opportunity of sending you the ratings to make a few comments about *THE GENERAL* as well as give you some feedback on recent games.

After a period where we were seriously considering allowing our subscriptions to lapse (had it expired four issues ago, George probably would have), we have become much more pleased with *THE GENERAL* (we have separate subscriptions). The change is largely due to the nature of your coverage and we would like to see it continue. As you can see from the game rating sheet, George owns a hefty percentage of AH games—probably 70 or more—and I own many others. Yet for a long time, we were finding few or no articles that interested us (despite ownership of *SL/ASL*, our dislike for the game means articles on those games aren't interesting). While we recognize that empirically we should not expect to find issues constantly laden with articles on the game we own (or play), the dearth of such articles contrasted with the many on *ASL*, *THIRD REICH* and the modern game was annoying. We realize that there are many ardent admirers of these games (they certainly have differing opinions of many on the games we enjoy), but our desire to get *THE GENERAL* waned after the prolonged monopoly of the magazine by these games.

Over the last four issues, however, we have observed a much broader coverage of our games in *THE GENERAL*. Leading articles on *DIPLOMACY*, *BRITANNIA* (which George does not own, but nevertheless enjoyed the article), *THUNDER AT CASSINO* and *RAID ON ST. NAZAIRE* were a refreshing contrast. In fact, the articles prompted George to buy *RSN* and may lead to the purchase of *BRITANNIA* at a later date. In addition, the other articles were much more diverse than they had been. We should note that some of this commentary may relate indirectly to the games you have been publishing recently as much as your editorial policy, but we perceive the overall article mix to be much better.

Michael Dworkin and George Young
Haverhill, Massachusetts

★★★★★

Dear Rex:

Thank you for passing my ideas for *FIRE-POWER* expansions to Craig Taylor. The economic situation has certainly not been good for wargaming, and it's a shame that the kinds of projects that Craig and I envisioned for *FIRE-POWER* cannot be practically and profitably implemented as they might have been ten years ago.

I do have one piece of positive hobby news that you might want to include in the magazine, depending on demands for space and the publishing schedule. I'm going to be teaching an adult education class for the Community College of Allegheny County, geared specifically toward getting novice gamers into the hobby with as little trauma as possible. It will meet for 15 weekly sessions starting on Tuesday, February 7 from 7:00 to 10:00 PM at Beattie Technical School in the North Hills suburb of Pittsburgh. Information can be obtained from:

Continuing Education Department
CCAC Center-North
1130 Perry Highway
Pittsburgh, PA 15237

With all that's been said and written recently about the dearth of new gamers and the difficulty of getting new people into the hobby, I'm glad to have the opportunity to do something about it.

James Werbaneth
Allison Park, Pennsylvania



THE LAAGER

South Africa's War and FIREPOWER

By James P. Werbaneth

To say that South Africa faces difficulty would be a grave understatement. *Apartheid*, its system of institutionalized white supremacy, has provoked the progressive radicalization of the country's black majority and has drawn global condemnation and ostracism. If it were practical, the Republic of South Africa would probably be run entirely out of the international community. However, South Africa's fortunes are tied less to the overrated force of world opinion than to its own vast natural resources and the tenacity of the *Afrikaner* people. Inconvenienced the South African government may be by world opinion and sanctions; still it is in control of its own destiny.

The foremost South African natural resource is its location on the Cape of Good Hope. The first Dutch settlers came to the Cape in 1652 to establish a way station for ships plying the trade between the Netherlands and the East Indies. Today, enormous amounts of oil flow from the Middle East, around the Cape, and to ports in Europe and North America. Though domestic politics might make it expedient for the United States and Western Europe to sever all contact with South Africa and watch dispassionately as varied ethnic and ideological factions vie for control, the Cape is strategically too important to concede to other parties possibly hostile to the West and its economic interests. Thus, despite all of the West's anti-apartheid rhetoric and talk of divestment, South Africa enjoys at least its tacit support.

South Africa's underground resources are similarly vital and increase its importance. It is the world's leading source of gold, producing three-quarters of the non-Communist world's output during the seventies. Diamonds are another leading asset, as are strategic minerals such as chromium, manganese, nickel and uranium. These fuel an economy that, despite periodic slowing, is the strongest and most vibrant in sub-Saharan Africa. This makes it a profitable and generally safe area for foreign investment. Divestment may make good sense to many people on moral grounds, but South Africa can be a very good place to make money. Furthermore, South African mineral exports are too important to Western industry to allow human rights to be the only concern of foreign policy.

The South Africans have adroitly used the blessings of nature to insure the security of their country. The economy is an excellent example. There are other countries in Africa with comparable natural resources, but they lack the cohesiveness and economic aptitude of the South Africans, white and black. States such as Zaire, the Sudan and Angola labor under the burdens of rampant tribalism, economic misinvestment and mismanagement, and (especially in the case of Zaire) rampant corruption, as well as the tribalism and ethnic competition that is present over nearly the entire continent. Even if one allows for the factor of intrusive foreign influence, the bottom line is that South Africa has proven far more capable of tapping its resources than any other country south of the Sahara. Unpalatable as it may be to white South Africa's many opponents, it is a major reason for its continued existence.

As well as a major economic force, South Africa is a regional military juggernaut. It has been able to circumvent international arms embargoes, and what it has not been able to purchase abroad it has manufactured at home. Furthermore, *Afrikaner* identity and cultural traits give the South African Defence Force (*SADF*) a high degree of cohesiveness and excellent morale. Together with excellent mobility, flexibility and firepower, these make the *SADF* Africa's best military establishment.

South Africa's population is 33,241,000 (1986 estimate). Whites number only 18%, but are the only people to enjoy full citizenship and completely dominate the country. Asians, primarily Indians, are 3% of the population; and mixed-race "Coloureds" are 10%. The tri-cameral legislature has separate houses for Asians and Coloureds, but only the whites have the power to pass nationally significant legislation. Blacks constitute 68% of South Africa's people. They are denied both enfranchisement and the rudiments of citizenship, and their role in the economy is primarily one of cheap and abundant menial labor. The objective of apartheid is to perpetuate this situation and prevent the blacks from effectively challenging the whites for any type of power.

Officially, South Africa tends to blame all facets of its conflict with most of the rest of the world on the struggle between Western liberty and capitalism

and Communism. To an extent, this is true—as the USSR and its allies are interested in the Cape and its resources, simple because anything so important to the West would attract the attention of its rival. But the primary factor is ethnicity. Blacks generally want citizenship and meaningful power in South Africa, and the Coloured and Asian populations wish to improve their own subordinate positions. The *Afrikaner*-led whites aim to forestall the blacks, make minimal concessions to the others, and preserve their status as the rulers and owners of South Africa. Communism does play a part in the struggle in South Africa because ethnic conflict provides a perfect opportunity. Race is, without doubt, the independent variable.

Moreover, there are ethnic divisions that affect social dynamics within even the black cause. The blacks are divided into distinct ethnic groups (for example, the Zulu, Xhosa, Tswana and Sotho). Ethnic considerations can have profound effects on the prospects for black unity. The most important example of tribalism in politics is the ongoing feud between *Inkatha*, the Zulu-dominated movement led by the Zulu chief Gotsha Buthelezi, and the most powerful black organization, the African National Congress (*ANC*). Relations between *Inkatha* and the *ANC* have long been strained, and there have been instances of violent clashes between members of both organizations.

Likewise, the white population is hardly an ethnic monolith. Some 57% of white South Africans are *Afrikaners*, 39% are of British extraction, and 4% belong to other ethnic groups (such as Portuguese and some non-British Jews). Though other white groups are vital to South Africa, it is the *Afrikaners* who dominate it. The *Afrikaners* are so inexorably tied to South Africa that *Afrikaner* nationalism and South African nationalism are virtually one and the same.

AFRIKANERS AND APARTHEID

The *Afrikaner* nation has its roots in the seventeenth century, when colonists from the Netherlands landed at the Cape of Good Hope. In the centuries to come, the Dutch, isolated from the far more settled and liberal mother countries, evolved a

separate culture with even a language (Afrikaans) that departed from the European Dutch.

The most striking feature of Afrikaner culture is a collective siege mentality. Its positive traits are cohesiveness, a fiercely guarded independence, and an enduring ideal of self-sufficiency. On the negative side, the Afrikaner people have demonstrated a close-mindedness and occasional contempt for non-traditional ideas of external origin, and recurring self-righteousness and chauvinism. It is no coincidence that Afrikaans has been identified among blacks with white supremacism.

It must be remembered that the combative, insular pride of the Afrikaners is not the result of some original sin of arrogance. It is the result of nearly three centuries of often brutal competition for their African homeland and their very survival as a people. The Afrikaner people have developed a siege mentality because, throughout their history, they have had very good reasons to view themselves as under siege.

The British were long a bane of the Afrikaners. The Boer Wars between Britain and the Afrikaner republics of the Orange Free State and the Transvaal are only the best known and most dramatic examples of this. However, the conflict was seldom so overt, and tended to be more of a cultural than a military conflict. After the Cape region passed to British control in 1806, the new rulers enacted policies that the Afrikaners viewed as attempts at cultural subversion and assimilation. English was established as the official language, and the British encouraged liberal institutions, especially those regarding blacks, that infuriated the far more conservative Afrikaners. Interracial education commenced, and the Pass system that regulated the movements of Coloureds was dismantled—though in 1828 it was extended to the Khoikhoi (*Hottentots*) and incoming Xhosa. Indeed, the British truly were trying to Anglicize the Afrikaner people. That the blacks were also subjects of the same British cultural chauvinism was of no comfort. The Afrikaners rebelled in 1806 and in 1812, in neither case with any success.

However, the armed revolt was not the archetypal Afrikaner response to British domination. The response most vivid in the collective Afrikaner memory is the "Trek". The Trek was less an act of rebellion than one of escape, in which the Afrikaner people pulled up stakes and migrated into the as-yet ungoverned interior. To South Africa, the trek wagon is even stronger a national symbol than is the very similar Conestoga wagon to the western Americans.

The *Voortrek*, the single greatest migration of Afrikaners from Cape, took place from 1834 to 1856. Although general British superiority was the underlying cause, the specific issues driving the Afrikaners north was race. Britain halted the importation of West African slaves in 1807 and extended some protection to blacks the next year. Emancipation came to the Cape in 1833, and some Afrikaners promptly left. The trekkers represented a distinct minority of the Cape's Afrikaner population, and were mainly the poorest farmers from the northern frontiers. In the 1850s, the two countries founded by these trekkers, the Transvaal and the Orange Free State, were recognized by Great Britain.

The relationship between the Afrikaners and the blacks is of crucial importance. The traditional Afrikaner view assigns blacks to two types of roles: subordinates or enemies. The first colonists brought West African slaves with them. In 1707, there were 1100 slaves to only 1800 Dutchmen. By 1795, slaves came to outnumber whites by about 17000 to 15000. (By this time the whites were thinking of themselves as Afrikaners, and not just as Dutchmen who happened to live outside the Netherlands.)

Blacks continued to serve as inexpensive labor even after the end of slavery. Menial labor became the domain of blacks (even as it did in the United

States), and unbecoming the dignity of the white man—who after all saw himself as born to rule. The corollary was that the better jobs were unquestioningly reserved for whites. In the nineteenth century this was connected with the linguistic practice of calling black Africans *skepsels* ("creatures") as opposed to *mense* ("people"). The Dutch Reformed Church in South Africa supported the subjection of blacks as "theologically justified" into the 1970s; and even the rejection of this doctrine was done in such a way as to hardly be mistaken for an unequivocal endorsement of racial equality.

The second essential view of the black is as a mortal enemy. As the Afrikaners trekked north, they encountered migrating blacks that desired the same land. The blacks had the advantage of numbers and, especially the Zulus, could be well-organized and competently led. Nor did the Afrikaners have a monopoly on courage.

If the first view of the African blacks has a basis in contempt, the second has its roots in fear. Enemy blacks are perceived as subhuman hordes, terrible foes of God's chosen people, who in the end might be overwhelmed. The enduring cultural image of the response to black enemies is the *laager*. Literally, the *laager* is the circling of the trek wagons, which then form a wooden fort. On another level, it reflects the stubborn resolve of the Afrikaners to band together and fight against a fearsome and barbaric enemy. Retreat is not an option. No allies are going to come and save the day (as the U.S. cavalry did for beleaguered American wagon trains in the movies). All depends on the ability of the people within the *laager* to persevere. This image applies as readily today, as the Afrikaners see themselves surrounded by a multitude of determined enemies, as it did during the *voortrek* era.

One Afrikaner characteristic must always be borne in mind when analyzing events in South Africa. The Afrikaner homeland is Africa. They have not been Dutch since sometime in the eighteenth century, and the Netherlands is even less of a homeland for the Afrikaners than England is for the Americans. There is no longer a place for them to trek away from their problems, and there is no retreat to Europe. Today's Afrikaner nation is no less determined to survive than at any other time in its history, and when South Africa's foreign opponents have moved on to newer and trendier moral outrages, the Afrikaner survival urge will not have diminished.

Apartheid is the reason why South Africa has become a pariah state. It is the political and legal enforcement of the white race's dominance in South Africa. It is a peculiarly Afrikaner problem. It is much more than simple segregation or institutionalized racism, however. Apartheid and the very efficient enforcement of its sometimes draconian strictures are major components of the modern *laager*. It defends the *status quo*, simultaneously recognizing black Africans as needed workers and as dangerous rivals.

Apartheid has its roots in the early nineteenth century, when internal passports were first required of blacks. It was formalized in the early 1950s as a coherent official policy. The first of two critical laws establishing apartheid was the "Group Areas Act of 1950", which allowed the government to create segregation where it did not previously exist by forcing people in the "wrong" areas to move. The "Bantu Authorities Act of 1951" established the ethnic-based "homelands" for blacks. For the most part, blacks are excluded from living in cities.

The "Bantu Education Act" represented a concerted effort to divide South African blacks along ethnic lines. It set up eight separate black educational systems, one for each tribal "nation". In the early grades, education is conducted in the tribal vernacular, not English or Afrikaans. The goal is to strengthen ethnic identification at the expense of broad racial consciousness, thus inhibiting intertribal

resistance to white rule. Thus far it has worked to perfection.

Naturally, blacks are excluded from voting or holding political office. Until 1966, they were also bound by a hated system of internal passports called "Passbooks", severely limiting their choice of working and living areas. Blacks could be arbitrarily banished to homelands designated by the passbooks—places that could have been just as arbitrarily chosen.

Apartheid's "official" goal is the guidance of the Africans toward full partnership in governing South Africa. In 1961, Prime Minister Dr. Verwoerd named three alternatives for the future of his country: 1) surrender of white South Africa, with whites remaining under a possible black dictatorship or "evacuate the country to their forebears"; 2) make incremental concessions, leaving it to future generations to cope with the "final racial confrontation"; 3) "There is another method, however . . . live and let live—apart!"

This paternalistic version of apartheid should fool no one. Apartheid is intended to preserve white power, not prepare anyone else to share in it. Nobody is about to open a gap between the wagons.

THE SOUTH AFRICAN DEFENSE FORCE

South Africa's military may be fairly small, but it meets very high standards, despite foreign arms embargoes and chronic manpower shortages. It is the best in the region, and one of the best in the world.

The SADF's manpower is divided into four categories according to terms of service. The "Permanent Force" is its professional core and, although it consists overwhelmingly of white males, includes some white female and black units. Instituted in 1968, "National Service" is the category of white men aged 18-25 serving their compulsory two-year initial military duty. Upon discharge from National Service, they go into the "Citizen Force" for twelve years. This is a reserve that also includes some volunteers. "Commandos" are local defense units in the tradition of the Afrikaner militias. White men must serve until age 55 in the Commandos, which also includes many white women and black volunteers. Of the Citizen Force and the Commandos, the former provides most of the trained part-time military forces and supplies units to the army, navy and air force. All service categories underwent massive expansion during the 1960s and 1970s.

Table 1: SADF Expansion

	1960	1967	1974	1977	1979
Permanent Force	11500	13000	21500	28000	40000
National Service*	11000	23000	26000	27000	60000
Citizen Force	2000	30000	120000	180000	230000
Commandos	48500	75000	90000	120000	150000

*: Before 1968, National Servicemen were selected by a ballot system.

Source: Richard Leonhard, *South Africa at War: White Power and the Crisis in South Africa* (Westport: Lawrence Hill, 1983)

The South African Defense Force is divided into four branches. The army constitutes 80% of it and is the backbone of the SADF. Other arms are the air force (founded in 1920) and the navy. In July 1979, the South African Medical Services became the SADF's fourth arm.

The army benefits from an effective combination of firepower and mobility. It has a large tank force, assembled in the seventies, consisting of Centurions acquired from Spain and India (now known as "Oliphants"). Equally important is a large force of armored cars, which are highly effective in a region where much of the terrain is unkind to tracked vehicles. These are principally the French Panhard and the very similar South African Eland. For training purposes the South African army also has Soviet-built T-34/85, T-54, T-55 and PT-76 tanks, as well as some BRDM-2 armored cars.

The army's fire support is centered on advanced 155mm howitzers. Italy has reportedly sold South

Africa American M-109 howitzers, and an American company has supposedly sold extended-range guns capable of firing nuclear shells. South Africa also manufactures its own G-5, which uses ammunition developed with American and West German help. It is also entirely possible that South Africa has acquired a nuclear capability. Difficult as South Africa may be to overcome militarily now, tactical nuclear weapons combined with a dependable delivery system such as 155mm artillery could turn such an effort into a horrific bloodbath.

The South African army also possesses an excellent mechanized transport capability. Its tracked vehicles include M-113A1 armored personnel carriers purchased from Italy and Portuguese license-built Commando V-150s. Again, wheeled vehicles are more commonly used. Finally, the SADF has an excellent airmobile capability provided by the air force. The army is sufficiently flexible that it is not permanently wedded to its motor and air transport, however. When operational needs call for it, South African units readily opt for foot movement.

All helicopter and fixed-wing transports are under the control of the air force's transport command. "Strike Command" includes all primary combat aircraft; "Maritime Command" conducts offshore patrols; and the "Light Aircraft Command" performs low-level reconnaissance, liaison and evacuation missions. In addition, there are thirteen Air Commando squadrons, in which reservists train in their own light planes, which they fly operationally if their units are called up.

South Africa bought the Mirage III and Mirage F-1 from France, and now builds the Mirage III domestically. In 1966, it began buying the Macchi MB 326 basic jet trainer, modified for a ground attack role, from Italy. It is called the Impala II in South Africa, which now manufactures it also. The "Simonstown Agreement" with Great Britain allowed the acquisition of the Hawker Siddeley Buccaneer strike aircraft and Wasp helicopters, as well as parts and maintenance for Canberra light bombers and Shackleton maritime patrol planes. Besides the Impala II, Italy provided the SADF with Piaggio P-166 light transports, American-designed Lockheed AL-60 and AM-3C light planes, and civilian models of the Augusta Bell "Huey" helicopter. France sold Transall heavy air transports and Super Frelon, Puma and Alouette copters to South Africa.

The navy is the smallest arm of the SADF. It was formed in 1946 with ships provided by Britain, and the 1955-75 Simonstown agreement with the UK has permitted it to operate with the Royal Navy, and informally with NATO. In return, the British had access to the vital base and facilities at Simonstown. With the passage of the United Nations arms embargo in 1977, South Africa declared a naval policy shift in which regional defense would take precedence over insuring the security of the Cape sea lanes.

The South African navy's most important asset is not its seagoing capability. It is the Silvermine electronic intelligence center at the Cape of Good Hope. This enormous complex allows the monitoring of wide areas of the South Atlantic and Indian Oceans, and will be of immense value to any country with access to it in a future naval war.

The SADF has three types of special warfare units. The army has reconnaissance Commandos (*Recces*), which function as special forces, as well as a brigade of paratroopers. In addition, in 1979 South Africa created a force of marines; their mission is primarily harbor and port defense.

The SADF's material needs have been largely fulfilled by Western Europe, with France as the chief arms supplier. But increasingly South Africa has been able to provide its own needs through the giant arms manufacturer Armscor. With its subsidiaries, Armscor is able to build weapons as sophisticated as the Mirage III. More prosaically, it also developed

the R4 5.56mm assault rifle, a weapon very similar to the Israeli AR Galil and which has been replacing the FAL and G3. Too, Armscor builds the M4 Commando, a 60mm mortar of local design, and is augmenting its electronic capabilities.

Manpower has been a far more serious problem. White South Africa has a small population, putting a definite premium on white manpower. One method of alleviating shortages is the sort of universal, white male conscription that the country currently employs. Another is to increase the role of non-whites in the SADF.

This is understandably a very serious issue to the South Africans. There is a precedent for non-white military service, however, as blacks served as support troops, gunners and sailors during World War II. They were demobilized afterward and excluded from service. The Cape Coloured Training Corps was reactivated in 1963. The navy also began to recruit blacks, and by 1979 a fifth of its Permanent Force personnel were Coloured or Indian.

The army began training black volunteers in 1974, but a year later this program only included 35 native Africans. In 1975 the army nevertheless managed to form a black battalion, the 21st, which had 575 blacks up to the rank of corporal. Plans call for the formation of more black units in the 1980s. Still, the SADF remains overwhelmingly white:

Table 2: Racial Make-up of the SADF, 1981

Race	Percentage
White	92.00%
African	1.05%
Coloured	5.86%
Indian	1.09%

Source: Peter Randall (ed.), *Survey of Race Relations in South Africa, 1982* (Johannesburg: South African Institute of Race Relations, 1983)

A 1982 White Paper on defense and armament supply stated that the SADF was mainly dependent on white males for manpower. It added that this would not be in the national interest in the future, and that members of other races and white women would become important too.

Exacerbating ethnically-based personnel problems was Afrikaner domination of the SADF. In 1975 the South African government reported that 85% of the army's permanent staff was Afrikaners, 75% of the air force's, and 50% of the navy's. This left English-speaking whites feeling "not wanted" and with little opportunity for advancement. The South African *Financial Mail* reported in February 1980 that: "It was not uncommon [in the 1970s] for an English-speaking officer to remain unpromoted for 17 or 18 years, and the result was that the cream of the Defense Force left in disgust." This was remedied during the seventies by policy changes and massive military expansion.

NAMIBIA

A lot is at stake in Namibia, also known as South-West Africa. Besides forming an expansive buffer between South Africa and hostile, Marxist Angola, it is another treasure trove of natural resources. Namibia is the world's leading producer of gem diamonds and is Africa's principal source of base metals. It is also so rich in uranium that it supplies about a sixth of the West's production.

Germany established a colony in South-West Africa in 1884 and almost immediately began skirmishing with the Herero people. Open revolt broke out in 1904. Three years later 65000 out of the original Hereros were dead, with losses in the thousands also inflicted on the Namas and Damaras. The rich diamond fields were discovered in 1908.

With the passing of the German overseas empire, the new League of Nations gave a mandate for South-West Africa's administration to South Africa. The mandate came into question when the League

officially ceased to exist in 1946. The United Nations insisted that it has succeeded to the supervision of the South-West Africa mandate, something that South Africa vehemently denies.

Unrest again flared in South-West Africa. The South-West African People's Organization (SWAPO) was founded in 1960, and became the strongest opposition to rule from Pretoria. SWAPO formed a military wing, the People's Liberation Army of Namibia (PLAN) and commenced an initially ineffectual guerrilla war in 1966. In that same year the UN, acting as the successor to the League of Nations, revoked the South African trusteeship.

On 6 March 1972, Kurt Waldheim went to South Africa with a Security Council mandate to establish dialogue regarding Namibia. This was the first direct contact between a UN Secretary-General and a South African Prime Minister (B. John Vorster). The year before, the International Court of Justice had declared the South African occupation of Namibia illegal, and in 1973 the UN General Assembly had recognized SWAPO as the legitimate and authentic representative of the Namibian people. Thus, even as Waldheim tried to negotiate toward a political settlement of the Namibian dispute, the UN worked toward the establishment of the greatest Afrikaner bogeyman—a militant African government in Namibia. An abortive 1974 attempt to expell South Africa from the United Nations could not have helped matters further.

In 1977 the five Western members of the Security Council (the United States, Britain, West Germany, France and Canada) put pressure on South Africa to withdraw from Namibia. The reason was that there was no SWAPO participation in the Turnhalle "interim government", which was essentially a creature of South African policy. In fact, SWAPO's leadership had been rounded up from the Namibian capital of Windhoek in 1968 in response to the organization's unsuccessful attempt to militarily infiltrate the territory. Negotiations with the five Western powers culminated in an 25 April 1978 agreement by which free elections would be conducted for a Constituent Assembly that would, in turn, draft a constitution for an independent Namibia. However, the agreement foundered when the UN, which would supervise the elections, unreasonably refused to monitor SWAPO bases outside of Namibia. Voting took place anyway and South Africa's favored party, the Democratic Turnhalle Alliance (DTA) of course won.

This did not happen in isolation from the military conflict. The South African garrison was strengthened, particularly after the ICJ's 1971 ruling. As the initial SWAPO incursion came across the short border with Zambia, the Caprivi Strip was reinforced. This diminutive panhandle is an anomaly ceded by Britain to Germany in 1890 to provide a transportation link between South-West Africa and German East Africa by way of the Zambezi River. Forgotten were the Victoria Falls, which render the river unnavigable.

SWAPO fortunes improved dramatically with the Portuguese withdrawal from Angola and the establishment of a Marxist-Leninist regime there. For South Africa's intervention in the Angolan civil war, Citizen Force and Commando units were called into Namibia to bring South African presence up to almost 50000 troops. The SADF presence was not reduced after the South African retreat from Angola.

Despite these hefty reinforcements, the war appears to have been going badly for South Africa. *The Times* of London stated that some South African strategists felt that the critical northern region of Ovamboland would be overrun in 48 hours if their forces were withdrawn. Defence Force morale declined when one of its cornerstones, the excellent medical services, were strained by action in Angola and Namibia. South Africa reacted to the crisis. A one-kilometer free-fire zone was declared along the northern border. In 1976 reserve call-ups for

"border duty" continued. The next year saw the initial period of National Service extended from one year to two.

Matters did not improve for South Africa in 1978. Early in the year SWAPO was said to be mounting mortar-supported attacks by as many as sixty guerrillas against South African bases. SADF units, it was reported, were on nearly constant "search and destroy" operations, though with the unsatisfactory kill ratio of 2:1.

The turning point against SWAPO seems to have come in 1978. South Africa began to re-enter Angola for the first time since its abortive intervention, with the objective of attacking SWAPO's refugees. In May, an airborne assault was launched against the SWAPO refugee camp at Cassinga, 150 miles across the frontier. Mirage fighters strafed and bombed the camp, followed by paratroopers, who overwhelmed the defenders and wrecked the facilities. This marked the beginning of a far more aggressive South African strategy.

The National Union for the Total Independence of Angola (UNITA), a defeated contender in the civil war, resumed operations at about the same time. An alliance with South Africa was inevitable. As a result, Angola's border security deteriorated rapidly and the tide shifted in South Africa's favor. Since then it has been SWAPO that has struggled on the defensive.

UNITA contributes a great deal to Namibia's security. By controlling southeastern Angola, it effectively cuts in half the border that the easily overstretched SADF has to guard. Between UNITA's resurrection and South African operations north of the border, events in Angola are of decisive importance to the war in Namibia.

SWAPO has one natural ally in the climate of the region. In the spring, rains cover the normally dry border region with lush vegetation that lends excellent cover to infiltrating guerrillas. The low cloud cover of the season also hinders South African aerial surveillance. Spring is therefore the preferred time for SWAPO to attempt the frontier crossings.

As in the rest of Africa, ethnic considerations are of crucial importance to Namibia. Ethnicity and population distribution are two of the most crucial considerations in the South African-SWAPO war.

Table 3: Ethnic Affiliation in Namibia, 1981

Group	Number	Percentage
Whites	75600	7.3%
Coloured Groups:		
Coloureds	43500	4.2%
Namas	49500	4.7%
Rehoboth Basters	25800	2.5%
Native Groups:		
Ovambos	516000	49.7%
Kavangos	98000	9.4%
East Caprivians	39500	3.8%
Damaras	76800	7.4%
Hereros & Kaokas	77600	7.5%
Tswanas	6800	0.7%
Bushmen	30000	2.9%

Source: *Survey of Race Relations in South Africa, 1982.*

Over five times the size of any other group, the Ovambos are by far the most important ethnic group in Namibia. They are concentrated along the northern border, leaving the rest of Namibia very sparsely inhabited. Their traditional settlement is a cluster of circular huts within a kraal of labyrinthine stick walls. An inheritance from early tribal conflicts, the interior walls can be moved to change the passage to the headman's hut, foiling raiders. They were largely left alone by the Germans and South Africans alike but for the missionaries (the reason why about 80% of the Ovambos are Christians).

They are also the backbone of SWAPO. Since the organization depends on Ovambo support and the majority of the people live in the border region, their

territory is the battleground between the SADF and SWAPO. Although guerrillas were, at their peak, able to penetrate to the white-dominated central plateau, Ovamboland has been superceded as the area of conflict only by Angola.

Ovambo pre-eminence in SWAPO has led to suspicions of Ovambo supremacism by other Namibians. The best example of ethnic conflict in the rebel camp involves the Caprivians, a people long inculcated with British culture and the English language. In 1964 an independence movement called the Caprivi African National Union (CANU) was founded under the leadership of A.M. Muyongo. CANU subsequently merged with SWAPO, in which Muyongo became vice president. Combined forces conducted a severe mortar and artillery attack on the Caprivi town of Katimi Mulilo in 1978. But in 1980, SWAPO expelled Muyongo and his staff for complaining of Ovambo discrimination against Caprivians. By 1982, the Caprivians were pressing for greater autonomy from South Africa than that wanted by the DTA, but were not ardent SWAPO supporters.

Other groups have also aligned politically. The Hereros, with their sour memories of armed rebellion, are among the strongest supporters of the DTA. SWAPO support is also hard to come by south of the densely populated border strip due to fears of Ovambo domination.

Native troops are an important component of the South African war effort. A San Bushman battalion (the 31st) was raised in West Caprivi in 1974. An elite hunter-killer unit, the 31st Battalion exploits San talents for skilled and tireless tracking, and their proficiency and ruthlessness in ambush. Other ethnically-based battalions were subsequently formed in Kavangoland, East Caprivi and Ovamboland. An integrated battalion (the 41st) was raised in 1977. From its inception, it included whites, Damaras, Rehobothers, Namas and Tswanas. Also, elements of the Cape Corps Service Battalion have been in Namibia since 1976, and the black 21st Battalion was deployed there two years later.

Anticipating the granting of Namibian independence on South African terms, South Africa announced the reorganization of the territory's security apparatus. This led to the 1981 creation of the South-West African Police (SWAP), a heavily armed and paramilitary force. SWAP not withstanding, South African police units remain.

The battalions raised in Namibia were formed into the South-West African Territorial Force (SWATF) in September 1979. Conscription for blacks was introduced in January 1980. Because of their ethnic affiliations with SWAPO insurgents, however, requirements were waived for Ovambos, Kavangos and Caprivians. By 1983 SWATF consisted of six regular, tribally-segregated battalions trained in counterinsurgency. It further included a conventional brigade consisting of the motorized 41st Battalion, a reserve armored car regiment, and a reserve artillery regiment. Local defense is provided by 26 "area force units" similar to Commandos. SWATF has its own support units, training units and headquarters, as well as a mounted motorcycle and tracker unit called the 1st South-West Africa Specialist Unit. The Namibian air component consists of a single reserve light aircraft squadron. Its 1983 manpower was estimated at 20000, half of it white. This would indicate that its support, headquarters, leadership and mechanization functions are performed almost exclusively by whites. Both the SWAP and SWATF remain under tight South African control.

If South Africa's aggressive forward strategy in Namibia has a vulnerable point, it is logistics. The main supply burden is borne by a single railroad and one running from Upington, South Africa to Windhoek to the border area. Another road through Botswana links the Caprivi strip to South Africa. Should SWAPO or the Angolans manage to consistently interdict these links, the South African

cause would be dealt a massive blow. Likewise, the South African air force must be able to maintain air superiority over the Cuban and East German pilots who fly Angola's planes.

Another feature of the transportation infrastructure complicates the chances of a negotiated settlement. Walvis Bay is the best deep-water port in Namibia, but became an integral part of South Africa in 1910. South Africa is determined not to relinquish control of Walvis Bay to an independent Namibia although (and apparently because) lack of the port would hinder Namibian economic independence and development.

ANGOLA

The end of Portugal's African empire was due to two causes. Insurgencies in Angola and Mozambique, especially the former, taxed the Portuguese garrisons. In Angola, the Europeans relied on defended villages called *aldeamentos* and airpower to hold off the guerrillas. But despite the consistent Portuguese ability to attain tactical superiority, there were never enough airplanes or helicopters to maintain adequate surveillance. The other factor in the equation was the restoration of democracy in Portugal itself. After the 1974 coup, recovering from a long night of dictatorship was viewed as far more vital than waging expensive colonial wars far away.

Of the three Angolan insurgent groups, the strongest was the People's Movement for the Liberation of Angola (MPLA), founded in 1956. The MPLA eventually merged with the Communist Party and other radical revolutionary groups. Its ties to Cuba were cemented in 1965 with a meeting in Congo-Brazzaville between MPLA president Agostino Neto and Che Guevara. At that time Guevara was intensely interested in exporting the Soviet model of socialism to black Africa. The MPLA was the leading military challenge to Portuguese rule. Between 1964 and 1975, it took most of the valuable territory around the capital of Luanda, and many of the coastal industrial centers.

The National Front for the Liberation of Angola (FNLA) succeeded an organization called the People's Union of Angola, a separatist movement in the northern Bakongo region. Although both the FNLA and the People's Union abandoned separatism in 1958, neither could escape the influence of ethnicity. The FNLA's ideology was a primitive melange of tribalism, anti-white and anti-Coloured racism, and anti-Communism.

An original member of the FNLA, Jonas Savimbi, formed the National Union for the Total Independence of Angola in 1966. Based in the south, it peacefully co-existed with the MPLA through the sixties and into the seventies. Following in the FNLA tradition, what passed for UNITA ideology was racism and tribal populism. During the Portuguese era it trailed the MPLA in military power and was the equal of the FNLA.

Civil war began in 1974 between the three insurgent groups. The USSR and Cuba supported the MPLA; the United States clandestinely aided the FNLA through the CIA, and Zaire also supported the northerners. When the anti-MPLA coalition started to falter, South Africa increased its support. South Africa intervened directly on 23 October 1975. In "Operation Zulu", 5000 SADF troops crossed the border from Namibia, advancing 500 kilometers in a single week. Fearing the loss of Luanda, the MPLA appealed to Havana for troops to defend it on 4 November. A Cuban battalion arrived by air the next day. From then until March 1976, 18000 to 24000 Cuban soldiers were sent to Angola.

This decided the outcome of the war. By mid-December 1975, the South Africans had been halted and an MPLA-Cuban offensive launched in the north. The United States refused to deliver on pre-

vious promises of assistance to the FNLA and UNITA. This left South Africa in the lurch, and the SADF pulled back to Namibia. UNITA was soundly routed and the remnants of the FNLA took refuge in Zaire.

The MPLA triumph resulted in a fundamental change in the balance of power in southern Africa. Instead of a Portuguese colony to the north of Namibia, South Africa now faced the People's Republic of Angola. The new regime enjoyed excellent relations with Cuba, whose expeditionary force did not leave, and had an economic dependence on the USSR that caused Soviet domination of foreign policy. Even worse, Angola provided a haven for SWAPO. Whereas the SADF once had to guard only a short border with Zambia from infiltration, now the entire northern frontier had to be screened. A decline in South African fortunes was inevitable.

But Angola's border security deteriorated badly in 1978. The May SADF attack on Cassinga signalled the beginning of a new South African aggressiveness, something that Angola's armed forces could not counter. Also, UNITA underwent a revival in the southeast. This significantly reduced the SADF's burden of protecting the border and established an indigenous military opposition to the Marxist-Leninist regime in Luanda.

Ethnic animosities have been instrumental in the resurrection of UNITA. Its power base is among the Ovambo who are the source of SWAPO's strength. Regardless of ideology, they resent government by the peoples to the northwest. Therefore, UNITA is not any sort of democratic resistance to Leninist tyranny, but a tribal and regional entity.

SADF pressure increased. "Operation Protea" in August 1981 was the largest South African incursion to that point. Mechanized and airmobile forces thrust 150 miles into Kunene province, occupying virtually all of it, including the capital of N'Giva. Neighboring provinces were also struck. Angola claimed 45000 South Africans had massed on the border and that 15000 had actually invaded with tank, armored car, 155mm artillery and air support. Even if Angola's claims are inflated, Operation Protea was a major undertaking. South Africa claimed that at a cost of ten dead SADF, a thousand SWAPO and Angolan troops were killed and \$200 million of war material destroyed. Another major push into Angola occurred in November.

Yet the SADF effort was not limited to two big operations. According to the European Economic Community, South Africa conducted a total of 200 operations in Angola in 1981, and that the SADF displaced 13000 people and inflicted severe economic damage between 1975 and 1980. SWAPO's claim that the SADF was a constant presence in Angola was probably the truth.

South Africa would be overjoyed to inflict a military defeat on Angola or cause its government grief of any kind. Yet the MPLA regime is not the target of South African operations in Angola. The SADF's primary objective is to make Angola a dangerous place for SWAPO's forces and to destroy its units before they have the chance to attempt infiltrating the border. The war in Angola is actually the war for Namibia, waged elsewhere.

Angola and SWAPO are not entirely without advantages of their own. If South African forces in northern Namibia are at the end of a long and fragile supply line, those in Angola are beyond the logistical pale. South Africa's decreasing ability to support its forces as they move north limits the SADF more than does the Angolan army and SWAPO. The second advantage is the Cuban force has yet to go home. Its chief mission is to form a defensive line from Lubango in the south to Melanje in the north, protecting the vital coastal region. Consistent penetration of the west, especially the northwest, by UNITA or the SADF could well mean the end of the People's Republic of Angola. The Cubans

are the bulwark against this. Although their mission is mainly defensive, they have taken the offensive at times and have engaged the SADF from time to time.

An example of how the SADF fights in Angola to disrupt SWAPO is 1982's "Operation Super". South African and Namibian security forces learned that a SWAPO infiltration force was training at Cambena, just north of the Kunene River that divides northwest Namibia from Angola. The SWAPO force was in a valley in the midst of broken terrain, making it difficult to attack on the ground. On 13 March, about forty men of an SADF counter-insurgency battalion struck from helicopters, taking the defenders by surprise. The battle lasted for eight hours as the South Africans chased the fleeing guerrillas down a series of ravines. The SWAPO troops there encountered South African "stopper groups" that effectively blocked them. According to South African sources, 201 SWAPO members were killed and about 40 escaped to the hills, leaving behind caches of "sophisticated arms of Russian origin, mostly new." The same report counted SADF dead at three.

While the SADF's high quality and aggressiveness are beyond question, the same cannot be said of UNITA. One South African journalist wrote that in the early 1980s UNITA was large and copiously supplied, and controlled 40% of Angola. But there were questions at the time about its proficiency and resolve. Trevor Edwards, a Briton commanding the 3rd Battalion of the South African army, said:

"The point is that UNITA are a lot of crap. They hang around in the south-east where their tribe is and they can defend themselves, but they can't go out and take a place like Savate [Angolan town captured by Edward's unit, then handed over to UNITA]. We do it for them because it improves their bargaining position, gives them more talking power."

UNITA's actual character probably combines aspects of both accounts. It has been able to control large areas of Angola, or at least deny them to the government. Edwards is entirely correct in pointing out its ethnic orientation. Also, a force can combine good, plentiful hardware with a serious lack of initiative when it might count the most. UNITA benefits from the support of the SADF and does not need the same degree of determination that it would without its alliance with South Africa. Undoubtedly it would also be in far worse straits if the SADF did not stand between it and the undivided attention of the Angolan army, or if the Cubans were freed for a prolonged offensive against UNITA.

South Africa and UNITA have essentially detached the Ovambindu-populated areas from Angola. This is not an especially serious threat to the regime's continued existence, as the MPLA never had any real support or a ground presence there. Furthermore, the region is less economically important than the west coast or the diamond- and coffee-producing regions of the north. More serious is that UNITA, despite its generally suspect initiative, has been able to periodically infiltrate the western MPLA heartland. By September 1984, towns as close to Luanda as Caxito were being raided. Huambo and Bie in the west-central highlands were also struck. Only if UNITA can expand its actions there from quick raids to an enduring presence can it hope to bring the war home to the MPLA.

The MPLA and its allies have tried during the eighties to erode the South African and UNITA position. The introduction of Soviet-built tactical air support enabled the Angolans to stop UNITA encroachment on the west, then force it into its own core areas with a successful offensive. In July 1986 Angolan and Cuban troops, with Soviet support, staged an offensive against UNITA's headquarters

at Jamba, as SWAPO attempted to infiltrate Namibia by way of Zaire.

Another offensive, this time without the Cubans, occurred in September of the same year. Twelve government brigades, each accompanied by a company of Soviet advisors and technicians, and with a brigade of 96 T-55 tanks, deployed on the Lomba River. An initial assault across the river failed when one brigade, which had established a bridgehead, was thrown back across. A four-day battle starting on 6 October saw the government troops once more repulsed with heavy casualties. An important reason for the UNITA victory was the presence nearby of South Africans, who provided artillery support with their G-5 howitzers.

Combined Cuban and Angolan forces, again with Soviet help, fought South African units in south-eastern Angola in late 1987, during the southern hemisphere spring. Although early reports of the fighting were sketchy, the South African defense minister (General Magnus Malan) hinted that the SADF may have suffered heavy losses. He placed the blame for the battle on the United States, which he said had lain South Africa open to Communist expansion by helping to isolate it.

The objective of South Africa's enemies in Angola is to extend the length of the Namibian border that the SADF and SWATF have to guard. Offensives north of the border are not intended to extend the area of Angola under Luanda's control as the primary objective, but to hopefully overextend South Africa's forces and facilitate SWAPO infiltration. But the war in Angola is wearying and expensive for Angola as well as for South Africa. Besides the direct costs of waging the conflict, Angola has suffered terrible economic damage. The main east-west railroad to Benguela is attacked by UNITA just as it was raided by the MPLA before independence. Worse, the war has arrested the rapid economic development that occurred during the last years of Portuguese rule. Recovery is dependent upon peace.

This last issue has divided the MPLA into two factions. One espouses a hard line and is more willing to fight UNITA to the bloody finish. The other is willing to enter into negotiations with Savimbi.

Just as the war in Angola is dependent on the war in Namibia, so peace is dependent on South Africa's willingness to withdraw. As long as SWAPO is based in Angola and the Namibian dispute is yet to be resolved in South Africa's favor, this is highly unlikely. Moreover, South Africa insists that a pull-out is out of the question unless Castro's legions are first withdrawn. That will not happen so long as the Cubans are the best insurance policy for the continued existence of the People's Republic of Angola.

RESISTANCE IN SOUTH AFRICA

Understandably, white rule and apartheid have earned the hostility of wide sectors of South Africa's black population. So far the bulk of the struggle has taken the form of political action, riots and general unrest.

Sometimes a specific government action or policy is enough to set off a round of disturbances. One of the most famous and important cases of this occurred in June 1976, when the government announced plans to use Afrikaans in all schools. Riots exploded in the teeming black township of Soweto, and continued even after the government rescinded its policy of teaching blacks the language so closely identified with the Afrikaner nation and apartheid. About 500 blacks and two whites were killed in the violence. A work stoppage, with a 70% absentee rate, was enforced by black vigilantes who burned down the houses of people who kept on working. Johannesburg was denied of its black menial labor—at least for a time.

More serious than occasional episodes of black rioting is the chronic hostility that increasingly

simmer among the black population. The white minority needs the acquiescence, if not the active support, of the blacks. Despite apartheid and its authoritarian enforcement mechanisms, South Africa cannot function on coercion alone.

Places like Soweto are breeding grounds for the sort of militancy that is fast replacing the former collective passivity of past eras. The 1976 Soweto riots were an indication of this phenomenon. One resident said during the mid-1970s, "We are the last generation . . . who will ask for a dialogue, and if it does not come about, we can expect something worse than riots." Renewed unrest in this decade further attests that white South Africa faces major problems in the townships.

Although the anti-apartheid movement is constituted by a wide spectrum of groups, ranging from the clergy to Communists, one is dominant. This is the African National Congress. Undoubtedly, it would rule *Azania* (as South Africa would be renamed by a black regime). A 1982 newspaper poll indicated that 40% of the blacks in Cape Town, Durban and Johannesburg would vote for an ANC representative for parliament. Nelson Mandela, the jailed ANC leader, was supported by 76% of the sample, with support coming from every class, sex and age group. The ANC is the group best able to capture the imagination of black South Africans, and in Mandela it has an excellent revolutionary martyr for both domestic and foreign consumption.

For a radical revolutionary organization, the ANC has unlikely origins. It was founded in 1912 by conservative, foreign-educated Africans with traditional tribal leaders. It emphasized passive protest until the rise of a more militant younger generation in the 1940s. The ANC declared in 1943 that its aim was "to attain the freedom of all African people from all discriminatory laws whatsoever," and its Bill of Rights in 1954 demanded full citizenship. In 1949, the ANC's Programme of Action called for the end of cooperation with the government and the start of boycotts, strikes and civil disobedience. The government responded with stiff measures against passive resistance. In 1960, the ANC, increasingly restricted by the government, was proscribed altogether.

Another important organization was founded that same year. The Pan-African Congress (PAC) rejected the multi-racialism of the ANC, from which its founders broke. It planned a campaign of "positive non-violence" to end white rule by 1963, followed by the establishment of a black socialist state. The PAC too was outlawed in 1960.

Both organizations have military components, and neither has been able to spark an insurgency in South Africa. Countering possible infiltration is a program in which white paramilitary farmers in border areas report suspicious movements by radio, bringing in a mechanized or airborne force. In addition, the high quality of the SADF and police make operations within South Africa highly difficult and dangerous under any circumstances.

African revolutionaries have hardly helped their own cause with recurring internal strife. The PAC's military arm, the Azanian People's Liberation Army (APLA) suffered a damaging episode in which a group of dissident guerrillas was detained by its hosts in Tanzania. Apparently in all seriousness, the Tanzanian government qualified that the APLA members were simply "undergoing re-education with help from the Tanzanian People's Defense Force."

Paralleling the war in Namibia, denying foreign sanctuary to the ANC and PAC is a keystone of South African policy. That neighboring countries have many thousands of citizens working in South Africa fosters economic dependence that gives Pretoria a great deal of leverage. In addition, South Africa promises immediate reprisals against countries that are the origin of infiltrators—and has delivered militarily on this promise. Botswana, Lesotho and

Zimbabwe have all been intimidated into compliance. Military actions against Mozambique and guerrilla bases there led to a 1984 South African-Mozambique non-aggression pact. But regardless of the treaty and the Marxist state's creeping rapprochement with the West, South Africa continues to support an extremely repulsive insurgency against Mozambique.

The policy of keeping South African blacks as divided as possible helps guard against united support of armed revolt, even if the organizations advocating it are very popular. The divide-and-rule strategy has worked, as shown by the recurring ethnic battles and the Inkatha-ANC feud. A black population unified by the concept that revolutionary and violent change is preferable to traditional allegiances and parochialism could be the decisive factor in the defeat of white South Africa. White South Africa is perfectly aware of it.

The capstone of official ethnic division is the granting of bogus independence to African homelands. KwaZulu, Transkei, Ciskei, Venda and other "Bantustans" are justifiably recognized by no country but South Africa. They represent not only attempts to encourage tribal division, but the substitution of devalued citizenship for that of South African.

CONCLUSIONS

The Afrikaner people and the country they dominate are beset by enemies. Of the two archetypal Afrikaner reactions, the trek is entirely out of the question; there is no more unclaimed wilderness to migrate into, and the modern world abhors conquest even more than the denial of basic human rights (at least among countries in the public eye). As the Afrikaners' home country is in Africa, there is no retreat to Europe, as was available to the Portuguese and as might be an option for the English-speaking white South Africans.

The alternative is the laager. The Afrikaner nation is committed to defending its place in Africa and to surviving as a people. In fact, in the face of growing black unrest and foreign condemnation of apartheid, support for it is actually growing in South Africa itself. An important lesson of South African history is that if the ultimate contest for the country is a match of willpower, the Afrikaners will win.

South Africa appears too strong to defeat militarily, at least at present. But two major factors may erode the SADF's power in coming years.

One is technological. The Republic of South Africa has shown that it can supply most of its own material defense needs, and that it can develop weapons of both excellent quality in the field and technological sophistication. The G-5 155mm howitzer is a good example. (Hopefully, it will never be known if South Africa's ability to produce fine conventional weapons extends to nuclear arms.) But South Africa is in danger of being outclassed by the introduction of new weapons systems to its enemies. The Mirages and Oliphants may be very effective in the hands of South African pilots and crews, but they are aging designs. Whether they could stand up to upcoming generations of Soviet weaponry is open to question. The SADF needs updated weapons systems. Tanks and aircraft are the most obvious requirements, but progress in defense electronics are also made imperative by progress in this field elsewhere. The international opprobrium and sanctions that hinder South Africa's ability to purchase its defense needs abroad mandates that it shoulder its own research and development burden. Armscor has taken a step in this direction by augmenting its electronics capabilities. A new South African jet fighter or main battle tank would be important achievements toward future security.

More important a problem than technology is manpower. Even if South Africa is not ready or able to significantly tap its black manpower potential,

it has a crying need for greater use of Coloured and Asian personnel. But these groups face discrimination and possess limited franchise, which prevents them from fighting for South Africa with the same ardor as the Afrikaners. Conscription would alienate them further, perhaps irreparably, and would be highly counterproductive.

All problems stem from ethnicity and the Afrikaner approach to it. Apartheid has fanned the hostility of non-whites within its borders and earned the condemnation of most of the world. Still, one wonders what would have happened if the Afrikaners had colonized North America or the empty spaces of Australia, or if the native populations there had been larger, more resistant to disease, and better able to stand up to European arms and military organization. Perhaps the Afrikaners would be criticizing the United States and Canada for oppressing their Indian majorities. This is no excuse for apartheid of course, but a necessary requirement of judgement is to measure the understanding of the judged. To do so without it is to run the risk of missing the main point of the moral lesson that one wishes to affirm.

Few issues are as subject to moral judgements as apartheid and the white rule that it reflects and perpetuates. This is only right, as few issues so clearly frame the concepts of human rights and equality held dear by Western civilization. It demeans them to condemn South Africa because it is stylish, or because one expects vastly and subtly different cultures to instinctively embrace all one's national values. The first is posturing; the second conceit. Following the dictates of conscience to a rejection of apartheid and its underpinnings may be noble. Letting the consciences of others do all the work is just plain wrong.

Too, the issue of South Africa exemplifies the classic conflict between concern for moral right and national power considerations. Despite its sanctions and hostile rhetoric, the West puts up with white South Africa because it needs it. South Africa's location and resources make its control an issue of extreme importance. The Republic of South Africa is not only a state eager to establish and maintain economic and political ties with the West, but harbors a fundamental hostility towards the West's Communist rivals. From a perspective limited strictly to national power, South Africa is too good to be true. From a perspective limited equally strictly to human rights, it may be too awful to tolerate. Do the moral considerations outweigh those of national interest, which in itself has ethical connotations? That deceptively complex question is definitely one for the individual conscience.

SCENARIO DESIGN GUIDELINES

Most of South Africa's military engagements take place in the Namibian-Angolan border region, in both countries. The western end contains some rough terrain, in Kaokoland on the Namibian side and Kunene province in Angola. Vegetation is sparse but for the spring rainy season. Significant watercourses are rare in Namibia, but more common in Angola. Namibia is bounded on its western side by the Namib desert, and the Kalahari projects into the east-central part of the territory. Both are extremely hostile to military operations. The border region contains the bulk of Namibia's population. Kraals and other traditional domiciles contain more people than the few towns, although there are more towns on the Angolan side. Roads are scarce on both sides of the frontier.

The Angolans, SWAPO and UNITA use the standard assortment of Soviet-made weapons. The quality of squad-level units appears to have remained fairly constant since 1975; it is in terms of quantity and larger unit cohesion that these forces have improved or deteriorated. The Cuban units are the best in the Communist coalition, although their defen-

sive mission and the presence of the SADF have prevented them participating in a maximum number of engagements or from disposing of UNITA. The South Africans are excellent, both in material and in human terms. Commandos are organized similarly to regular infantry units. The SWATF is also very effective and has seen important duty in northern Namibia. In equipment it differs from the SADF in a greater propensity for Soviet weaponry, especially in the counterinsurgency units.

Squad Groups (Points Computed for 5-Turn Game)

SWATF Infantry Squad (Counterinsurgency; 1974 on): 4/2; 1S, 1A; 1×LMG3, 1×MPL20, 1×RFL1 (204 points; Group 8)

SWATF Infantry Squad (Counterinsurgency; 1974): 4/2; 1S, 1A; 1×LMG3, 9×RFL4 or RFL5 (264 points; Group 11)

SWATF Infantry Squad (Conventional 41st Battalion; 1977 on): 4/2; 1S, 1A; 1×LMG3, 7×RFL5 (200 points; Group 8)

SADF Infantry or Motorized Infantry Squad (1976 on for infantry; 1977 on for motorized infantry): 5/2; 1S, 1A; 1×LMG3, 10×RFL4 or RFL5—Dismounted from Ratel (323 points; Group 13)

SADF 81mm Mortar Squad (eight in heavy weapons company): 3/3; 1S; 1×MRT12, 3×RFL4 or RFL5 (171 points; Group 7)

SADF Machine Gun Squad (four in heavy weapons company): 5/2; 1S, 2A; 2×MMG1, 7×RFL4 or RFL5 (326 points; Group 14)

NOTE: The RFL4 replaces RFL5 in SADF from 1981 on; the RFL4 more likely to be found in frontline units than reserve units.

SWAPO Guerrilla Squad: 3/3; 1S; 1×LMG12M 1×MPL20, 8×RFL1 (212 points; Group 8)

SWAPO Guerrilla Squad: 4/2; 1S; 1×LMG12, 1×MPL20, 8×RFL1 (189 points; Group 8)

South African/SWATF Weapons: FTR1; GLR2 (few); GMC3 (MAG); LCW3; LMG15 (L4 Bren); LPL6 (a few obtained C. 1980); MMG1 (M1919A4—MG4AA); MPL4, MPL5, MPL7, MPL20, MPL21; MTR6, MTR7 (M4 Commando), MTR12 (M3); PST2 (HP35), PST3 (Super Star); RFL1, RFL4 (R4 replacing others after 1981), RFL5 (FAL), RFL11 (few); SMG7 (Uzi), SMG10 (Sten, Sterling).

South African/SWATF Vehicles: APC4 (M-113A1); IFV11, IFV12, IFV13 (Ratel—11 passengers); LTK1 (weapon 16), LTK2; MBT2 (Elephant—weapon 29 replaced weapon 23 in late 1970s—91 points), MBT9 (M-47; few); RCV1 (EIM and EIVM Eland and Panhard), RCV2 (-EIM AND IV Eland and Panhard), RCV4 (Mk.2/3); TRK2 (weapon 31).

NOTE: Don not use HGN1, HGN2 and RGN1. Types are than "G" are rare.

MPLA, SWAPO, FNLA and UNITA Weapons: Use Angola equipment list; few vehicles outside of TRK1 and TRK5 (except for MPLA after taking power).

The following optional rules are strongly recommended:

- 16.2—Assorted Optional Firing Modifiers
- 16.4—Suppression by Non-Automatic Weapons
- 16.6—Pinned and Inactive Status
- 16.7.2—Optional Nightsight Rules
- 16.8—Extra Major Personal Weapons
- 16.9—Standing Behind "2" Height Cover
- 21.—Fires
- 23.—Wounds and Cover
- 24.—Morale

Victory Conditions in all scenarios are consistent with the Victory Conditions rules on Page 42 of the

FIREPOWER Battle Manual. For all scenarios, each player receives one victory point for each wounded or eliminated enemy soldier and two points for each taken prisoner.

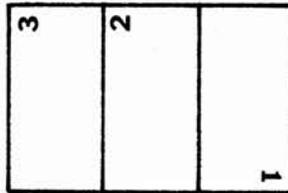
SCENARIOS

The following scenarios represent actual battles and campaigns in Angola and Namibia between 1975 and 1987.

"OPERATION ZULU 1975"

Alarmed at the prospect of a Marxist-Leninist regime in Angola, which would serve as a base for SWAPO and possibly others to subvert Namibia, South Africa intervened in the Angolan civil war. In this scenario, mechanized elements of the South African army engage unprepared MPLA units in the early stages of the invasion.

A. MAPBOARD TERRAIN: Ignore all walls, hedges, buildings and well. Hills are height "1" and depressions are height "-1". Roads are unpaved.



B. SPECIAL RULES: Game length is 5 Turns. MPLA units may only exit the north mapboard edge, and SADF units may only exit off the south edge. MPLA player sets up first within four hexes of the north board edge; South African player sets up second within four hexes of the south board edge.

WEATHER: Normal.

VISIBILITY: Condition 1.

FIRES (OP): Wet.

C. OPPOSING FORCES:

a. MPLA: (410-340-70 points).

1st MPLA Guerrilla Squad: 3/2; 1C, 1S; 1×LMG20, 1×MPL20, 6×RFL1.

2nd MPLA Guerrilla Squad: 3/2; 1C; 1×LMG20, 1×MPL20, 6×RFL1.

3rd MPLA Guerrilla Squad (-): 3/2; 1C; 1×LMG20, 5×RFL1.

Extra Equipment: 50×HGN3 ("G" only), 10×MPL20AMO

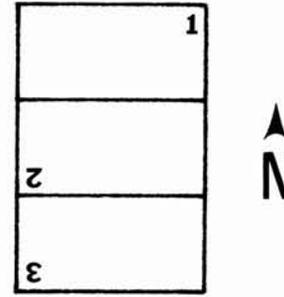
b. South African Motorized Infantry Squad (includes Panhard crew): 4/2; 1S, 1A; 2×LMG15, 7×RFL5, 2×SMG10, 1×RCV2; 1×SCP, 11×HGN2 or and/or HGN5 ("G" only) (410-396-14 points).

D. VICTORY CONDITIONS: Each side receives two points for each surviving, unwounded soldier on the opposite (i.e., past the mapboard fold) side of the mapboard at the end of the game. The Panhard armored car counts as five soldiers, not including the crew. If all soldiers of one side are panicked at the end of Turn 5, the other side wins regardless of the victory point count.

"TROUBLE IN OVAMBOLAND 1978"

The MPLA victory in Angola resulted in a crisis for South Africa. Although an excellent force, the SADF was easily overextended and a long, hostile border between Angola and Namibia did just that. SWAPO infiltration increased dramatically, and the organization reached the peak of its power and offensive capability. Here a SWAPO force assaults a South African outpost in Ovamboland during the wet season.

A. MAPBOARD TERRAIN: All buildings are of wood plank construction. Ignore all fences, hedges, walls and well. Hills are height "1"; ignore depressions. Trees on panels 2 and 3 are stumps. Roads are unpaved.



B. SPECIAL RULES: Game length is 4 Turns. SWAPO units may only exit the north mapboard edge, and SADF units may only exit off the south edge. The SWAPO player receives two "bonus" impulses to enter the mapboard. Any desired actions may be performed during these bonus phases, following which the normal draw of sequence chits commences.

WEATHER: Normal.

VISIBILITY: Condition 3 (Night).

FIRES (OP): Normal.

C. OPPOSING FORCES:

a. Attackers: SWAPO Guerrillas enter onto the north edge via bonus impulse phases (634-512-122 points).

1st SWAPO Guerrilla Squad (+): 4/2; 1C, 1S; 1×MRT6, 1×PST3, 1×LMG21, 1×MPL20, 8×RFL1.

2nd SWAPO Guerrilla Squad: 4/2; 1S; 1×LMG21, 1×MPL20, 8×RFL1.

3rd SWAPO Guerrilla Squad: 4/2; 1S; 1×LMG21, 1×MPL20, 8×RFL1.

Extra Equipment: 3×RDO, 8×MRT6AMO, 5×DMC, 7×PST3 (for MRT, LMG, MPL), 70×HGN3.

b. Defenders: South African Army soldiers set up in any whole hex on panel 3; *defensive units* (DFX, TWR, DWR, WIR, PMN) may be set up on any whole hex on panel 3 or on panel 2 south of hex-row 4. (451-348-103 points).

SADF Infantry Squad: 5/2; 1C, 1S, 1A; 1×LMG3, 10×RFL5, 1×SMG10.

Ovambo Local Defense Squad (-): 3/2; 1S; 6×RFL5.

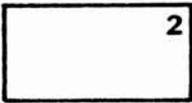
Extra Equipment: 1×NST, 40×HGN3 and/or HGN5 ("G" only), 4×RGN2 and/or RGN4 ("G" or "U" only), 1×PST2 (for LMG); 4×DFX, 1×TWR (sandbagged), 5×DWR, 7×WIR, 4×PMN1.

D. VICTORY CONDITIONS: Each side receives two victory points for each building controlled at the end of the game.

"BUSHMEN AT WAR 1979"

In 1974 the San Bushmen became the first Namibian ethnic group to be recruited by the South African Defense Force. The 31st Battalion exploits the tracking and ambush abilities of the San soldiers. In this action, elements of the 31st ambush a SWAPO unit attempting the increasingly difficult border by night.

A. MAPBOARD TERRAIN: Only mapboard panel 2 is used.



All trees are height "2", offering "-1" concealment and no cover, becoming clear terrain upon destruction. "H" weapons may be fired through them. Hills are height "1"; depressions are "-1". Ignore all fences and hedges. Roads are unpaved.

B. SPECIAL RULES: Game length is 3 Turns. Attackers exit off either side or both short sides of the mapboard. Defenders exit off either or both long sides of the mapboard. Players decide on which side the attacker enters by agreement or competitive die roll. Defender sets up secretly as per "Ambush" special rules (on page 45 of *FIREPOWER* Battle Manual). Attacker enters in accordance with the same set of special rules.

WEATHER: Normal.

VISIBILITY: Condition 3 (Night).

FIRES (OP): Dry.

C. OPPOSING FORCES:

a. Defenders: 31st Battalion Squad: 4/2; 1S; 1×LMG15, 1×MPL20, 7×RFL5; 1×BPD, 5×MPL20AMO, 2×PST2 (for LMG, MPL), 20HGN3 and/or HGN5 ("G" only) (190-157-33 points).

b. Attackers: SWAPO Guerrillas (441-345-96 points).

1st SWAPO Guerrilla Squad: 4/2; 1C, 1S; 1×LMG12, 1×MPL20, 7×RFL1, 1×PST3.

2nd SWAPO Guerrilla Squad: 4/2; 1S; 1×LMG12, 1×MPL20, 7×RFL1.

3rd SWAPO Guerrilla Squad: 4/2; 1S; 1×LMG12, 1×MPL20, 7×RFL1, 1×RFL8.

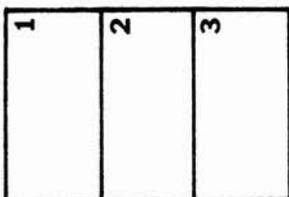
Extra Equipment: 6×PST3 (for LMG, MPL), 60×HGN3 ("G" only), 15×MPL20AMO.

D. VICTORY CONDITIONS: Each side receives two points for each surviving, unwounded soldier that exits the mapboard during Turn 3. And each receives one point for each wounded but surviving soldier that so exits. Defending soldiers must exit off the long sides of the mapboard and attacking soldiers off the short sides to receive these points.

"UNITA RESURGENT 1980"

UNITA was soundly defeated by the MPLA during the civil war following Portuguese withdrawal from Angola. But it rebounded in the later seventies and early eighties, assisted by Ovambindu tribalism and an alliance with South Africa. The Cuban army has been the MPLA's shield since the first, frantic appeal for help during Operation Zulu. In this scenario, UNITA guerrillas, on their way to raid a target on the edge of the MPLA heartland, meet a Cuban patrol.

A. MAPBOARD TERRAIN: All dark green hexes, as well as tree hexes, are trees. Hills are height "2"; depressions are "-2". Ignore all buildings, fences, hedges, walls and well. Roads are unpaved.



B. SPECIAL RULES: Game length is 5 Turns. UNITA units may only exit off the east edge; Cuban units off the west edge. Order of set up is determined by a competitive die roll. Cuban units set up

within four hexes of the west board edge; UNITA units within four hexes of the east board edge.

WEATHER: Normal.

VISIBILITY: Condition 1.

FIRES (OP): Normal.

C. OPPOSING FORCES:

a. Cuban Infantry Squad: 4/3; 1S, 1A; 1×LMG21, 1×MPL20, 6×RFL1; 1×BNC, 2×PST3 (for LMG, MPL), 7×MPL20AMO, 30×HGN3 (289-242-47 points).

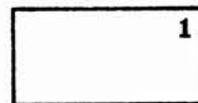
b. UNITA Guerrilla Squad (+): 3/3; 1S; 1×LMG12, 1×MPL20, 10×RFL1; 5×MPL20AMO, 27×HGN3 ("G" only) (289-252-37 points).

D. VICTORY CONDITIONS: Each side receives two points for each surviving, unwounded soldier on the opposite (i.e., past the mapboard fold) side of the mapboard at the end of the game. If one squad has panicked at the end of the game, the other automatically wins regardless of the victory point count.

"OPERATION SUPER 1982"

South Africa has both the will and the means of fighting SWAPO in Angola instead of Namibia. Operation Super was an airmobile attack on an assembling SWAPO infiltration force in Angola, just north of Kaokoland. Taken by surprise, the SWAPO guerrillas fled down a series of ravines. There they met SADF "stopper groups".

A. MAPBOARD TERRAIN: Only mapboard panel 1 is used.



Hills are height "3"; depressions are "-2". Roads are unpaved.

B. SPECIAL RULES: Game length is 3 Turns. Attackers exit off either side or both long sides of the mapboard as well as hexrow GG; defenders may exit off any side. Defender sets up secretly as per "Ambush" special rules (on page 45 of *FIREPOWER* Battle Manual). Attackers enter on hexrow A in accordance with the same set of special rules, except that they may move through any ground-level or depression hexes.

WEATHER: Normal.

VISIBILITY: Condition 1.

FIRES (OP): Normal.

C. OPPOSING FORCES:

a. Defenders: SADF Infantry Squad: 5/2; 1S, 1A; 1×LMG3, 10×RFL4; 1×BNC, 1×PST2 (for LMG), 35×HGN3 and/or HGN5, 1×PMN1 (231-192-39 points).

b. Attackers: SWAPO Guerrillas (462-401-61 points).

1st SWAPO Guerrilla Squad: 3/3; 1C, 1S; 1×LMG20, 7×RFL1, 1×SMG7.

2nd SWAPO Guerrilla Squad: 3/3; 1S; 1×LMG20, 1×MPL20, 7×RFL1.

3rd SWAPO Guerrilla Squad: 3/3; 1S; 1×LMG20, 1×MPL20, 7×RFL1.

Extra Equipment: 1×BNC, 5×PST (for LMG, MPL), 6×MPL20AMO, 3×BPD, 40×HGN3 ("G" only).

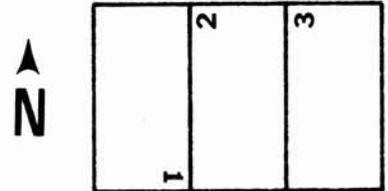
D. VICTORY CONDITIONS: The South African player receives two victory points for each SADF soldier exited off the long sides of the mapboard, and one for each exited off hexrow GG, on Turn 3. The SWAPO player receives two victory points for each soldier exited off hexrow GG at any time during the game, and one point for each exited off

the long sides on Turn 3. The SWAPO player automatically wins, regardless of victory points, if the South African squad is panicked at the end of the game.

"OPERATION PROTEA 1981"

Operation Protea was a SADF August 1981 airmobile and mechanized offensive against Kunene and neighboring Angolan provinces. In this scenario, Angolan troops defend a small village against a South African mechanized column.

A. MAPBOARD TERRAIN: All buildings are of wood plank construction, and all fences are of log construction. Hills are height "1"; depressions are "-1". Roads are unpaved.



B. SPECIAL RULES: Game length is 4 Turns. Angolan units may only exit off the east edge; SADF units off the west edge and/or any other which they enter the mapboard. Angolan units and fortifications must set up first within four hexes of any building hex; non-fortification units and mines may be placed anywhere except within four hexes of the south, west and north mapboard edges. At least one SADF motorized infantry squad must enter on the south edge of the board; others may enter the south, west or north edges. The South African Eland mortar vehicle may be withheld from the map, in which case it may be used indirect fire at maximum range. South African radios do not require a clear line of sight to communicate, although a clear LOS must still exist between the spotter and the target hex. South African units entering the north or south mapboard edges receive one "bonus" impulse phase, and may activate mines at this time; units entering on the west edge receive two "bonus" impulse phases.

WEATHER: Normal.

VISIBILITY: Condition 1.

FIRES (OP): Normal.

C. OPPOSING FORCES:

a. Defenders: Angolan Army (556-388-158 points).

1st Angolan Infantry Squad: 4/2; 1C, 1S; 1×LMG21, 1×MPL20, 7×RFL1, 1×PST1.

2nd Angolan Infantry Squad: 4/2; 1S; 1×LMG21, 1×MPL20, 7×RFL3.

3rd Angolan Infantry Squad: 4/2; 1S; 1×LMG21, 1×MPL20, 7×RFL3.

Extra Equipment: 1×BNC, 4×PST3 (for LMG, MPL), 14×MPL20AMO, 75×HGN3; 2×BPD; 2×DFX, 2×SFX, 1×PBX, 5×WIR, 2×PMN1, 2×VMN1.

b. Attackers: South African Army (704-642-62 points).

1st SADF Motorized Infantry Squad: 5/2; 1C, 1S, 1A; 1×LMG3, 7×RFL4.

2nd SADF Motorized Infantry Squad: 5/2; 1S, 1A; 1×LMG3, 7×RFL4.

SADF Ad-hoc Vehicle Squad: 5/2; 1S; 1×IFV11, 1×RCV1 (Eland), 5×SMG7.

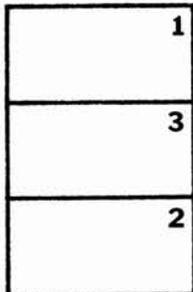
Extra Equipment: 4×BNC, 2×PST2 (for LMG), 50×HGN3 and/or HGN5 ("G" or "M" only); 1×SCP, 2XRDO.

D. VICTORY CONDITIONS: Each side receives two points for each building controlled at the end of the game.

“A DEFEAT FOR THE SADF? 1987”

South African forces have frequently fought the forces of SWAPO and Angola. Less frequent are encounters with the Cubans. A battle in southeast Angola in the local spring of 1987 between the SADF and a combined Angolan-Cuban force may have resulted in a South African bloody nose.

A. MAPBOARD TERRAIN: Hills are height “+1”; depressions are “-1”. Ignore all buildings, walls, fences, hedges and well. Roads are unpaved.



B. SPECIAL RULES: Game length is 5 Turns. Cuban units may only exit off the west edge; South Africans off the east. South African units set up first within four hexes of the east board edge. Cuban units set up second within four hexes of the west board edge.

WEATHER: Normal.

VISIBILITY: Condition 1.

FIRES (OP): Normal.

C. OPPOSING FORCES:

a. SADF Infantry Squad: 5/2; 1S, 1A; 1×LMG3, 10×RFL4; 1×BNC, 1×PST2 (for LMG); 33×HGN3 and/or HGN5 (“G” only) (358-323-35 points).

b. Cuban Infantry Squad (+): 4/3; 1S, 1A; 1×LMG21, 1×MPL20, 6×RFL1, 1×RFL19; 1×BNC, 2×PST3 (for LMG, MPL); 5×MPL20AMO, 37×HGN3 (358-308-50 points).

D. VICTORY CONDITIONS: Each side receives two points for each surviving, unwounded soldier on the opposite (i.e., past the mapboard fold) side of the mapboard at the end of the game. If one squad has panicked at the end of the game, the other automatically wins regardless of the victory point count.

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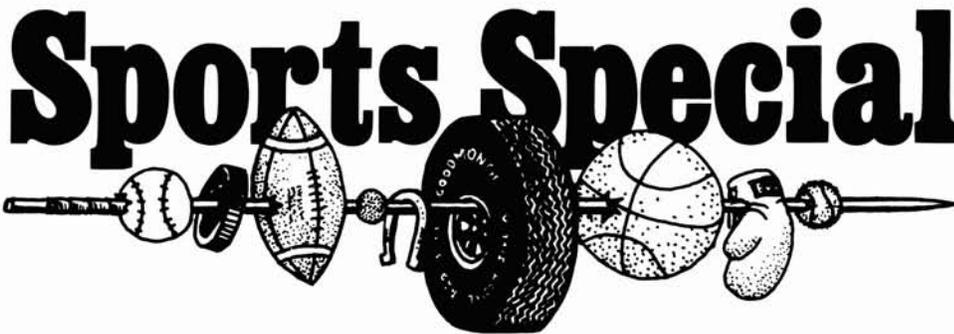
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KICK OFF

By Jim Burnett

Once again, it’s football season, and time to dust off the football games which have been packed away since last fall. On of the games which may have collected the most dust is *FOOTBALL STRATEGY*. If there is a reason for this, it may have to do with age. This game is approaching 30 years old, a fantastic record for a game of its kind! There are definitely signs of age when you open the box. Pro football is just not what it once was. As a game, however, *FOOTBALL STRATEGY* still is one of the best for a quick simulation of football, and is still a favorite at tournaments. In order to give the game the rejuvenation it needs and to bring it in line with the game as it is played today, a few changes are necessary.

First, let’s concentrate on the game’s strong point—the play matrix. Pro football has indeed changed, but you still run and pass to advance the ball. The simulation of scrimmage plays is the heart of the game system, and a much copied feature. There is really nothing that can be altered here without taking a chance on imbalancing the entire game. The shifts in theory and rules over the years have pretty much kept the passing/running balance of the game as it was when *FOOTBALL STRATEGY* was first designed. If there is any perceived imbalance in the charts, it is in the “Long Pass” game. Present zone defenses have lessened the chances of this type of gain, but it is the excitement factor in the all-or-nothing approach that demands that offensive choices “17” through “20” be retained.

The same cannot be said for the two punting choices. The kicking game, with its associated special team players, has changed the way punting fits into the modern game. The substitute matrix below will handle six cases: a normal fourth-down punt, a fake punt, an out-of-bounds punt, a quick-kick, a short punt attempt, and an all-out block attempt by the defense. The procedure is as follows:

1. For a non-fourth down punt, use the “Quick Kick” column. If the defense has chosen card “C” or “H” (the blitz cards), the kick is automatically blocked.
2. On fourth down, the defense must still choose a card. If the offense is running a fake punt, resolve the play normally. If the offense punts, the offensive player will indicate which type of punt is to be attempted (Normal, Out-of-bounds, Short). If the defense has card “C” or “H”, use the “Rush” column.
3. After determining whether the punt may be returned (any punt to the goal or beyond may not), the receiving player may make a roll on the “Return” column. Note that this is optional; a “fair catch” may be made. Players will also note that two dice are now required for resolution—this to give a better spread of results and to make room for more variation.

4. A player may take an automatic fair catch rather than attempting a punt return. The ball is dead at the point of reception.

5. Recovery of a blocked punt will still result in a change of possession on fourth down.

Figure 1: Punting Table

Die Roll	Normal Kick	O/B Kick	Short Kick	Rush Kick	Quick Kick	Return Yards
2	60	45	40	Block	60	Long Gain
3	55	45 O/B	40 FC	Penalty	55	20
4	50	40	35 FC	50	50	15
5	45	40 O/B	35 FC	45	45	10
6	40 O/B	40 O/B	35	40 O/B	40	10
7	40	35 O/B	30 FC	40 FC	35	Penalty
8	40	35	30 FC	40	30	5
9	35 O/B	30 O/B	35 FC	35 O/B	25	5
10	35	30 O/B	25 FC	35 FC	20	0
11	30 FC	30	20 FC	30 FC	15	0
12	Block	Block	Block	Block	Block	Fumble

O/B=Out of Bounds
 FC=Free Catch
 Penalty (Rush)= +10 Yards (Roughing)
 Penalty (Return)= -10 Yards (Illegal Block)

The kick-off procedure is modified as follows. The receiver will choose a defensive card. Either “C” or “H” (to conform to the punting rules above) will indicate that an onside kick is expected. The kicker will then choose either “Onside” or “Normal”. If both players expect a Normal kick, use the “Normal” column. The return will then be resolved on the Return column. If the kicker indicates an Onside kick, use the Onside column. If the kicker selects “Normal” and the receiver has picked “Onside”, the receiver gets the ball at the 20. An Onside kick is not returned. An out-of-bounds kickoff is re-rolled and five yards added to the result. The O/B result gives the receiving team the choice of the ball at a point 10 yards from the kick, or a re-kick with a 5-yard penalty.

For convenience, the Long Gain table is listed here. Also, introduced is the Other Return table. This column is used for attempts to return fumbles or blocked kicks. In the case of a “Fumble”, the recovering team may also take a chance on advancing the ball, using another dice roll on the same column. A player may elect to take the ball at the point of the play rather than attempting the return.

Figure 2: Kick-off and Long Gain Table

Die Roll	Normal Kick	Onside Kick	Kick-off Return	Long Gain	Other Return
2	0	45*	Long Gain	TD	Long Gain
3	0	50	30	60	30
4	5	50	30	55	25
5	5	50**	25	50	20
6	5	45**	20	50	15
7	10	45	Penalty	40	10
8	10	45	15	35	5
9	15	45	15	30	0
10	20	45***	15	30	Penalty
11	25	40	10	25	Fumble
12	O/B	O/B	+20 Fumble	25	Fumble

O/B=Out of Bounds
 * =Receiving Team’s 45
 ** =Kicking Team’s Ball (Receiving Team’s card not C or H)
 *** =Kicking Team’s Ball

Field Goals are also modified. Refer to Figure 3 to resolve field goal attempts now. The return result uses the kick-off return table and is computed from the goal line.

Figure 3: Field Goal Table

Die Roll	Extra Point	0-10	11-20	21-30	31-40	41-50
2	G/+5	G/+5	G/+5	G/+5	G/+5	G/+5
3	Good	Good	Good	Good	Good	Good
4	Good	Good	Good	Good	Good	Good
5	Good	Good	Good	Good	Good	Miss
6	Good	Good	Good	Good	Miss	Miss
7	Good	Good	Good	Miss	Good	Miss
8	Good	Good	Good	Good	Miss	Miss
9	Good	Good	Miss	Miss	Miss	Miss
10	Good	Miss	Miss	Miss	Miss	Miss
11	-5 P	-5 P	Miss	Miss	Miss	Block
12	Miss	Block	Block	Block	Block	Return

G/+5=Good, or accept 5-yard Penalty (Kicker's Choice)

-5 P=5-yard Penalty

The greatest change in the game, however, occurs in using the new time chart below. While there have been no real changes in the way plays are timed in the NFL, the greater reliance on the passing game and the greater outside speed of both offense and defense have resulted in the way plays consume time. Indeed, the critical observer might have some suspicion that up-the-middle running plays are merely attempted to gain a bit of rest for all concerned. While the number of plays run in a game has increased in recent times, a pile-up in the middle of the field seems to take an inordinate amount of time to unstack and resume play.

The changes to be made are fairly simple. Your time chart is broken up in 15-second increments. We will subdivide this into 7.5-second intervals, giving essentially eight boxes per minute. The record keeping for this is simple. When required to mark off 7.5 seconds, put a "\ " through the box. To complete the box (either for a full 15 seconds or for a second 7.5 seconds), put a "/"—resulting in an "X". The full time Chart is given in Figure 4. Note that a player wishing to spend less time at the end of the half may institute a "hurry-up" offense. These plays will use less time due to the lack of unstacking time. If a player runs the same play as the preceding in a hurry-up offense, the play consumes only 7.5 seconds (no time wasted in making the call). One more option is the "grounding" play. This simulates the intentional grounding pass in the NFL. This play takes no time, gains no yards, but does use a down.

Figure 4: Time Table

Play	Time (seconds)
Run	45
Pass	45
Out-of-Bounds	7.5
Incomplete	7.5
Interception	15
Other Turnover	7.5
Change Possession	7.5
All Kicks	7.5 (0 seconds for O/B Kick-off)
Penalty	7.5 (vs Offense, use play time)
Time Out	7.5
Grounding Pass	0
Hurry-Up Offense	15 (Same Play=7.5)
Touchdown/Safety	7.5
Extra Point	0

I include two other optional rules here for those who want a bit more realism. These are recommended only for those players who wish to add more "chrome" to their FOOTBALL STRATEGY games at the expense of quicker play.

First is the "Measurement Rule". Any time a possible first down, touchdown or safety is made by exactly the yardage required, two dice are rolled. If the result is even, the offense has barely made the yardage; if odd, the defense has held by inches. Note that a 10-yard gain on first down would only be another first down if the subsequent dice roll were even. Also note that, a zero gain running play causes another dice roll, but an incomplete pass does not. Consecutive 5-yard penalties are always a first down. It is possible to be on either the 0-yard line (an odd result on the opposite goal is a safety).



Contemporary Designs

By John Huff

This was the theme for this month's GENERAL, and the theme I was requested to write upon. All well and good, but we do not have any games on the new release list related to modern warfare. There are some new projects in the works that will fill in this gap (as well as some modern variants of existing games) but the releases for 1989 jump from World War II to the near future, conveniently avoiding the modern. So, rather than write on this, I would like to use the opportunity to open some lines of communication with those readers who are computer game enthusiasts. One way is to give you some of my ideas on what makes a good computer game and see how they relate to your own.

Start with the age-old question: what makes a good game (or more precisely, a good computer game)? My attitude is that there are four overall elements to a computer game (and a lot of technical elements which I'll go into at another time) which comprise a good game. They are *fun*, *ease of play*, *originality* and *finesse*. I'll quantify these a bit more.

FUN—No matter what anyone tells you, this is the most important facet of the game. If people have to put up with a dull game just because it is on a theme they are interested in, it is not the success it should be. People generally know when they are enjoying themselves. In fact, when they are not, they will let you know by *not* buying your games.

One index of how fun a game is has to be how many times you tell yourself, "Just one more turn and then I'll save it and go to bed." Another is how much time you spend talking about it with your friends, and what kinds of things you say about it. In any event, you know when you are enjoying yourself.

As a game designer, it is important to play many games (even games unrelated to your specific interest) and try to figure out why you're having fun. This is not an easy thing to do, for by the time you are wrapped up in the game you don't wish to stop and be clinical—and *those* are the games you want to dissect.

EASE OF PLAY—Think about this one. Computers were designed to take care of repetitive tasks and to store large amounts of information indexed for easy access. There is no reason that the player must do this, is there? Moving pieces around the board and attacking other pieces should be no more difficult than moving the pieces in a checkers game. Movement points, strength points and related values should be taken care of by the computer so that all the player need do is to say to the computer, "Take this piece and occupy this location." If the move is legal, the computer will allow it; if not, it won't.

Not that the information should be concealed from the player (unless the game system dictates that it should be), but the need to have that detailed information just to put in orders is not desirable. As a player, I find that when the computer requires an

elaborate command string or accepts an order which is not legitimate and then just ignores it, I am irritated. If used properly (in terms of strategy games), the computer should free the player to concentrate on the problem at hand rather than trying to figure out the mechanics of the game.

ORIGINALITY—This is pretty simple to see, but is often missed by game developers. Originality does not mean just to find a subject nobody has touched upon before, but to take an approach no one else has yet. The game can be on any subject, the level of game play can be anywhere from single-player simulators to multiplayer global strategies. No matter what, if the approach is fresh and bright, the game will be fun and entertaining (and lucrative for the designer hopefully). Naturally, there is the trap of mistaking an obscure approach with a new approach (imagine a Civil War game that gave you battle reports in heliographed Morse code). This common affliction of game designers can be avoided if you remember that you must keep the game easy to understand and play. Frequently this can head off a stupid approach to the game.

FINESSE—Just because a game is easy to play does not mean that it should be easy to win. A tactical game must allow the player to use local terrain to hide actions; a strategic-level game should be flexible enough to allow the player to use believable diversions and feints. "Finesse" is that quality in the game that lets the player set up elegant strategies and see a positive reaction to them. Then a sense of control comes into the play. A feeling of control adds a whole dimension to any game. One example is taken from three years ago when the submission for the SPITFIRE 40 flight simulator was first received. I was flying along, amused by the game (but not sold on it) when a BF-109 appeared in my rearview mirror. Instinctively I kicked the rudder port and rolled starboard to watch the enemy plane move into my right forward quarter, snapped around in a tight turn and flamed him. This was the first time I had ever flown a simulator where this worked! Up to then, the programs I had seen precluded skidding, the split "S" turns didn't work correctly, and many other artificial limitations were placed in the program. Computers (by now) are so sophisticated that finesse should be a standard part of all games; unfortunately, the designers and programmers are only beginning to grasp this.

One of the approaches to design I have found that is very successful is the "Electronic Sandbox". This is a system whereby the laws of the universe you create are imbedded in the structure of the game. On a practical level this means that you don't need a lot of special rules—just one global rule (like gravity, line of sight, etc.). This is a much more difficult way to program a game, but does not place

Continued on Page 31, Column 3

INTO THE JUNGLE

Player's Notes on PLATOON

By James P. Werbaneth

PLATOON is designed to be "user-friendly" for the novice wargamer. It has only two pages of standard rules, and these are relatively simple. Combat consists of easily-resolved fire with personal weapons (similarly with grenades and off-board artillery) and melee. The map has only two main terrain types, clear and jungle, with trails and a stream that aid or hinder movement respectively.

Yet for all its apparent simplicity, *PLATOON* demands an extraordinary care and tactical thoughtfulness. Moving soldiers around at random and shooting at every target that looks good for the moment is seldom enough to win a scenario. *PLATOON* proves that simple rules do not necessarily make for a simple game.

At the core of its deceptive complexity are the aspects of limited intelligence and the denial of omnipotence to both players. Employing the expedient of placing counters upright on plastic stands so only the owner can see them, the limited intelligence rules test a player's ability to guess and estimate the identities of unrevealed units from those that have been revealed previously.

The game uses a system of impulses similar to Craig Taylor's earlier released *FIREPOWER*—although simplified greatly. In *PLATOON* each player may perform one action with one soldier (or group of soldiers with a leader) for each drawn chit. Often a minority of soldiers on both sides will do the decisive fighting, due to the incremental pace dictated by the impulse system.

Fields of Fire

One of the most important lessons for the *PLATOON* player is the absolute necessity of maintaining clear and optimally lethal fields of fire. A player who blocks his own machineguns and grenade launchers with Fakes (blank counters used to confuse the opponent) or +1 fire-modified riflemen without a compelling reason does a lot to help his enemy. Soldiers with these weapons should be deployed to take best advantage of their firepower and range. The same holds true for +3 fire-modified riflemen and "Bunny", with his sometimes devastating shotgun, and North Vietnamese RPGs. These units do have much shorter ranges and smaller fields of fire, and leaders with these traits such as "Barnes" and "Elias" are normally better suited to lead groups or direct fire support.

Terrain is equally important in determining fields of fire. Jungle is a great equalizer in that it can cut the range of a machinegun or M79 grenade launcher to that of a shotgun. The +3 target modifier of a jungle hex effectively diminishes the firepower of all weapons firing into it, and the reduction of range can make unsupported soldiers vulnerable to melee. On the other hand, clear terrain is an excellent place to be eliminated. The combination of undiminished weapon range and lack of target modifier makes it quite dangerous, and generally a good place to avoid. A single soldier with at least a +2 fire-modifier and a clear field of fire over open ground, with a willingness to commit an action chit to fire, can effectively deny that clear terrain to the enemy.

Units covering open ground are very difficult to overwhelm if they are in jungle or defensive works and the enemy is forced to enter the field of fire to get at them. The limitation of one action per impulse and the uncertain draw of the chits threatens to cause an advance across open ground to be erratic, with the soldiers picked off one by one. Furthermore, a player who expends action chits try-

ing to neutralize one or two troublesome soldiers likely does so at the expense of potentially more productive efforts elsewhere.

The best example of open ground's lethality is also the one first encountered by many players. In the "Protect the Flank" firefight, one American in hex T10 can deny about two-thirds of the clear terrain on board B to the North Vietnamese Army player. As the victory conditions reward the NVA for exiting units through T10 and the adjacent clear hexes, this has a profound and immediate effect on play. In fact, "Protect the Flank" can be an exercise of "Elias" staying in T10 and stopping waves of NVA single-handed, while the other three Americans guard the jungle to his left. "Elias" often is the only American soldier to fire his weapon. (See Illustration #1.)

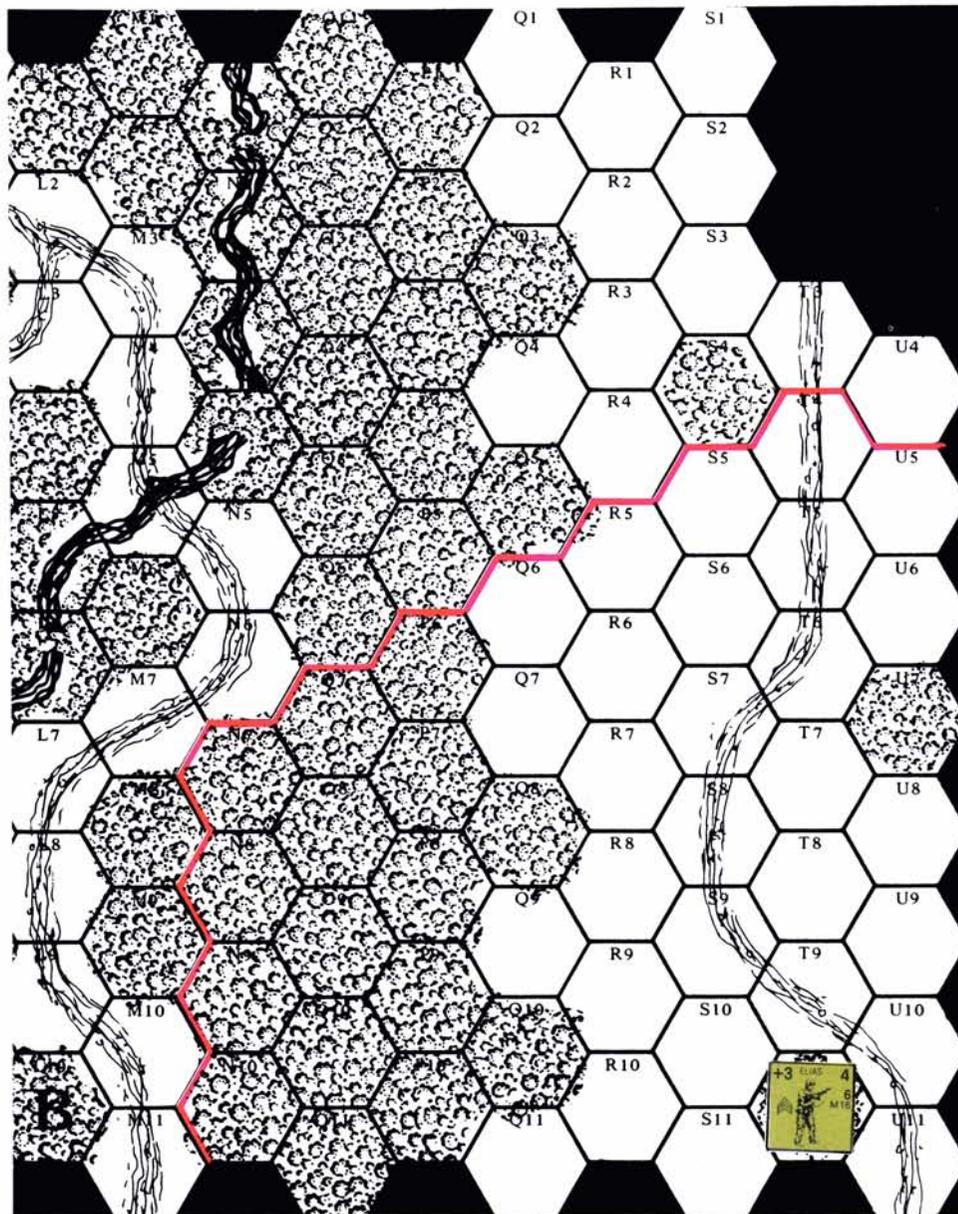
Soldiers should be kept in the jungle at almost all times. As they are crucial for masking one's dispositions and intentions, Fakes should likewise remain in the jungle. Although they cannot fire or

initiate melee, Fakes have a unique value of their own and are not to be squandered. A foxhole or bunker *can* make a clear hex just as safe as one in the jungle. But a defensive work in the jungle can be practically impregnable to fire instead of only adequately safe, as it would be in the open.

Shooting at Shadows

For the player there is seldom a clear picture of the other's dispositions and intentions. Instead he faces a nebulous mass of blank counters, each of which could be a soldier, a group of soldiers, a Fake, or a claymore mine or booby trap (depending on the nationality). The substitute card can indicate the size of any groups on the map, but Fakes can be used to deceive here too. What one guesses to be a formidable group can prove to be less than overwhelming, and vice versa.

Illustration #1: Elias' Field of Fire in "Protect the Flank". Clear hexes within the field of fire are effectively denied to the NVA player.



ability to cut through the "fog of war". Casualties represent the most frequent direct route to victory, especially for the Americans, and certainly affect the NAV player's ability to exit soldiers.

NAV victory conditions in "Return to the Black Virgin" may appear anomalous, but are really not. The evacuation of eliminated Americans is a function of their elimination. The only difference between this scenario and the others is that some eliminated Americans are worth more than others, depending on the NAV player's follow-through. NAV tactics may change to prevent evacuation, but the victory conditions remain essentially the same.

Conclusions

PLATOON rewards tacticians and punishes players whose understanding of the game is no deeper than the letter of the rules. Play is often a matter of firing at shadows and coping with limited intelligence; comprehending the deeper intricacies of the game system is necessary to surmount these obstacles and the incremental structure of the turns. For instance, the possibilities of regulating enemy intelligence are great, from inducing the opponent to confuse Fakes with more lethal units to using only one soldier in a group in fire combat to conceal the presence of a leader.

Herein lies the core of its sophistication. *PLATOON* is not (nor does it pretend to be) the last word on small unit operations in Vietnam. It is intended as a bridge for interested and intelligent mass-market gamers to enter wargaming. Yet the dynamics of *PLATOON* are surprisingly complex.

PLATOON is one of the best examples of a wargame is played on two levels. On the objective level, there is a mapboard and a set of counters, which are moved rationally and in concert on the mapboard toward given objectives understood by both players. No less important is the subjective level. This is that plane of guesses and estimates based on limited knowledge of an opponent who cannot do everything he wants to at once. It is where *PLATOON* becomes a "shell game", as revealed units move among others and other units open fire. The subjective level accounts for Fakes that are quite convincing as large groups and groups that move unhindered because the opponent thinks that they are Fakes.

All wargames have this dual nature, whether or not it is readily apparent. It is one of the primary attractions of all games of strategy and tactics, from chess to *ADVANCED SQUAD LEADER*. Even a game without limited intelligence rules operates on the subjective level, as both players have to speculate to some degree on each others' strategies and luck. Only solitaire gaming lacks these subjective aspects, and this absence is sorely missed.

Somewhere on both levels and between them is the impulse system. Players quickly learn to act according to what probability states will be the next chit drawn. For example, in a firefight in which both players have eight chits, an American who has seen seven straight NVA chits drawn will generally assume that he is in for a run of American impulses and will plan for a limited North Vietnamese ability to react. On the flip side are those who will gamble against probability on the next draw.

Its objective simplicity is what makes *PLATOON* look like a simple game for the novice wargamer. In fact, Craig Taylor combined simple mechanics with complex dynamics to make it look easy.



Coming Attractions

MBT

MBT (Main Battle Tank) will soon be the newest addition to Avalon Hill's growing series of modern-era games. *MBT* is a tactical level simulation of combat in Western Europe between the forces of the United States and West Germany against their Warsaw Pact counterparts. Combat units represent individual vehicles, fixed-wing aircraft, rotary-wing aircraft, artillery batteries, infantry squads, and a myriad of support units. In total, forces of company- and battalion-sized formations, along with their supporting assets, can be fielded by the opposing players. Over 55 vehicles, 25 aircraft, and assorted infantry, guns and crew-served weapons are included in the 400+ two-sided counter mix. Examples of some of the units included are the M1A1 Abrams, M2A2 Bradley, M901 Improved TOW Vehicle, A10A Thunderbolt II, AH-64A Apache, UH-60A Blackhawk, Leopard 2, Marder, the Jagar 1 and 2, M48A2GA2 Tank Destroyer, Gepard, BO-105 PAH-1, Tornado IDS, T-80A, T-72M1, BMP-1, ASU-85, SA-13 Gopher, ZSU-24(4) Shilka, Mil Mi-24 Hind-E and the Su-25 Frogfoot.

All combat units are represented by individual "Data Cards" that include all the pertinent information necessary to simulate the highly detailed nature of modern combat. The specific information for vehicle units include, for example, speed, maneuverability, weapon types, ammo options, armor, defensive capabilities, size and extensive notes. This level of detail has also been extended in the representation of the aircraft and infantry units.

In addition to the counters and data cards, the game will include four mounted mapboard panels, terrain sheet, combat information cards, an introductory rules folder, a battle manual and ten-sided dice. The "Battle Manual", while containing the bulk of the Advanced and Optional rules, also includes over 400 possible TO&Es ("Tables of Organization and Equipment") that are currently fielded by the antagonists of *MBT*.

The four geomorphic map panels can be used to simulate a wide variety of terrain types, from heavily wooded to urban to virtually open terrain. A series of colors will be used to represent the major terrain types. By designating these colors as different terrain types from scenario to scenario, a wide variation is achieved. In addition, the map panels can be joined to form many different combinations.

The introductory rules folder, which is a scant four pages, carries all the information necessary to get an *MBT* engagement underway quickly. The Battle Manual expands on the introductory rules. *MBT* offers the advantage of placing the level of complexity in the hands of the individual players. Each scenario can be made as simple or as complex as desired.

Speaking of scenarios, *MBT* includes an extensive mix of "what-if" engagements that take advantage of the wide variety of combat units included in the game. Multiple variations of meeting engagements, defensive battles, mobile assaults and airmobile assaults have been devised. In addition, the game lends itself very well to the design-your-own approach. The extensive list of TO&Es should cover just about all possible combinations.

The scale is 100 meters per hex, along with a fluid time frame that represents from 30 seconds to five minutes of real time per turn. The game system utilizes a quasi-simultaneous movement system that is based upon command order chits—no written orders are necessary for all the basic commands. Of course, options such as artillery fire, ammo and fuel limits, and target acquisitions do require a certain degree of writing. But these options are just that—they are employed only if desired.

I feel *MBT* accurately represents the unique nature of modern combat. The rule today is to spot the enemy before he spots you, since virtually all units have the capability of knocking out any other unit on the battlefield. Very few units possess the degree of immunity that seemed to prevail during WW2; Tiger IIs are a thing of the past (although the M1A1 Abrams certainly comes close).

Command control is just as important as concealment on the modern battlefield. *MBT* effectively presents the complexity of the modern command process. A command "point" system, in combination with the command order chits, is utilized to simulate the frustrations the modern commander must face, yet does not overly complicate the game to the detriment of its playability. A wide variety of combat headquarter and headquarter formations have been included in the TO&Es to facilitate the command control function. Again, since single units are utilized in *MBT*, COs and XO's and support commands are represented as individual units.

Doctrine plays as important a role as command control, especially in fielding the Warsaw Pact forces. That doctrine is much more rigid than the American or West German. The doctrine limitations can have far-reaching effects on the degree of flexibility these units can employ during a battle. Yet, the Warsaw Pact player will more than likely have a numerical advantage—there are trade-offs for everything.

The sequence of play is straightforward, yet effectively encompasses all necessary aspects of combat. The sequence of play includes:

- Command Phase
- First Aircraft Phase
- Direct Fire Phase (including steps for gun and ATGM weapons)
- Movement Phase
- Second Aircraft Phase
- Artillery Phase
- Adjustment Phase

Depending on the level of complexity desired, some of these phases may not even be necessary. If aircraft and artillery are not used, for example, three of the seven phases could be eliminated.

Some other aspects of modern combat included in *MBT*: specific vehicle facing and armor locations; specific ammo types (APFSDS, SPDS, HEAT, HESH); overwatch fire; reactive armor; camouflage; rangefinder systems (from optical to CO₂ lasers); individual ATGM speeds and the ability to dodge missiles; visual and/or infrared screening smoke; night fighting; and adverse weather and ground conditions; thermal imagers, image intensifiers, and searchlights; troop quality; area and point effect

weapons; radio jamming; crew losses; transported unit bail-out; building destruction and fire; mines; quickmarch; special forces; artillery missions (HE, Smoke, ICMDP, FASCAM, CLGP); counter-battery fire; and many types of aircraft weapons (cluster bombs to chain guns to smart bombs). In short, *MBT* promises to be one of the most accurate, playable and exciting simulations of modern combat yet published.

Jim Day
January 1989



ALL-STAR REPLAY

For those readers who follow Mr. Burnett's column "Sports Special" but who may not be familiar with the defunct *ALL-STAR REPLAY*, it was an irregular periodical edited (at various times) by Bruce Milligan or Joe Balkoski. The following is a listing of the contents for the nine issues of *ALL-STAR REPLAY* for which back issues remain in stock. Common abbreviations are used for the sports games, to wit: Baseball Strategy—*BbSr*; Basketball Strategy—*BkSr*; Bowl Bound—*BB*; Challenge Bridge—*CB*; Football Strategy—*FbSr*; Paydirt—*PD*; Pennant Race—*PR*; Pro Golf—*PG*; Speed Circuit—*SC*; Stasis-Pro Baseball—*SPBb*; Stasis-Pro Basketball—*SPBk*; Stasis-Pro Football—*SPFb*; Superstar Baseball—*SB*; Title Bout—*TB*; USAC Auto Racing—*USAC*; Win, Place & Show—*WP&S*. The subject code is also fairly straightforward: History/Statistics—*H*; Play—*P*; Variant—*V*; Design—*D*; Strategy—*S*. We should note that many of these issues contained new cards/charts for use with a published variant. Readers wishing to obtain one or more of these back issues of *ALL-STAR REPLAY* may obtain them direct from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214) for \$4.00 each plus the usual 10% shipping and handling. (Maryland residents, please add 5% state sales tax.)

- Vol. 2, #1: *SPBb*—*H, V*; *SB*—*D*; *SC*—*V*; *CB*—*P*; *BB*—*H, V*; *FbSr*—*P*; *SPBk*—*V*
- Vol. 2, #2: *FbSr*—*P, V*; *BB*—*P, V*; *SPBk*—*V*; *BkSr*—*V*; *SC*—*V*; *CB*—*P*; *TB*—*V, H*; *BbSr*—*V*; *USAC*—*D*; *WP&S*—*V*
- Vol. 2, #3: *TB*—*V, H*; *BB*—*V, D*; *SPBb*—*V, P*; *CB*—*P*; *SC*—*V, P*; *SPBk*—*V*; *WP&S*—*V*
- Vol. 4, #1: *PG*—*H, V, D*; *SB*—*P*; *WP&S*—*V*; *TB*—*V*; *BkSr*—*P*
- Vol. 4, #2: *SPBb*—*H, V*; *SPBk*—*P*; *WP&S*—*V*; *TB*—*V*; *FbSr*—*P*; *SC*—*H*
- Vol. 4, #3: *PD*—*H, V*; *SPFb*—*P, V*; *WP&S*—*V*; *TB*—*V*; *SC*—*H*
- Vol. 4, #4: *WP&S*—*V, P*; *TB*—*V*; *PR*—*D, V*; *SPBb*—*P*; *PG*—*D*; *PD*—*V*; *BB*—*V*
- Vol. 4, #5: *PR*—*H, V*; *WP&S*—*V*; *PG*—*P, V*; *SC*—*P, V*; *TB*—*V*; *SPFb*—*V*; *BkSr*—*V*
- Vol. 4, #6: *SB*—*H, V, P*; *PR*—*P, V*; *WP&S*—*V*; *TB*—*D*

COPY SERVICE

If the reader should need a copy of an article from an out-of-print back issue of *The GENERAL* or one of the Wargamer's Guides, The Avalon Hill Game Company does provide a photocopying service. The charge for this service is \$1.00 per page, with a minimum order of five pages required. Please specify the article title, volume and number it appeared in, and the pages on which it can be found; *The GENERAL Index* is invaluable for this (\$4.50 from Avalon Hill). This service is also extended to our other publications, past and present — *ALL-STAR REPLAY* and *HEROES*. Standard Avalon Hill Game Company postage rates of 10% of the amount of the order must be included for domestic orders (20% for Canadian orders and 30% for overseas orders).

BACK ISSUES

Only the following back issues of *The GENERAL* remain in stock; price is \$4.00 per issue (plus the usual shipping and handling charges). Due to the low quantities of some back issues, if ordering, please specify alternative selections. Below is a listing of each in-stock back issue by subject matter; game abbreviations are italicized and standard (a partial listing may be found on the "Opponent's Wanted" form on the insert of this issue). Type of article is indicated by the following abbreviations: *H*—Historical, *DN*—Designer's Notes, *V*—Variant, *SR*—Series Replay, *S*—Strategy, *Q*—Questions, *P*—PBM (postal), *Sc*—Scenarios, *A*—Analytical. The featured game for each issue is always the first one listed. Those printed in red indicate one-color reprints of previously out-of-stock issues.



- 14-3: *AIW*—*H, DN, S, Q*; *TRC*—*S*; *3R*—*S*; *STAL*—*SR*; *WAS*—*V*; *PB*—*Sc*
- 14-5: *SL*—*H, A, DN, Q*; *WS&IM*—*A*; *TRC*—*S*; *MD*—*S*; *SST*—*S*; *3R*—*S*
- 15-2: *PL*—*V, Sc*; *STAL*—*V*; *3R*—*V*; *DD*—*DN*; *RB*—*S*; *VITP*—*S*
- 16-1: *AZ*—*Sc*; *S, DN*; *3R*—*S*; *NP*—*S*; *PB*—*SR*; *1776*—*S*; *DIP*—*S*
- 16-6: *DUNE*—*A*; *DIP*—*V*; *OS*—*V*; *AZ*—*DN*; *Sc*; *SR*; *PB*—*A, PBM*
- 17-4: *FE*—*S, P, DN, V*; *MD*—*V, Q*; *COI*—*SR*; *VITP*—*S*; *1776*—*Sc*; *WO*—*A*; *SST*—*V*; *NAP*—*S*
- 17-5: *CM*—*S, V, Q*; *RW*—*V*; *SL*—*V*; *STAL*—*V*; *PL*—*S*; *3R*—*S, SR*; *CAE*—*V*; *KM*—*S*; *MR*—*S*
- 17-6: *STAL*—*S*; *WS&IM*—*V, Sc*; *WAS*—*V*; *3R*—*SR*; *SL*—*S*; *TLD*—*Q*; *CL*—*S*; *VITP*—*S*; *TRC*—*S*
- 18-1: *FITW*—*A, Q*; *BIS*—*S*; *SL*—*S*; *DUNE*—*V*; *DIP*—*S*; *AK*—*A*; *PB*—*SR*; *AL*—*S*; *W&P*—*S*
- 18-2: *AF*—*A, Sc, Q*; *AK*—*V*; *3R*—*DN*; *TB*—*V*; *SL*—*S, Sc*; *AIW*—*V*; *VITP*—*S*; *DIP*—*S*; *DD*—*S*
- 18-3: *GOA*—*S, DN, V, Q*; *AOC*—*V, Sc*; *AK*—*S*; *VITP*—*V*; *SL*—*S, Sc*; *WS&IM*—*SR, P*; *DIP*—*S*
- 18-5: *3R*—*S, A, V, DN, Q*; *SL*—*S, A, Sc*; *TRC*—*V*; *TB*—*V*; *RW*—*V*; *CL*—*A*; *DUNE*—*V*
- 18-6: *FT*—*A, Sc, V, DN*; *VITP*—*V, Q*; *MD*—*S, Q*; *SOTN*—*A, Q*; *SUB*—*Sc*; *BL*—*V*
- 19-1: *SOA*—*A, V, DN, SR, Q*; *TLD*—*A, Q*; *3R*—*S, Q*; *DWTK*—*DN*; *TB*—*A*
- 19-2: *BB*—*H, Sc, S, DN*; *TLD*—*A, Q*; *SL*—*V*; *3R*—*S*; *SOA*—*SR*
- 19-3: *GSL*—*A, Sc, V, SR, Q*; *DIP*—*A*; *RW*—*Sc*; *GE*—*V*; *1776*—*Sc*; *LRT*—*V, Q*; *SL*—*A*
- 19-4: *CIV*—*A, V, DN*; *CM*—*V*; *DIP*—*A*; *GL*—*V*; *AL*—*V*; *TR*—*Sc*; *WO*—*Sc*; *SLA*; *3R*—*S, Q*
- 19-5: *SON*—*A, S, H, Q*; *W&P*—*S, Q*; *DIP*—*A*; *WAT*—*V*; *WS&IM*—*Sc*; *SL*—*A*
- 19-6: *VITP*—*PBM, SR*; *3R*—*V, Q*; *DIP*—*A*; *FT*—*V*; *BIS*—*V*; *NW*—*A*; *SL*—*A, Sc*; *SUB*—*V, Sc*
- 20-1: *GI*—*S, A, DN, V, Q*; *VITP*—*SR*
- 20-2: *TT*—*A, DN, S, Q*; *MR*—*V*; *LRH*—*A*; *SL*—*Sc*; *W&P*—*V*; *GOA*—*S, Q*; *DIP*—*A*; *PL*—*V*
- 20-3: *FRED*—*S, V, Sc, Q*; *PB*—*A*; *1776*—*Sc*; *DWTK*—*S, V, Q*; *DIP*—*A*; *CON*—*V, S*
- 20-5: *BR*—*SR, S, H, Q*; *LRT*—*S*; *DIP*—*A*; *GSL*—*Sc*; *GE*—*A*; *WS&IM*—*SR, P*; *SON*—*Q*
- 20-6: *B-17*—*A, V, SR, Q*; *AF*—*V*; *LW*—*S*; *DL*—*S*; *FE*—*S*; *DIP*—*A*; *MD*—*S*; *BR*—*SR*; *GOA*—*Sc*; *SL*—*A*; *PL*—*Q*
- 21-1: *UF*—*S, A, SR, DN, Q*; *SOA*—*S*; *GI*—*H, S*; *TRC*—*S*; *DD*—*S*
- 21-2: *NAB*—*S, DN*; *W&P*—*S, A, Q*; *NAP*—*S, Q*; *DIP*—*A*; *FR*—*S*; *FE*—*S*; *3R*—*S*; *BFI*—*S*; *1776*—*S*; *SL*—*A*
- 21-3: *BB*—*S, SR, Q*; *3R*—*S*; *SL*—*A, H*; *SOTN*—*V*; *DIP*—*A*; *FRED*—*S*; *FE*—*S, Q*; *SST*—*S*; *TLD*—*S*; *PL*—*Sc*; *1776*—*Q*; *SOA*—*Q*
- 21-4: *PGG*—*S, SR*; *PB*—*A*; *3R*—*S*; *TRC*—*S, V, Q*; *DIP*—*A*; *STAL*—*V, S*; *SL*—*Sc*; *PK*—*Q*
- 21-5: *HW*—*S, V, A*; *MR*—*S, Q*; *OR*—*A*; *DIP*—*A*; *3R*—*A*; *RB*—*S*; *CON*—*V*; *CIV*—*S*; *SL*—*A*
- 21-6: *FP*—*H, V, SR*; *AIW*—*S, Sc*; *BL*—*V*; *TAC*—*V, Q*; *SL*—*A*; *PK*—*Q*
- 22-1: *PAA*—*A, S, Q*; *TB*—*A, V*; *DWTK*—*DN*; *TR*—*V*; *GSL*—*PBM*; *DIP*—*A*; *AOC*—*S*; *WAS*—*S, Q*; *AK*—*V*; *CIV*—*S*; *3R*—*S, Q*
- 22-2: *BANZ*—*A, SR, Q*; *FT*—*A, S*; *SUB*—*Sc*; *VITP*—*S, Q*; *AK*—*Q*
- 22-3: *PB*—*SR*; *PL*—*Sc, V, Q*; *SOA*—*S*; *3R*—*V*; *DIP*—*A*; *CIV*—*A*; *UF*—*Sc, Q*; *AIW*—*S*; *GOA*—*A, Q*; *TLD*—*A*
- 22-4: *RF*—*A, V, S*; *TRC*—*V*; *PK*—*S, Q*; *DIP*—*A*; *3R*—*V*; *SUB*—*V*; *PPG*—*S*
- 22-5: *DEV*—*S, A, Q*; *GSL*—*Sc*; *BR*—*S*; *DIP*—*PBM, A*; *SC*—*V*; *FITG*—*A*; *ASL*—*Sc, Q*
- 22-6: *ASL*—*A, Sc, DN, Q*; *FP*—*Sc*; *FE*—*S, Q*; *WAS*—*A*; *DIP*—*A*; *SL*—*S*; *TLD*—*S*
- 23-1: *FL*—*A, V*; *DL*—*V*; *B-17*—*V, DN*; *HW*—*S, Q*; *VITP*—*V*; *3R*—*S*; *TT*—*V*; *LW*—*V*; *SST*—*V*; *RW*—*V*
- 23-2: *ASL*—*A, S, Sc, Q*; *BV*—*SR*; *UF*—*S*; *DIP*—*A*; *PL*—*A*
- 23-3: *SUB*—*V, Sc*; *ASL*—*S, Sc*; *BV*—*SR*; *HW*—*V*; *BL*—*V, Q*; *BB*—*A*
- 23-4: *EIA*—*S, DN*; *W&P*—*V, S*; *WS&IM*—*Sc*; *SC*—*V*; *NAP*—*S*; *YS*—*S*; *3R*—*S, Q*
- 23-5: *KOTA*—*DN, S, V, Q*; *WAT*—*V*; *B-17*—*V, Q*; *3R*—*S*; *RW*—*V*; *ASL*—*S, Sc*; *VITP*—*S*
- 23-6: *1830*—*DN, S, V, Q*; *FP*—*Sc*; *RB*—*S*; *DEV*—*PBM*; *CIV*—*S*; *MR*—*S*
- 24-1: *ASL*—*V, S, Sc, Q*; *SOF*—*SR*; *TRC*—*S*; *FP*—*Sc*; *RF*—*S, DN*; *PGG*—*S*
- 24-2: *ASL*—*A, S, Sc, Q*; *SOF*—*SR*; *PL*—*S*; *3R*—*S*; *DD*—*S*; *FE*—*S*
- 24-3: *DIP*—*S, A, H*; *HW*—*V, S*; *EIA*—*S*; *DE*—*S*; *TV*—*Q*; *KOTA*—*Q*
- 24-4: *RSN*—*H, D, A, SR, V, Q*; *ASL*—*V, S, Sc*; *FE*—*S*; *3R*—*S*
- 24-5: *BRIT*—*A, DN, S*; *CAE*—*S*; *CL*—*S*; *GL*—*V*; *CIV*—*S*; *SOJ*—*DN*; *KM*—*V, S*; *MR*—*S, Q*
- 24-6: *CASS*—*H, S, SR, Q*; *B-17*—*V*; *ASL*—*S, Sc, Q*; *AZ*—*S*; *PGG*—*S*; *3R*—*S, Q*
- 25-1: 25th Anniversary Issue; *KREM*—*S, Q*; *DINO*—*S*; *MOV*—*DN*; *ASL*—*DN, Q*

THE CASE FOR PLAYING BY MAIL

An Introduction to PBM

By Tom Oleson

Surely no one is better qualified to author a discussion of play-by-mail techniques than Tom Oleson. Author of Avalon Hill's "Code of Conduct" rules by which AREA play has been governed for the past decade, Tom has been playing wargames by mail longer than many of the readership has been alive. The only AREA competitor to reach the triple-Z qualifier in 15 years, Tom has nonetheless amassed an enviable numerical score by playing virtually all comers at practically any game while others tend to submit only their best games to rating. His experience is by no means limited to Avalon Hill games, having sampled a wide range of what the hobby has to offer in terms of varying publishers and periods. Gamers who feel that they are not getting as much out of gaming as they used to due to lack of time or capable opponents owe it to themselves to listen to Tom's sage advice on the "other way to play".

Apart from the obvious difference in subject matter, what is the difference between a game like *Monopoly*, and the typical wargame? There are several not obvious at first glance. I doubt that anyone has a keen interest in *Monopoly* without actually playing the game. In contrast, some of the most celebrated figures in our hobby rarely play. For example, I would be surprised if Richard Berg, Jim Dunnigan or Rodger MacGowan have actually played a wargame in a decade, and yet they are among the most *deservedly* respected names in the hobby. Another difference is that I doubt very much if any one plays *Monopoly* solitaire, and yet many enthusiastic wargamers like, or even prefer, solitaire play.

So if you are one of the many enjoying our hobby without actually playing against an opponent, this article is not for you. Then again, maybe it is *especially* for you. I've tried some of the games designed for solitaire play and must admit they are pretty good. However, despite the recent advances in the design of solitaire wargames, I dare say none that I've seen can compare with the excitement of playing a skilled opponent. Regardless of your time available or geographic location, the perfect opponent is as close as your nearest mail box.

That's where Play By Mail (PBM) comes in. It is the best way I know to contact that opponent with the perfect temperament who will make wargaming really come alive for you because it greatly multiplies the number of opponents available to you from which to choose. Joe down-the-street doesn't like Civil War games? No bother, Bill in Tennessee loves them. Bill hasn't learned the new impulse-movement games; so what, Jeff in Georgia knows his stuff. Of course, this is not the only advantage of PBM. You can do a PBM turn at the most convenient moment for you and your family, who may have different ideas about how daddy or fiance should spend the evening or weekend, something other than an all-day Face-To-Face (FTF) wargaming session. I don't know anyone so henpecked he can't slip away for an hour while his wife watches the latest "Dynasty" episode to do a PBM turn, and it is so much more exciting than today's TV! Moreover, given the length of many of our wargames, it is often more convenient to reduce them to bite-size proportions by taking one turn at a time rather than trying to finish them all at once in one marathon session. Moreover, you never have to worry about Joe Gamer sneezing in your face, eating you out of house and home, or wanting to play on your bowling night. You play when you want.

All the convenience of the computer or solitaire game's built-in opponent, but with infinitely more challenging programming.

The case for PBM does not end with convenience. How many of your old games do you still play? Games that you enjoyed not all that long ago gather dust on your shelf for lack of opponents. Probably all your local friends are too busy playing the latest releases to hark back to those old classics that got you into this in the first place. Why let it gather dust when you can be playing a turn or two a month and reliving some of that past excitement you first experienced when the shrink-wrap was freshly removed?

One turn at a time too "bite-sized" for you? Who's to say that you have to play only one game at a time? Many PBMers play several games at once so that they can take several turns with each exchange of letters. Indeed, the ultimate balance solution to any wargame is to play two games simultaneously—one as each side. Don Greenwood and I have been doing just that for many years and he tells me that the four turns he takes every other weekend in our four different games nicely fills up his available time while satisfying him with four separate situations to resolve at each setting. For him, it's like playing a mini-wargame every week.

Many gamers tell me that the new games they are interested in just aren't suitable for PBM. It is certainly true that the greater number of phases called for in more recent games makes PBM more inconvenient, but with a little ingenuity they can still be played by mail and with considerable enjoyment. I dare say no game is more detailed than *ASL* and I've encountered many people who play it by mail. Certainly more enjoyment is derived from playing them this way than by not playing them at all. PBM doesn't have to be limited to those games with published PBM systems. Once you've gotten the hang of PBM, you can devise a method to play almost anything by mail. PBMers are an innovative lot and where there's a will there's a way. Don Greenwood and I are playing *THUNDER AT CASSINO* by mail—one of those games wherein each player takes turns moving a single unit or group of units. Given the number of possible impulses in each turn, the game could go on far past our respective lifetimes; but by using some common sense bending of the rules, sealed envelopes bearing conditional orders, and a bit of the honor system we are making good progress. This is one of those games that I would not PBM alone, but it makes for a quick turn to supplement our *ANZIO* moves in each mailing.

Strange as it may seem, I number social contacts as one of the chief advantages of PBM. While many surely dismiss PBMers as hermits unwilling to play FTF, I've always enjoyed the comradeship of making new friends in different parts of the world. I have PBM'd with opponents from every continent except Antarctica [and that's only because penguins can't write]—including some behind the Iron Curtain—and treasure the contacts thus made. The well-known Egyptian actor Omar Sharif is a champion bridge player, and in a recent BBC interview he commented that with a deck of cards and the ability to play bridge, you could make friends anywhere in the world. As one who has lived in many different countries, I can attest that the same is true of wargaming. While every pursuit has its share of stinkers and nice guys, I believe wargaming has more than its share of the latter and it has been a pleasure to make their acquaintance through our mutual love affair with wargames. Through the

years, I've greatly enjoyed meeting my postal correspondents in person. Many of those I play have told me that their main interest in attending ORIGINS each year lies in meeting those far-away opponents at last and giving each letter writer a face. It's all made possible for the price of a stamp, through PBM. Even in today's world of high tech pleasures, PBM remains one of the most satisfying and inexpensive pastimes.

But when push comes to shove, the real advantage to playing by mail for me is to improve my skill. If you own a car, chances are it can exceed 100 mph. Most cars will these days, although it is just as likely that you rarely use more than half of that performance. Wargames are like that, too. Those of us intimately familiar with a game realize that most of those games gathering dust on our shelves have subtleties of play few have ever discovered, let alone practiced against a skilled opponent. The only way to harness that skill for yourself is to play the game against as many different opponents as possible—players who may have very different ideas about how to best play the game because they've had different experiences than you. It's also not uncommon to discover that you've actually been playing the game incorrectly when you play someone outside your immediate circle of friends. When this happens, a re-reading of the rules may result in you seeing an entirely different interpretation of how the game should be played.

Some players are put off by the frequency of errors in PBM which require returning the move for a "redo". Since moves aren't commonly recorded in live games, the "clerical" aspect of PBM can be annoying. Admittedly, such annoyances aren't present in FTF games. However, there's another side to that question. How many error-free games have you played FTF? All of them? Are you sure? The funny thing, when you stop to think about it, is that errors in FTF play are probably more frequent, but less noticed. Another hobby veteran, George Phillies, the "Stalingrad King", made an observation about the now waning fad of "double blind" games which illustrates the problem. He remarked that one of the drawbacks of this type game (where you do not observe your FTF opponent's move to preserve the "fog of war") is that the players may understand the rules differently, but not realize it because they move unobserved. In actuality, few, if any, FTF games are played as "legally" (i.e., within the framework of the rules) as those played by mail, simply because every move is readily verifiable without the overbearing presence one would have to use in checking the legality of an opponent's moves in a "live" game. Who among us has not been annoyed by the live opponent who uses the creative "shift" so prevalent in FTF play—whether consciously or not—where a unit is moved, the player changes his mind, returns it and moves it again. "Let's see now, the 16th Panzer was here, right?"

The question of legalities aside, the real advantage of PBM for me and countless others has been what it has done for our understanding of the games themselves—the development of our skill. Putting aside for the moment the lessons one gets simply by expanding one's circle of opponents, a PBM turn offers a player the opportunity to "try on for size" countless variations of a response to any given turn. "What if we put the 16th Panzer in Napoli? No, that won't do, how about Cassino?" This type of "mulling over" of a move and constant juggling of pieces is both impractical and socially unaccept-

able in FTF play. How many of you have sworn off playing someone again because he took "forever" to make a move? In PBM you can take all the time you want without inconveniencing your opponent, and in the process you will discover countless tricks and superior strategies not readily apparent before.

ELECTRONIC MEDIA

In this age of high tech, Play By Mail can take many forms. Moves can be made by telephone, FACS machines, or computer modems with any of the numerous electronic Bulletin Board services that are available for user fees. The medium doesn't really matter. The important thing is that they each allow you to bridge great distances to reach an opponent who wouldn't otherwise be available to you, and allow you to take your turn at your leisure. While the above methods tend to be more expensive, they have the advantage of getting your moves to their destination faster. Given the more leisurely pace of PBM, I've never considered this much of an advantage—although I can see where two fellows on opposite sides of the country who wanted to play each other an entire game during the course of a weekend might find great advantage in the instant communications these electronic media provide. I understand some of the electronic bulletin board services even provide random number generators for the resolution of combat. Certainly this is a form of PBM we will hear more of in the future, but you don't have to be well versed in the computer revolution to use the telephone.

Gamers in major urban areas can especially use the telephone to good advantage to play "by mail" faster and more cheaply than they could through the mails. Don Greenwood is currently playing the new *STALINGRAD* game one impulse at a time with a friend on the other side of Baltimore. They live more than 50 miles apart and see each other infrequently; but because it's still a local phone call, they exchange impulses daily for free. The impulse system games are especially good for play-by-phone because so few units are actually moved each "turn" and the problem of slurring or writing grid-coordinates is lessened. Dice rolls can be resolved simply by stating a page number from your common phonebook. Your opponent then responds instantly with a column and a number—so quickly that it removes any doubt that he has had time to actually look up the page and column in question. You can then both look up the page quoted, go to the proper column, and count down the cited number to the randomly selected phone number. Use the divide-by-6 method to determine a random number from "1" to "6" by dividing the last four digits of that phone number. Any other dice rolls required can be taken in order down the page provided you've specified them in advance. If you live in the same television viewing area or even the same state, you might want to use the numbers picked daily in televised state lottery shows. A simpler solution is just to use the Random Number sheet method described later in this article.

WHERE TO KEEP THEM

Regrettably, I must concede that PBM is not for everyone. You will probably rapidly come to the same conclusion if your PBM debut is attempted without a place to leave the game set up between turns. Although there are many fine PBMs who don't leave their games set up between turns, it is not recommended. Not only is it a nuisance and time consuming to have to reset each turn, but the possibilities for error are multiplied. So if you absolutely don't have a place where you can leave games setup perhaps you had best forget about PBM. But don't be so quick to use this as an excuse! With a little effort and very little expense, most living space situations can be adjusted so that leaving one or more games set up need not be cumber-

some. The most frequent solution is simply to leave games setup on a rec room's long neglected ping pong or pool table; but then what do you do when Uncle Sid comes over for a game of billiards? There are lots of simple solutions and they are very handy to have on hand for the growing number of war-games that can't be finished live in one sitting.

A game cabinet is not as expensive as it sounds. This doesn't have to be a piece of fine furniture (although I've seen some that qualify for that description). A game cabinet is simply a box big enough to slide drawers into that will hold standard-sized gameboards. A good-sized cabinet can be constructed from one 4'x8' sheet of 1/2" plywood. Shelves can then be cut from 1/4" sheets in the amount desired by the individual and rested inside the "box" on struts positioned about 4 inches apart on the sides of the box. This allows you to remove each shelf to carry the gameboard from room to room without disturbing a single piece. When you've finished your move, return it to the cabinet secure in the knowledge that it is safe from the ravages of wife, kids and pets. A project like this with eight shelves cost me about \$20.00 more years ago than I care to remember, but I imagine the cost is still relatively inexpensive. Regardless of your woodworking skills, it is a good idea to varnish the whole thing and soap the strips of wood which provide the support for the drawers to prevent sticking.

A game cabinet lends a whole new outlook to your play. Instead of forgetting about a move after you've mailed it off, you are always tempted to pull out the board and study it for fresh approaches every day until that next move arrives. Such contemplation has made more than a few players "see the light" in a particular game and made better players of them. You also no longer have to reposition each unit every time you receive a move. You already have his last move before you. Moving units to their new location and checking the legality of the move becomes one and the same. The only drawback to a game cabinet that I've discovered is that those games with larger mapboards such as *ANZIO* or *AFRIKA KORPS* need to be cut along the fold to fit into a standard-sized cabinet. Of course, if you also still play these same games FTF or have more than one PBM match of the same game going at a time (and most PBMs do), you'll need to purchase extra boards and counters to get the most utility out of your cabinet.

An easy alternative for those lacking woodworking skills is to simply make custom trays for any game you want to PBM. Merely cut a flat rectangle of 1/4" plywood to the dimensions of the board in question with an extra inch allotted around the perimeter. Then take four strips of plywood 1/2" wide by one inch high, and nail or glue them to the bed area. These raised strips around the side make it possible to stack a number of games without disturbing the counters. Game trays are less prone to sticking than the shelves of a game cabinet, and more versatile for odd-shaped boards. On the negative side, they are more prone to the ravages of any passerby. Both the game cabinet and game trays can be stored under that ping pong or pool table alluded to earlier to consume less space and increase their protection from accidental bumps.

To increase the protection of units from random bumps, many gamers use a form of artist putty available in most stationary stores. A tiny ball of the stuff can be applied to any counter to make it stick to the board or another counter with little discernible damage to either the board or the counter—although over a period of time it will wear off the printing. The stuff is easily removed, balled up again, and reusable when it comes time to move the unit. I've dropped whole gameboards while using this stuff and only had to relocate a few errant pieces.

A more elaborate method of the same thing is to magnetize your game. Unmounted mapsheets for

most games can be ordered from AH for the same price as the mounted versions and hung on any metallic surface. The units can then be magnetized by applying magnetic "tape" (also available from AH). A ten-foot strip of this tape sells for \$7.50 and is sufficient to magnetize 240 1/2" counters. This treatment requires a bit of work, however, as you need to cut the tape into 1/2" pieces with a razor blade and then permanently mount it on the counter back. Obviously, this treatment has its drawbacks when using two-sided counters; you must make a duplicate set of counters for the backs. Consequently, I recommend it only for those games with one-sided counters. On the plus side, mounting a gameboard with movable pieces in place on the wall really makes a snazzy looking gameroom. If you have a permanent wargame domain and a favorite game or two, you might well want to try this. Otherwise, it's really not necessary.

Another disadvantage of the magnetic tape AH uses, is that unless you thin the counters before application, the magnetic bond is usually strong enough to only hold four or five counters in a horizontal stack. There is a company called Shield Laminating which offers a product called "Counter Clips". The advantage of these is that counters are inserted inside a magnetic body that surrounds the counter on three sides. Counters can thus be removed from the clip and reinserted back side up which is a real plus for games with two-sided counters. They also offer a stronger magnetic bond because the magnets actually adhere to each other rather than attracting through the width of the counter. They come in 3/8" size as well as 1/2". On the negative side, they are about three times as expensive and the edges can block the view of the printing on the edges of the counter. I've also heard that the edges break off easily, making them worthless thereafter. If so, their utility for use with two-sided counters is much less.

RECORDING LOCATIONS

Now that you have a place to leave your game setup between moves, the chance of a game-delaying error is lessened but not eliminated. The most common PBM error is incorrectly recording the location of a unit. Most games have the grid coordinates printed in every hex nowadays, but for those that don't it's not a bad idea to take the time to actually print them on the board. You need not print the location in every hex, but place them at regular intervals so that you can easily determine the co-ordinate of each hex. Whatever grid system is in use, be sure to check your move after you've recorded it to ascertain that those units are actually where you think they are. Get in the habit of changing the facing of counters by rotating them 90 degrees after recording/checking their location so that when you are done they all should be facing in the same direction. Any that are "out of step" may have been skipped. You'll also find that doing this will cause you to reassess your move as you go along, opening up new possibilities and the inspiration for an improved move may well come to you while checking your clerical work. Lastly, get in the habit of printing your moves. Many gamers have handwriting that rivals an MD's prescriptions. Make sure your moves are legible. Many a game has been delayed, lost, or ended in acrimonious dispute because someone innocently mistook a "3" for a "5".

RANDOM NUMBER SHEETS

No discussion of PBM aids would be complete without touching upon Random Number Sheets. Use of a Random Number Sheet system for die roll resolutions does away with a whole category of potential PBM problems by putting the stock market system out of mind although it adds a few new ones. AHIKS members can obtain free Random Number

sheets for use in club matches. (Despite the similarity of the name, AHKS has no connection with Avalon Hill so if you have a problem with them don't take it up with the boys on Harford Road.)

The real beauty of Random Number Sheets though is that virtually anyone can get one for the price of a newspaper. As explained in the accompanying Code of Conduct article, the listing of New York Stock Exchange transactions, printed in most papers, can easily be used to generate dice rolls. However, you need not use them in the traditional manner in conjunction with a CTD—thus requiring ready access to virtually any paper.

Get in the habit of saving a few newspaper stock listings. Pick one out—the older, the better. At this point, pick ten stocks and add their total sales-in-hundreds. Advise your opponent of your ten stocks and their total sales. This constitutes a "fingerprint" for your newspaper sheet. It is unlikely that any two stock lists for different days will have this same total. Thus, your opponent is assured that you will be using the same Random Number Sheet throughout the game.

It must be acknowledged that this system is not without its flaws. An industrious and unscrupulous player could cheat by spending hour upon hour pouring over old stock results until he found one that matched your finger print. By providing your opponent with only the total sales of your ten stocks rather than the individual sales of each stock, the cheater must really work to discover your newspaper—laboriously totalling columns of numbers trying to find the right combination. Frankly, anybody who wants to win this badly is really sick and has my pity. I gladly concede the win to anyone handicapped by such an under-developed conscience. However, you needn't be so generous. It is easy to remove even this small element of doubt. Here's how. When a player selects a stock for resolution, he includes with his selection a digit between 0 and 5 as an additive randomizer. The result for combat resolution is the "sum mod 6" of the stock volume and the additive randomizer. For example, suppose the player selects AT&T as the stock entry and 4 as his additive randomizer. If the AT&T final sales result is a "2", the result is $2+4=6$. This way, even if your opponent can predict the next stock you will select, you have the opportunity of unknowingly changing the result.

A bigger drawback to my mind is what happens when your wife inadvertently throws out your old newspaper with the spring housecleaning? That takes some pretty tall explaining . . . "uh, sorry Rolfe, we'll have to do that last bunch of attacks over again—I lost my Random Number Sheet". When that happens, you must in good conscience offer to resign the game—and don't be upset when your opponent accepts.

Another drawback to the use of Random Number Sheets is the lack of immediate verification. When you use the CTD method, you verify every attack result automatically when you return your newspaper clipping with your next move. Doing so with a Newspaper Random Number Sheet would destroy the sheet each time you resolved combat. Consequently, you do not verify results until the end of the game—or more frequently if you prefer—at which time you exchange Random Number Sheets. If your opponent finds a discrepancy in the results you must gladly concede him the win. Many gamers do not like this system because they don't want to jeopardize a win to an error in basic math. Personally, I prefer it. With calculators so cheap today, there is no excuse for even the most pathetic mathematician being unable to correctly divide a three- or four-digit number by six and then multiplying the result by six to double-check his work.

Many of the same rules for the selection of stocks when using the CTD method apply also to a stock

random number sheet. For example, if a certain stock is missing or lacks a three-digit result, use the next unused suitable stock. Be sure to mark off on your sheet stocks you've already used in one color so that you won't repeat them in a later turn. Circle the sales-in-hundreds results used by your opponent with a notation of the die roll each generates in a second color. This aids your opponent's eventual verification and guards against his using the same stock twice. If you wish to really be helpful you might note the turn each die roll was generated in the margin in still another color.

There has been much discussion of possible pitfalls in using the "do-it-yourself" Random Number Sheet. If the precautions above are taken—and they only require a few minutes per game—the problems are minimized. The advantages are that it is cheap and very convenient. If you happen to be playing several people simultaneously as most PBM'ers do, you don't have to worry about them picking the same CTD and thereby requiring you to scurry about getting extra copies of the same paper as verification. Regardless of any delay in receiving your opponent's turn, your die roll sheet is right there waiting.



CONVENTION CALENDAR

The GENERAL will list any gaming convention in this space free of charge on a space available basis provided that we are notified at least four months in advance of the convention date. Each listing must include the name, date, site, and contact address of the convention. Additional information of interest to our readership such as tournaments or events utilizing The Avalon Hill Game Company's games is solicited and will be printed if made available.

The Avalon Hill Game Company does not necessarily attend or endorse these gatherings, nor do we guarantee that events using The Avalon Hill Game Company's games will be held. Readers are urged to contact the listed sources for further information before making plans to attend.

MARCH 17-19

OWLCON X, Houston, Texas

Contact: Jon Benignus, RSFAFA, P.O. Box 1892, Houston, TX 77251.

Note: Tournaments in *DIPLOMACY* and *CIVILIZATION* among others.

APRIL 14-16

PENTECON, Ithaca, New York

Contact: Robert Kurzban, Cornell Strategic Simulations Society, 5553 North Campus #5, Cornell University, Ithaca, NY 14853.

APRIL 15-16

WINDS OF WAR '89, Winston-Salem, North Carolina

Contact: Piedmont Area Wargamers, P.O. Box 72, Kernersville, NC 27285.

Note: *ASL* Regional Tournament.

APRIL 29-30

UMF-CON, Farmington, Maine

Contact: Table Gaming Club, Student Life Office, 5 South Street, Farmington, ME 04938.

MAY 26-29

GAMECAUCUS II, Concord, California

Contact: Mike Wilson, P.O. Box 4867, Walnut Creek, CA 94596. (415) 228-0764.

Note: Tournaments include *TAC AIR*, *UP FRONT*, *TITAN*, *B-17* and *7th FLEET* among others.

JUNE 16-18

MICHICON '89, Southfield, Michigan

Contact: Barry Jensen or Mike Bartnikowski, Metro Detroit Gamers, P.O. Box 656, Wyandotte, MI 48192. (313) 591-2300.

JULY 28-30

DIP-CON XXII, San Diego, California

Contact: Larry Peery, P.O. Box 8416, San Diego, CA 92102. (619) 295-6248.

Note: The premier *DIPLOMACY* tournament in the States, featuring individual and team and variant competitions.

HEROES Back Issues

A number of folks have written to us lately requesting a listing of the contents of *HEROES*, Avalon Hill's defunct role-playing magazine. For those readers who may not be familiar with *HEROES*, it was a bi-monthly, 48-page periodical edited (at various times) by Bill Peschel or Richard Snider. The following is a listing of the contents for the ten issues of *HEROES* that appeared. Common abbreviations are used for the role-playing games, to wit: Powers & Perils—*P&P*; RuneQuest—*RQ*; James Bond—*007*; Lords of Creation—*LOC*. Many issues also contained one or more articles on one of Avalon Hill's science-fiction or fantasy boardgames; these have not been abbreviated. The subject code is also fairly straightforward: Fiction/Background—*F*; Scenario—*Sc*; Variant—*V*; Design—*D*; Strategy—*S*. Readers wishing to obtain one or more of these back issues of *HEROES* may obtain them direct from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214) for \$4.00 each plus the usual 10% shipping and handling. (Maryland residents, please add 5% state sales tax.)

Vol. 1, #1: *RQ-F, D; P&P-D; LOC-Sc; Amoeba Wars-S*
Vol. 1, #2: *007-D; LOC-V; RQ-F, V; P&P-Sc; Elric-F, Sc*
Vol. 1, #3: *007-V, D; LOC-V; RQ-V; P&P-V, S; Mystic Wood-S*

Vol. 1, #4: *RQ-D, F, Sc; LOC-V; 007-S, V, D; Freedom in the Galaxy-S, D*

Vol. 1, #5: *007-V; RQ-D, F, V; P&P-V, F; LOC-V; Wizards-S, D*

Vol. 1, #6: *RQ-F, V, Sc, D; 007-D; Dragon Pass-D*

Vol. 2, #1: *RQ-F, Sc; P&P-Sc*

Vol. 2, #2: *RQ-D, S, V; LOC-V; P&P-F, V; Freedom in the Galaxy-S*

Vol. 2, #3: *RQ-Sc, V; P&P-V, F*

Vol. 2, #4: *RQ-S, D, V, F; 007-V; P&P-S*

Computer Corner . . . Cont'd from Page 24

artificial barriers to player actions. (Doesn't it really burn when the computer won't allow a move for no other reason than that the designer never figured someone might want to do that?)

The electronic sandbox is just that. The player should be able to perform any action that might occur to him, excluding those specified as impossible through common sense. It is inherently obvious that an armored vehicle cannot change elevations unless the ground does; it is not, however, obvious that the same vehicle can be denied entrance to a given location because an enemy unit is occupying the same 100 meter hex. It should simply mean that one or the other unit will be driven off or destroyed by superior firepower and/or position.

Built into the structure of the game should be the rules that govern actions. In this way, the game can more readily handle a greater range of conditions. The alternative method is an easier programming job, but is based on the premise that the players are less intelligent than the designer (not the case at all, I assure you) and should be limited only to the tactics the designer and programmer can think of. A good rule of thumb is this: if the designer can easily win the game, then it is probably not very good. Like any Frankenstein's monster, to some extent the game should synergistically game a little of its own.

The only partial exception to this is in the case of a direct translation of an existing boardgame to computer format. If the design is a sufficiently popular one, then the translation for damn sure ought to allow the same sort of successful strategies that work in the board game to work on the computer. But, even in the case of a direct translation, there is no excuse for sloppy design.



THE REVISED AREA BRIEFING

Changes to the AREA System

By Don Greenwood

The AREA Player Rating system is now entering its 15th year of existence. Although it can't be said to have achieved its avowed purpose of completely culling the bad guys from the ranks of postal play, neither has it been a dismal failure. There are still incidents of poor sportsmanship and outright fraud, not to mention disappearing opponents who drop out of sight when games start to go bad. However, judging from the number of such reports received in recent years, it would appear that the frequency of these instances has decreased. Whether this relative calm upon the waters can be attributable to the "Big Brother is watching you" syndrome of AREA or simply the graying of the hobby is a matter of opinion. It does appear likely however that the publication and widespread acceptance of a code of ethics regarding postal play where none existed previously has had at least a contributing effect. No matter how distasteful it may be to "snitch" on an errant opponent, the possibility of being reported to a neutral higher authority and dismissed in disgrace must influence at least a few to adhere to the straight and narrow. Playing someone with an extensive AREA background is not a guarantee of an enjoyable game played to conclusion, but it is certainly a better percentage bet than trying someone with no track record at all.

Skill and personality aside, one of the best qualifications an opponent can have is humility. All too often PBM rookies take defeat personally or as a test of their gaming "manhood". Learning to lose graciously is what sets aside the practiced, mature competitor from the "win-at-any-cost" mentality of someone trying to feed his ego. A player with an extensive AREA record is someone who has been through the wars already and probably met defeat before and knows that it is nothing to be ashamed of. The real reward in these games is not just winning, but the friendly comradeship of a hard-fought contest. In that sense, AREA has been a success and because of it we are embarking on a new era of AREA play in which we are attempting to shore up its shortcomings and give it a new, more active role. This, and the accompanying articles on PBM and Playing Aids, kick off our campaign to give AREA the facelift it needs to carry it into the '90s and help revitalize competitive gaming in our hobby again.

Heretofore AREA's shortcomings could be lumped into three general categories:

1. **LACK OF PUBLICITY:** Despite administering the system and publicizing the AREA Top 50 list, we did little to actually relate what AREA was on an ongoing basis. In 15 years of existence, this article marks only the third time that the system has been extensively explained to the readership. All references to it must have been somewhat mystical to new readers not versed in what AREA does. Consequently, hereafter we will be publishing a regular AREA AFFAIRS column by leading AREA competitor Don Burdick to keep the readership posted of AREA activities and actions on a regular and detailed basis.

2. **NON-FTF APPEAL:** AREA was designed with the Play-By-Mail (PBM) gamer in mind and did little to appeal to those interested only in live Face-to-Face (FTF) play. With the growing sophistication of the "state-of-the-art", new games that are easy to play by mail have been few and far between—which contributed to a declining rate of postal wars being conducted. For all of its virtues, PBM has one big drawback: the time it takes to bring games

to a conclusion—as so vividly demonstrated by the two-round AREA postal tournaments, some of which have not yet finished years later. Obviously, if AREA is to be a force in the mainstream of the hobby it must do a better job of catering to FTF players as well. Some year, we hope to address this shortcoming with an annual Championships convention.

3. **LACK OF DETAIL:** In trying to cover all facets of Avalon Hill gaming, we spread ourselves too thin and didn't give enough attention to detail. The system as presently construed rates a player for all reported games played; but because the system does not presently distinguish between the games played, a rating does not tell anything about which games a player is proficient at—only that he has played some game(s) a specific number of times. A great *TACTICS II* player may be a terrible *RUSSIAN CAMPAIGN* player. It is possible that the highest rated AREA player has gained his place on the Top 50 list playing nothing but *TACTICS II* and under his own terms. We are now going to address that shortcoming as well.

For longtime readers who are familiar with AREA and PBM procedures or who have no interest in them, we apologize for usurping so much of your magazine with what is essentially a rehash of previously printed material. Humor us though—once in 15 years is not too high a price to pay to have all of this information at your fingertips and refresh the memory of the hobby at large as to the delights of these subjects. Who knows, you might find it opening new vistas of gaming pleasure for you too. And even if you think you've seen it all before, pay attention. There are some very important—and we think exciting—differences in the information presented below and in the accompanying articles.

DEFINING THE ACRONYM

"AREA" is short for the Avalon Reliability, Experience, and Ability player rating service. The service draws its name from the Avalon Hill Game Company which originated it, maintains it, and whose games form the medium for its competition. Games of other manufacturers are not subject to rating because they do not subsidize the maintenance of the service.

The *Reliability* part was necessitated by the need to measure not only a player's skill, but his maturity in being willing to finish a game he has started rather than simply fading away and not owning up to a loss. The "fadeaway" opponent has been the chief gripe of those who play by mail ever since the postal hobby got its start in the 60s. AREA can't force people to play to conclusion, of course, but they can admonish those who don't and remove them from the rating service. More importantly, through the use of additional qualifiers attached to a player's numerical rating, a competitor's record of finished games can be worn like a badge of honor proclaiming to one and all that he has a verified record of finishing what he starts.

That's where the *Experience* part comes in. The AREA rating service does more than just give players a numerical score to determine how many games they've won. Through the use of alpha-numeric qualifiers appended to their score, a rating also tells in an instant how many rated games the individual has played, against how many different opponents, and the number of those games played by mail.

The *Ability* part is where we have the most

trouble. Unfortunately, some people get hung up on amassing points—forgetting that the object is to have fun and comradeship with a like-minded competitor. Nevertheless, the numerical rating serves a very useful purpose in that it can prevent the embarrassment of overmatching an inexperienced player with a highly skilled one. That sort of match-up is rarely satisfying for either party. The numerical ratings allow players to pick adversaries of approximately equal skill and thus result in the most exciting matches. Unfortunately, in the past we have measured only a player's ability in all rated games as a group—rather than in specific games. That shortcoming is about to be corrected.

NEW STARTING POINT

The numerical system is similar to that used by the United States Chess Federation, but the use of alpha-numeric qualifiers gives it some unique qualities all its own. All new players start out with 1500 points and no qualifiers. The latter have to be earned through rated games. Originally, new entrants got to pick their opening level—ranging from 1600 for those who viewed themselves as experts to 900 for those who saw themselves as the rawest rookie. This led to problems however when the "900" players encountered difficulty finding opponents who would play them for fear of losing too many points or not winning any due to their low rating. Consequently, we now start all new entrants at 1500 and allow competition to decide their true level. In reality, an AREA rating means nothing until it is "verified" by having played ten rated games. Until then, a player's rating is considered "provisional".

Scoring is simple. Players agree to play a rated game, exchange a signed Code of Conduct agreement containing all the details of the match, and at the conclusion the loser signs the winner's Victory slip, adding the date and his membership number. The winner then sends the Victory slip to Avalon Hill to be fed into the rating system. Points are won and lost according to the dictates of the Provisional Numerical Rating Chart.

PROVISIONAL NUMERICAL RATING CHART

Difference in rating points:	Subtract ratings of the two players:	If higher rated player wins:	If lower rated player wins:	In case of a draw:
	high player gains	low player loses	high player loses	low player gains
0-50	70	70	0	0
51-100	65	75	5	5
101-150	60	80	10	10
151-200	55	85	15	15
201-250	50	90	20	20
251-300	45	95	25	25
301-350	40	100	30	30
351-400	35	105	35	35
401-450	30	110	40	40
451-500	25	115	45	45
501-550	20	120	50	50
551-600	15	125	55	55
601-650	10	130	60	60
651-700	5	135	65	65
701+	0	140	70	70

Any Verified player (10 rated games) loses/gains half these points (fractions rounded up)—regardless of whether he played a Verified or Provisional opponent.

EXAMPLE: Assume a 900-rated Provisional player beats a 1200-rated Provisional player. The winner gains 95 points to 995 while the loser drops 95 to 1105. Had the higher player won his rating would be 1245; the loser's 855. Let's further assume that the 1200 player was Verified. If he won he'd have gained half of 45 (23) to 1223, but the loser who was Provisional would still drop 45 to 855.

A Verified player's gains/losses are halved to give his rating more stability. Provisional players ratings are kept volatile on purpose so they can reach their true level of competition faster.

Starting in 1989, AREA will also rate multi-player games. The only additional requirement is that the winner must collect a signed victory slip from each player, staple them together and forward them as a unit to the AREA technician with a statement that all of the slips compose a single ratings claim for an X-number multi-player game. Each loser should write the word "multi-player" across his concession slip. The Area technician will then award and subtract points as he would for a single two-player game except that all points won/lost are divided by the number of players in the game (fractions rounded up).

EXAMPLE: Assume player A with a verified rating of 1600 wins a four-player game of *KREMLIN*. The losers are rated 1500, 1400, and 1300 respectively but player B's 1500 rating is provisional (less than ten recorded games). Player B loses 17 points (.25 of 65), player C loses seven (.25 of 28; as a verified player his point gain/loss is halved, and player D loses six (.25 of 23). Player A who is verified will gain nine points from B, seven from C, and six from D for a total gain of 22 points in one game.

FORFEITS

Forfeited games do not result in victory points for either side. A "Forfeit" is defined as any game in which a player refuses to finish a game which has been started with the mutual understanding that it will be submitted for rating. Players may successfully terminate a game at any time by signing their opponent's Victory slip. Players are urged to report those AREA members who forfeit so that they can be warned that such behaviour requires their removal from the AREA system. (See "Grievances" below.)

NEW SPECIFIC GAME RATINGS

Now for the first time, AREA memberships come in two flavors: General and Specific. Every AREA member gets a General membership when he joins. This allows him to submit any regular Avalon Hill wargame played against another consenting AREA member for rating. Unfortunately, ability in one game implies very little about a player's skills at another. While there is some overall correlation between skill at one game and abilities at another, in general a player's skill will vary in direct correlation to his experience at that particular game. Consequently, the General membership just records his abilities at virtually all of the games that he submits to rating as a whole. As a player need submit only those games which he wishes for rating, it is assumed that the player feels relatively competent at any game thus submitted. All games submitted are lumped into one overall rating.

However, players who wish to keep separate records of their prowess in individual games or compete for "Top 10" honors in specific games may augment their General AREA membership with a Specific AREA membership. By purchasing an additional \$6.00 membership, a player can have all of his rated games for a specific title kept separate from his General AREA rating. Rated games played in an individual's specialty affect both his General and Specific Area rating. Any other games submitted would affect only his General rating. For example, let's assume Tom Gamer has a General rating of 1600 but because he wants to compete for national honors and recognition in *ANZIO*, he has also purchased an *ANZIO* membership. Any *WATERLOO* games he submits for rating will affect only his General AREA rating, but any points won or lost at *ANZIO* will be added or subtracted equally from both his General and *ANZIO* ratings. It makes

no difference whether your opponent is playing for General or Specific ratings. The fact that he is playing only for General rating does not prohibit you from registering both General and Specific ratings for the same game. A player may purchase as many Specific AREA memberships as he wishes by simply paying the \$6.00 fee for each and specifying the game that he wishes the membership for. A player cannot purchase a Specific membership without a General membership. All current members of the system already have their General membership.

Unfortunately, games already rated as part of a current General membership cannot be counted towards establishing a Specific membership. Therefore, all Specific memberships must be Provisional until a player has played ten rated games in that specified title. We will be printing "Top 10" lists of rated gamers in *THE GENERAL* for each game as they become available. Rated members will receive top seeds and/or byes at the future Avalon Hill Championships. We believe this system offers exciting new opportunities for players to earn recognition in their hobby while publicizing just who the best players are and setting up "dream" matches between players of equal skill.

CHOOSING SIDES

AREA does not get involved in assigning opponents or sides. Starting a rated game is up to the initiative of the individual player to find an AREA rated opponent with similar desires. The *GENERAL* want ads are a good place to start. Failing that, you can obtain a listing of four other AREA members in your vicinity by sending a self-addressed, stamped envelope and a \$1.00 fee. There is no guarantee that the members listed will be still active in AREA play or receptive to your proposals or even previously unknown to you. No refunds or alternate names will be furnished.

When setting up a match it is always best to list the optional rules or play balance refinements with which you wish to play and then offer your opponent his choice of sides. Failing that, the best solution is to agree to play two games—one with each side. If playing by mail, such a series should probably be done simultaneously rather than trusting the other fellow to be in the mood for a rematch at the end of what may be a game lasting several years.

QUALIFIERS

The letter qualifiers appended to a player's numerical rating tell the story behind the numbers. They tell in a brief form how the player has arrived at his rating in terms of the number of games that he has played for rating, the number of different opponents, and how many games he has played by mail.

QUALIFIERS FOR AREA RATING SYSTEM:

Qualifier	Frequency	Opponents	PBM Games
A	1-5	1	1
B	6-10	2-3	2
C	11-15	4-5	3
D	16-20	6-7	4
E	21-25	8-10	5-6
F	26-30	11-13	7-8
G	31-40	14-16	9-10
H	41-50	17-20	11-12
I	51-60	21-25	13-15
J	61-70	26-29	16-18
K	71-80	30-34	19-21
L	81-90	35-39	22-24
M	91-105	40-44	25-28
N	106-120	45-50	29-32
O	121-135	51-55	33-36
P	136-150	56-60	37-40
Q	151-165	61-66	41-45
R	166-180	67-73	46-50
S	181-200	74-80	51-55
T	201-220	81-87	56-60
U	221-240	88-95	61-66
V	241-260	96-103	67-73
W	261-280	104-111	74-80
X	281-300	112-120	81-86
Y	301-350	121-128	87-93
Z	351+	129+	94+

EXAMPLE: An AREA rating with a Qualifier of CCB has been rated in 11-15 games against 4-5 opponents of whom two have been played by mail.

GRIEVANCES

No one wants to be in the uncomfortable position of blowing the whistle on someone else, but there are times when it is necessary—if only to prevent the same misfortune from befalling another AREA member who does obey the rules. Players are urged to work out their problems amongst themselves in a friendly manner remembering that good sportsmanship is more important than any win. However, in those inevitable situations where the best efforts of diplomacy and fair play have failed to get an opponent to live up to his obligations, AREA encourages you to report the offender so that we can officially inform him that such behavior is not tolerated in the AREA player pool or advise you that you are in the wrong. When filing a grievance, always complete all of the following steps.

1. **CODE OF CONDUCT:** Furnish proof of the circumstances under which the game was started by providing us with a copy of the Code of Conduct agreement exchanged by both parties prior to the start of play. If no such agreement was signed, you have no recourse for complaint. You need not exchange a Code of Conduct agreement for every game played. Longtime acquaintances will seldom go to that formality. However, if you have not exchanged such agreements specifying the terms of your game, do not expect AREA to be able to read minds and render a decision regarding your complaint. If you did not exchange such an agreement beforehand you cannot make a complaint. Your only recourse is to chalk up the game to experience and scratch that opponent from your list of compatible playing partners.

2. **WARNING:** Never complain to AREA unless you have first tried to resolve your problem with your opponent to no avail. If that fails, always give your opponent a warning that your next action will be to file a grievance and give him two weeks to respond before doing so.

3. **OPPONENT'S COPY:** When filing a grievance, always send a copy of that grievance to your opponent. If you expect a reply of any kind from AREA, enclose a self-addressed, stamped envelope. Otherwise, you will never hear the outcome of your grievance.

4. **MEMBERSHIP NUMBER:** Always include the complete Membership Number and address of both yourself and your opponent when filing a grievance.

For the record, if we decide your grievance is valid, we will warn your opponent by mail to comply. Failure to do so constitutes a forfeit and removal from the system. Again, no points are earned for a forfeit—no matter how lop-sided the situation when the game terminated. Any game which does not end with a signed Victory slip is not a completed game and earns no points or qualifiers. Victory is not the most important part of a rated game; completion of it in a friendly manner is.

PROCEDURES

1. **MEMBERSHIP CARD:** Each AREA member gets a membership card containing his membership number and 40 Victory slips. The rating is entered in pencil so that you can update it. Your membership card should be safeguarded as replacements must be purchased. If you change your address, you must report it and purchase a new membership card—which will probably result in a new membership number as well. There is a \$1.00 fee for this service for each membership card changed. Do not submit victory claims/losses with an invalid address/membership number.

Continued on Page 38, Column 2

CODE OF CONDUCT

Official AREA check list for AREA matches

Avalon Hill suggests you make photocopies of this form to fill out and exchange with your opponent prior to the start of every AREA postal match.

Name _____ Name _____
 Address _____ Address _____

 AREA Number: _____ AREA Number: _____
 Phone Number: _____ Phone Number: _____
(Include Area code & preferred local time to call) (Include Area code & preferred local time to call)
 Date: _____ Date: _____
 Approximate AREA rating: _____ Approximate AREA rating: _____

I have read the article "RULES OF CONDUCT" by Tom Oleson, which appeared in Vol. 25, No. 2 of The *GENERAL*, and agree to abide by its rules for good postal play. Apart from the general rules, we agree to the following specific arrangements:

1. Game & Edition: _____
2. Scenario & applicable options: _____
3. Side each is playing: _____
4. Errata agreed to: _____
5. Other Agreements (such as second game w/exchange of sides): _____
6. Judge to handle disputes if other than AH: _____
7. Permitted time limit between the receipt of your opponent's turn, and the postmark of your reply:
 1 week 2 weeks 3 weeks 4 weeks Chess Clock [____ Days per Side]
8. Timeouts allowed to each side: one two three other (specify): _____
9. Time Span of timeouts: 2 weeks 4 weeks 2 months 3 months other (specify): _____
 It is understood that violation of the above agreed upon time limits will be cause for a concession and signed victory slip regardless of cause.
10. The possible combat and movement thereafter results of each turn must be fully specified in advance when the turn is mailed. Note here any deviation permitted from this rule: _____
11. Combat Resolution System: divide by 6 special PBM base 10 table other (specify): _____
12. If using a back issue newspaper stock sheet as a random number sheet, specify:
 A. Name & edition of newspaper: _____
 B. "Fingerprint" of sheet you are using: _____
 C. Any special procedure for selecting stocks: _____
13. If using a current date newspaper stock sheet for each turn, specify:
 A. Name & edition of newspaper: _____
 B. Minimum interval between postmark of letter and CTD of stocks: _____
 C. Alternative CTD if invalid CTD chosen: next valid CTD other (specify): _____
14. Attacks to be resolved by:
 defender attacker in subsequent letter using CTD after postmark of last letter other (specify): _____
15. Penalties for returned moves: none bonus die roll return of same move for correction three times results in concession.
16. Special Arrangements not covered above: _____
17. Signatures of both players:

THE LAST RESORT

Official AREA Complaint Form

All complaints regarding AREA play are to be filed on a photocopy of this form or a typed or printed facsimile. All information contained on this form is required to file a grievance with AREA. All AREA grievances are resolved in accordance with the Code of Conduct article printed in Vol. 25, No. 2 of The *GENERAL*. Do not expect help from AREA if your problem is caused by conduct other than that listed in the aforementioned article.

ACTION TAKEN: I understand that I cannot gain AREA points by gaining a forfeit win over my opponent. All that can be gained is a possible prompting of my opponent to fulfill his AREA obligations and consequently to resume our game, or failing that, his disqualification from the AREA rating pool.

REQUIREMENTS: 1. To file a complaint you must first have written your opponent trying to resolve your problem at least twice without success at two week intervals and must send him a copy of this complaint.

2. Do not file more than one complaint per form or per attached separate piece of correspondence.

3. If an AREA response is requested, a SASE is necessary.

Please print or type

Your Name _____

Address _____

AREA Number _____

Opponent's Name _____

Address _____

AREA Number _____

Game Being Played: _____

Date Begun: _____

Number of Turns Played: _____

Date of last correspondence from opponent: _____

Date of last unanswered correspondence to opponent: _____

Number of unanswered inquires sent at bi-weekly intervals: _____

NATURE OF COMPLAINT: Explain below or per attached correspondence. If a Code of Conduct agreement was made at the start of the match, attach same as proof of claim. In its absence, send other proof (such as letters from opponent agreeing to rules, etc.)

I certify that the above information is correct to the best of my knowledge, and that this claim is filed as a last resort and in the best interest of fair play in the AREA Rating Pool.

Signature _____

CODE OF CONDUCT

The Rules for AREA

By Tom Oleson

Tom Oleson's "Rules of Conduct" for PBM play were first published nearly a decade ago in Vol. 16, No. 6 of *The GENERAL* and have been the official bible of AREA play ever since. While they are not without their detractors—as evidenced by the accompanying article advocating a stricter set of guidelines for use in *RUSSIAN CAMPAIGN* (printed here only for contrast)—it is safe to say that they have been widely, if not universally, embraced by the PBM fraternity during the past decade. Having had the unpleasant experience of being the main arbitrator in more PBM disputes than I care to remember during that timespan, I can safely say that these rules are the only ones that Avalon Hill will ever endorse as the standard for AREA play wherein we are called upon to render service as an arbitrator of disputes.

The issue containing these rules has been out of print for some time, so new PBM advocates have had nowhere to turn for the official rules of AREA PBM play. Consequently, we hope longtime readers will forgive us for reprinting here a modified version of the same article. While we've added a few new interesting twists, the rules which follow do not make exciting reading. Those who have not tried PBM should not be put off by the degree of "legalese" put forth here. A discussion of the benefits of PBM can be found in the accompanying article presenting the case for playing by mail. The points discussed herein have become second nature to most veteran PBMers, and most play their games without need to refer to these rules at all. Just as most of us think we know the rules of baseball well enough to understand the game, none among us (including more than a few Major League umpires) really has that book of fine print containing the rules of the game committed to memory. A longtime subscriber to the theory that good fences make good neighbors, I hereby take advantage of the current AREA face-lifting to once again present the rulebook for AREA postal play.

Before beginning, let's take time to state what should be obvious but which is nonetheless the most important rule: Be a good sport. The purpose of wargaming is enjoyment. We are playing games. Nothing more. Of course we take them seriously and wish more people did likewise, but it is more important to gain the respect of a fellow gamer than to win any game. When faced by someone who doesn't subscribe to this theory, don't give in to the impulse to treat him in kind. Continue to play and give him the same respect and courtesy that you would like to receive. Then, after concluding the match, mark him off your list of opponents. There are many mature gamers out there looking for a good PBM match; there is no need to continue your association with someone whose personality you find abrasive. The ultimate end to any game should not necessarily be a victory, but rather the hearty congratulations of the loser while asking for another game. If you don't get that, then you really haven't won anything.

THE GAME AND ITS RULES

1. Be sure that you are both using the same edition of the rules.

2. In case of a rules disagreement, the Avalon Hill ruling will apply, unless you have agreed otherwise in advance. For example, you may agree to have a dispute resolved by a third party, such as a club judge.

3. It is your responsibility to know the rules. You have no cause for complaint if a legal move catches you unawares. Should such a misunderstanding put you in an untenable position, resign the game gracefully and offer to begin another, wiser for the experience.

THE FORMAT FOR PLAY

Since the end product of playing wargames is enjoyment, if you aren't enjoying it, you are likely to stop. My experience is that most PBM matches are conducted under an unspoken understanding based on common sense which just evolves between the players. If their styles are incompatible (whether because one is too slow, writes illegibly, makes too many mistakes, the difference in skill level is too great, or whatever), the first match is likely to be the last. The most unusual reason for a match coming to a halt which I have had was a PBM game with the well known designer Jack Radey. We exchanged political salvos with each turn, and when I argued that I preferred South Korea to North Korea, the match dribbled to a halt! It's still your turn, Jack!

But if you prefer a precisely defined format, here it is:

1. **TIME LIMITS:** Agree on time limits, date your turn, and also indicate which game turn it is. A common interval is one or two weeks. The interval doesn't matter as long as you agree beforehand. Don't consider such intervals sacrosanct. The purpose of time limits is to keep a game going—not to see if you can win on a technicality. Don't cry foul if an opponent violates your weekly intervals by taking eight days. But if those weekly intervals start becoming bi-weekly or monthly, it's time to remind him of his agreement and suggest that he take a timeout, or resign, or perhaps that you should re-negotiate the required time interval.

2. **TIMEOUTS:** Rare is the gamer who can invariably reply within a week (or whatever time interval has been agreed), so specify a number of "timeouts" and their duration. No one should expect his opponent to ignore vacations, work or any of the multitude of life's problems in order to keep to a PBM schedule. However, every gamer has the right to expect his opponent to show him the courtesy of dropping him a card stating that he will be unable to continue for a month or so. The frequency and duration of such timeouts should not be excessive but each gamer must decide for himself what is excessive. If you're not willing to delay a game for more than a month, state so in advance. If you violate the agreed time limits, offer to resign without complaint.

3. **CHESS CLOCK SYSTEM:** An alternative to the timeout system for those a little more serious about keeping a game going is the "Chess Clock" system. FTF players often dread playing someone who seemingly takes forever to make his moves. The problem is no less annoying in PBM. The solution in FTF play is readily available if players agree to use a Chess Clock. Chess Clocks do not limit the time you have to make any given move. Rather, they keep a running total of all the time a player uses during the course of a game. So a player who makes a move very quickly is rewarded with additional time which he can use later in a subsequent move. However, once the clock reaches a pre-agreed time limit the game is over and that player has lost. The Chess Clock system can be adapted to PBM quite

easily. Players agree in advance on a reasonable time frame for the game, say six months for a *PANZER-BLITZ* game. Each player is then given half of that period with which to make all of his moves (ten in this case). In this example, each player would have 90 days to make a total of ten moves. A Chess Clock log is kept on a separate sheet of paper which is sent back and forth with each move. Upon receipt of a move, each player records the turn number and the date of postmark of his opponents letter. He then subtracts the total number of days that have elapsed since the last entry on the log and enters the new total of days remaining for his opponent on the Chess Clock log. He must return the postmark of his opponents' letter as proof of the date. Should the postmark be missing or illegible, he must enter the date of the turn as recorded by his opponent. Using this system, one does not have to bother with negotiating timeouts or reminding an opponent who exceeds the time limits. Every time he does so, he is hurting his own chances. However, delays of more than a month should still require contacting the opponent to make sure that nothing is amiss. This system keeps a game moving promptly as there is real incentive to move quickly, but detracts from the convenience and leisurely pace of PBM. However, by agreeing to a sufficiently long playing time at the outset it need not detract unreasonably from a leisurely paced game.

4. **TELEPHONE:** Exchange phone numbers and a suggested time to take calls. No one is requiring you to make a long distance phone call, but you may discover that you want to during the course of a match to correct a move rather than returning it. Then too, with foreign postal strikes, rising postal rates, and falling long distance phone rates it is no longer considered exorbitant. Do use some common sense though. If you forget the difference in time zones and phone your opponent at 3AM local time he, or more likely his wife, may not appreciate it. Generally speaking, it is a good idea to invest in a phone call to try to resolve any problem before referring it to Avalon Hill in the form of a complaint.

5. **RECORDS:** There are many different PBM styles. Some are very casual, using any scrap of paper or postcard. Others regard such informality with disdain, and use elaborate OoB sheets such as those sold by Avalon Hill. If you do insist on a certain standard of record keeping, make that clear in advance. Otherwise, you have no complaint as long as the move is legible.

Print your move in ink. Invest in some carbon paper and keep a copy of every move so that your opponent doesn't have to return your move. If he does likewise, you'll both have a complete record of the game, and should a move go astray there will be no problem in restarting the game from the point of interruption.

This is a good point to mention AHIKS—the oldest wargaming club in existence—which consists primarily of those who play by mail. Among other services, they provide detailed OoB sheets for PBM and Random Number Sheets for the resolution of dice rolls. The current membership secretary is Bill Salvatore (19985 Wild Cherry Lane, Waters' Landing, MD 20874-1015).

6. **ORDER OF ATTACKS:** Apart from the different ways in which you may record your turn, there are numerous ways to play a PBM turn. Avalon Hill supplies instructions for PBM in general and specific rules for a few of their older games that are espe-

cially suitable for PBM. One of the differences between FTF and PBM is that in FTF you must decide the consequences of each combat (such as casualties, advances, retreats, etc.) before proceeding to the next, although you could vary the order in which you resolve a series of combats, as you proceed with combat resolution. When the FTF turn is done, it may become apparent that the decisions you made as combat resolution proceeded were not optimum, based on the results of later attacks.

In PBM, all combat is resolved simultaneously. Therefore, at least in theory, one could decide the results of each individual combat with the advantage in hand of knowing the results of all combats. Also, theoretically, one could, after the fact, consider each combat to be taken in the most convenient order. To my knowledge, no one actually PBMs this way. Rather, it is customary to arrange the PBM turn to approximate a FTF game as nearly as possible. Therefore, when you mail your PBM turn, you should:

A. List the order in which combats will be resolved, even though the combat results may make this not the most advantageous order.

B. List in advance all the possible results of each combat. This can be quite elaborate, particularly in a complex game with a number of combats. If you do not mention a possibility, you lose it. For example, if you intend to advance after combat or foresee the possibility for a second combat, you must so specify in advance. If anticipating all results is burdensomely complex, you may agree on one of the following alternatives:

1. A separate mailing for each combat. This is so inconvenient that it is rarely done. Games with more than one combat phase almost invariably require additional mailings.

2. Permitting the player whose turn it is to mail his turn, leaving to specify later the results of one or more combats. He then consults the newspaper for combat results and enjoys the convenience of specifying the outcome of one or more combats, after knowing the results of all other combats. This is a reasonable compromise between the flow of FTF play and PBM, but requires using the stock CTD system rather than a Random Number sheet unless you're willing to wait to hear back from your opponent as to the results of your first attack(s)—an inconvenience rarely asked. It is quite common to permit this "after the fact" delineation of just the final combat. However, if a number of combats can be separated into groups which are independent, perhaps because of geographic separation, there is no reason why the final combat in each such group could not be left for specification after other results are known. The point is to try to make the flow of a PBM turn similar to a FTF turn, to the extent convenient.

7. **INCREASED PHASES:** As the design of wargames has evolved, the degree of interaction between players has increased. The older, simpler games specifically divided each player's responsibilities to actions taken only during his own turn. During your turn, all your opponent had to do was watch. Today's games often require decisions or actions by the opponent during your move. That hasn't deterred PBM'ers from devising elaborate schemes to play such phase-loaded monsters as *ASL* on their own—often requiring some degree of application of the honor system. Due to the complexities of such systems, Avalon Hill has not encouraged PBM of these games. Veteran PBMers may doubtless try them on their own but please don't expect Avalon Hill to sort out any problems that result from such systems—whether they appear in the *GENERAL* as articles or are systems of your own design.

8. **CONCESSION:** The loser should submit his signed AREA slip directly to the winner. If you have lost, do not send in the claim yourself. There is a presumption of trust in any PBM match or it wouldn't have started in the first place, but it is unnecessary to take it on faith that your victory has been recorded. It has sometimes happened to me that my opponent acknowledges his loss, but for some reason does not send the concession slip. Sometimes I have had to send repeated reminders over quite lengthy periods to obtain the slip. In theory, I guess the game continued. The temptation was to get a little annoyed over the lack of courtesy, perhaps to resort to sarcasm or harsh words, and perhaps that was justified. Instead, I have found that in most cases friendly persistence has eventually paid off, particularly if accompanied by a stamped, self-addressed envelope and an AREA slip ready to be signed. It might seem like a lot of trouble, but this way you don't lose a friend. I have had this happen only to go on to another quite normal match with the same person. (As a personal aside, I recall a match I had with buddy Richard Berg. Particularly after he caught me with my guard way down in an *ANZIO* match, I treasure a *SQUAD LEADER* victory chit over him. I wouldn't like to say how much coaxing it took to get it signed! Sure Rich, *morally* you won, I haven't forgotten. No wonder he doesn't play any more!)

RESOLVING COMBAT

1. **HONOR SYSTEM:** There are several forms of honor system ranging from "rolling your own" to composing a Random Number Sheet from a newspaper stock exchange listing. There is a major disadvantage to such systems, and it is not dishonesty. Any experienced gamer knows that bizarre streaks of luck—both good and bad—occur. If, at a key moment, you roll three "1"'s, what do you do? If you honestly report them to your opponent, you can lose the trust and respect of a friend, or at least sow a seed of doubt. If you worsen your own die rolls, you are cheating yourself. What then if you roll three "6"'s? For that reason, no matter how much you trust your opponent—don't use the honor system; there are simple and readily available alternatives. If you don't want to use the CTD method of stock results—and many don't—resort to a Random Number Sheet. In my article "The Case For PBM" elsewhere in this issue you'll find an extensive discussion of the subject.

2. **DIVIDE BY SIX:** The most common form of die roll resolution uses the stock exchange listings in the daily paper. The Sales-in-Hundreds column is consulted for a particular stock on a given date to arrive at a random number. The cited date is referred to as the Closing Transaction Date—thus the usual name for the system: CTD. However, as most games use base-6 charts to conform to dice rolls, the number must be divided by six to arrive at a base-6 number. The remainder is the equivalent of a base six die roll; treat a remainder of 0 as a die roll of "6". A few games have base-10 PBM charts provided in the PBM kits that AH sells. Either system can be used as long as it is agreed to in advance.

2A. **EDITION:** I can't stress too strongly that it is imperative to agree in advance *exactly* which edition of which newspaper is to be used. Don't just say "the morning paper". Keep in mind the different time zones involved. Be sure that the newspaper you specify will have stock results printed after the person using it has mailed his letter selecting which stocks will be used. The reason why you must be so specific about the paper is that the same stock will not always show the same Sales-in-Hundreds in different papers, or even different editions of the same paper. If you just say "Friday's paper", you are giving an unscrupulous opponent the opportunity to pick and choose among several

different dice rolls—not every time, but often enough to matter.

2B. **VERIFICATION:** When you send your opponent the newspaper clipping verifying the dice rolls, be sure it includes the printed date and name of the paper on the same clipping. Note which stocks usually appear near the top of the page next to the date and name of the paper and use them to avoid having to stuff an entire newspaper page into an envelope. Someone who selects AT&T and Xerox as his stocks every turn is unknowingly guilty of bad gaming etiquette.

Have you ever had one of those carnival photographs taken with your head super-imposed on Rambo's body? It hasn't happened to me, but more than one gaming acquaintance has complained that they have received "verifying" newspaper clippings about as convincing. The fear is that some unscrupulous character would find favorable stock numbers, and tape them together with the date you were supposed to use. I have run across gamers who do not get a daily paper and have relied on library copies. Of course, defacing a library copy to get a clipping isn't a good idea, so if you're in this boat you should be using a Random Number Sheet instead of a CTD system. Don't ask an opponent to believe in the sanctity of a photostat. Most will accept such verification with no questions asked but some won't (and with valid reason), so why strain the relationship?

2C. **WHO RESOLVES?:** Decide whether to send your opponent your turn for him to resolve combat at his end using his paper, or whether you may first mail your turn a few days later resolving combat at your end, then mailing him the results with a copy of your paper. Doing so at your end is an option usually employed only in double-impulse movement games or when you wish to see the results of a preliminary attack before designating the orders for subsequent attacks. It is also a viable option if one of the players has trouble gaining access to a paper—although it is rarely employed because it involves twice as many mailings.

2D. **CTD:** The Closing Transaction Date specified means that combat will be resolved using the sales figures at the close of business for the date specified. The paper will state "closing prices", or a similar phrase. This phrase should be included in the part you clip out to mail. Some papers go to press at an hour when closing prices are unavailable, so they print volume figures corresponding to another hour. It may be inconvenient to get a paper with closing figures. You can use the transactions at an hour other than the close if it is clearly agreed to in advance. Using a non-closing stock list without notifying your opponent of that fact before he selects his CTD is not allowed.

2E. **EXCUSES:** Sometimes there is an unexpected problem: the market may close early, there are transmission problems, etc. It is understood that in such a case, you will use whatever figures are published. Invariably the paper will note on the stock sheet the reason for the discrepancy which should be included in your verifying clipping. On the other hand, telling your opponent that the dog ate your paper for that day just won't cut it. If the paper unexpectedly prints results from a different hour or doesn't print results at all, that is unexpected and verifiable. Even if you genuinely couldn't get the paper, you can't prove it. In this case you have to inform your opponent that he is free to provide the results for the cited CTD from his end using his paper, or failing that specify a new CTD. If this kind of commitment bothers you, you should be using a Random Number Sheet and not the CTD method. To facilitate your opponent getting the stock results, note how long it usually takes your letter to reach him and allow a few extra days between mailing your letter, and the date he must get the paper to check stocks. That way he knows in

advance to latch onto the paper before his wife wraps the fish in it.

2F. POSTMARKS: The essential difference between using stocks to generate dice rolls and an honor system is that you must select the stocks before knowing what their Sales-in-Hundreds result will be. Therefore, it is essential that you mail your turn so that the envelope will be postmarked at least the day before the date chosen to generate the dice rolls. Err on the side of safety and choose a date at least two days after you anticipate mailing the letter. There is probably little harm in using a postmark with even the same date as the CTD but why add that element of doubt? Infrequently the postmark is illegible. In such a case, return the unopened letter (after checking the back for that elusive postmark). A hassle? You bet. Another good reason to use a Random Number Sheet. Occasionally a letter bearing the results of a turn will arrive before the letter containing the turn, which, in a perfect world, the post office would have delivered first. In such a case, you need only check the postmarks. If they are in the proper sequence, then the inverted delivery is not your opponent's fault, and you have no cause for complaint. If the postmarks prove that the proper interval between turn and results has not been observed, return them to your opponent for a complete redo of the turn.

2G. SUNDAY SUMMARIES: There is no reason not to use the weekly summary of stock transactions appearing in the Sunday paper provided you've checked with your opponent to make sure he regularly gets one. It's quite convenient, as many Sunday papers are available Saturday, so it gives your opponent most of the weekend to do his turn, if he wishes. When using a Sunday summary, your letter should be postmarked no later than the preceding Thursday.

2H. CONTINGENCIES: Sometimes a CTD is selected for which there are no figures—usually because it is not a working day. In this instance, it is understood that the same stocks should be used, but for the very next day that the market trades. Another common error is forgetting to name a CTD. In this case use the next available date in which the market trades after the postmark on the letter in which the turn was mailed. Were it not for the problem of illegible postmarks this might well be the method of choice for selecting CTDs. If there is no legible postmark on the envelope, return the move for a redo but be sure to return his envelope too to verify the lack of a postmark.

2I. STOCK SELECTION: There are several things to keep in mind when selecting stocks. First, it is understood that the list used is that of the New York Stock Exchange, absent agreement to the contrary. To avoid confusion, use stocks which appear only once. For example, there is only one "Playboy" but there are seven different classes of "Philadelphia Electric" stock traded. Of course, if you do not name specific stocks, but describe how to find them (e.g., start in the "P" column and proceed down the list, using only stocks with at least three digits sales-in-hundreds), you can and will use stocks such as the many classes of "Philadelphia Electric". Some gamers have alleged that certain lightly-traded stocks generate non-random dice rolls, and it is true to a small degree that very inactive stocks will generate more lower numbers than higher ones. To avoid this problem, select stocks which consistently trade in three or more figures. Any stock with sales-in-hundreds less than 100 (10000 shares) is considered invalid and replaced with the next suitable stock beneath it in the listing not already cited for use during that turn. If a stock listing has the notation "Z", that means that the sales figure is not in hundreds, but rather the total sales. Such stocks are also invalid. This contingency agreement also comes into play when the selected stock is garbled or deleted.

It also happens that in the excitement of making a move, a player will forget some of the clerical details and forget to list one or more stocks for the combats he has specified. Rather than return the move for that information, players using the CTD method should understand that it is accepted AREA practise to use the listing of "Most Active" stocks for that day's transactions to select any necessary stocks. If only one such stock is required, use the most active stock to resolve it. If more than one, use them in declining order of volume—skipping any stocks which may have been specifically named for other resolutions. The Most Active List must then be part of the clipping you send your opponent for validation.

HOW TO HANDLE MISTAKES

A number of systems have been used by gamers to cope with errors in both PBM and FTF sessions. Behind these systems are two basic divergent philosophies. At one extreme are those who argue that if you make a mistake, you are stuck with it. War is hell. If a commander writes down an order incorrectly, he is responsible for the consequences. Wargames simulate war, so your ability to play without error should enhance your success and vice versa.

At the other extreme are those who say that the important thing in wargaming is sportsmanship, comradery and the excitement of a well-played match—not the clerical precision with which it is recorded. Therefore, mistakes should be corrected—not punished. Of course, most wargamers would take a stand somewhere between these two extremes, but finding someone who agrees exactly with you on where that point should be is often difficult.

The official AREA Code of Conduct requires that if you receive a turn with an error in it, you must return it for correction. You are free to play AREA matches by any other covenant you wish, but be advised that if a dispute arises which you wish to have Avalon Hill resolve, their one and only answer will be that incorrect turns are returned for correction. Even this simple policy could stand some elaboration:

1. DEFINITION: The AREA definition of a legal turn is as follows:

- A. All units in the OoB of the player whose turn it is are located, and only those units.
- B. The location of all units conforms to the rules of the game.
- C. All combats, or other events requiring dice rolls, are correctly listed correctly calculated and conform to the rules.
- D. Any other information required in the turn in question, for example declaration of a game option, is listed.
- E. The turn is done in the agreed format, as already explained in great detail.

A legal turn is not necessarily a well-done turn. If you send your opponent a turn conforming to the above definition, but containing an error in judgment, he is under no obligation to return it because errors in judgment are never clearcut. For example, you may mis-note the hex grid of a unit in such a way that the result is a legal move which leaves a gap in your front. Among opponents who are also friends, it is customary to return such a move for correction, even though it is a legal move. Suppose, however, that you failed to attack a weak point which your opponent had feared you would. This may be almost as silly a mistake, but it is much less obvious that even your best friend should return that turn for a redo. Even the U.S. Supreme Court might have trouble deciding just which legal turns should, on moral grounds, be returned—so don't complain when your opponent doesn't cut you a break!

2. REDO: If you receive a turn not conforming

exactly to the definition above, it is an illegal turn and you are obliged to return it for a complete redo, including completely new dice roll resolutions. Changes to all legal parts of the turn are permitted as well: it may be completely or partly redone, as the erring player prefers. The word "exactly" is stressed because turn mistakes come in all shapes and sizes. Some are great whales; others tiny minnows. We can't get into the morass of trying to decide what is trivial and what is significant. In AREA, a mistake is a mistake is a mistake; all are equal. You are free to play AREA-rated games without abiding by this policy, but don't refer disputes to us if any develop and you have not followed these procedures. Don Greenwood and I have been playing each other AREA-rated games postally for over a decade and we both make more than our share of errors. We rarely return a move for a redo because we both trust the other to correct obvious errors in the other's best interests. That kind of trust usually doesn't come early in a PBM relationship. It comes from years of comradery and placing the spirit of the game above the importance of winning. Until you've developed that network of compatible opponents, you would do well to stick to the letter of the rules.

3. APPROVING ILLEGAL TURNS: Suppose that you receive an illegal turn, but do not realize that it is illegal, or prefer to deliberately ignore it—perhaps because the illegality is in your favor. You then play on that turn, sending your own turn to your opponent. There are two possible outcomes:

- A. If your turn is legal, or has an error that could be corrected independently of your opponent's turn preceding, then you have lost your chance to insist that your opponent correct his immediately preceding, illegal, turn. By using it as the basis of your own move, you approved it.
- B. If your turn is not legal, and you can prove that it cannot be corrected without correcting the preceding opponent's turn to which it is a sequel, then your turn and the preceding opponent's turn must both be corrected.

To put it another way, the maximum number of turns which may have to be redone as the consequence of an illegal move is two—one by each player. Errors going further back than that are no longer grounds for complaint. Sometimes it is hard enough to notice your own mistakes, let alone your opponent's, which may be overlooked, and not because it helps to do so. Nonetheless, let it be clearly understood that when you receive an AREA turn, you are *morally* obliged to conscientiously check it for errors and to return it for a complete redo if any turn up. The word "morally" is stressed because there is no practical way to prove whether you failed to notice an error deliberately, or inadvertently.

4. PENALTIES: Constantly returning moves for correction is a hassle no PBMer enjoys and an opponent who regularly makes such mistakes is not often appreciated. The problem is where do you draw the line as to what a suitable penalty should be for inconveniencing your opponent? No one, including AREA, can make that decision for you. It is a matter for each gamer to decide between himself and his opponent the degree to which the cause of such inconveniences should be penalized, if at all. However, it is wise to come to an agreement beforehand on this subject. Otherwise, if you make no pre-match agreement on errors, you'll have to suffer in silence through the antics of any bumbling opponent you have the misfortune to play. Following are two possible recommended courses of action.

4A. BONUS DICE ROLLS: Whenever an opponent makes an error requiring that a move be returned for correction, that inconvenience has earned you a bonus die roll. You earn one bonus dice roll for each turn returned, not for each error that turn contains. Should you fail to point out one

or more errors while returning a move for correction of other faults, you may not earn additional bonus die rolls for later pointing out that same error if the redone move still contains it. Bonus die rolls must be used as soon as possible. A player who has a bonus die roll coming to him specifies his use of it by listing two stocks. Only the best of the two results applies. No more than one bonus die roll may be applied per resolution and all must be pre-designated. A player cannot see the result of a die roll before stating that he wishes to use his bonus die roll to change it. A bonus die roll can be carried over from one turn to the next only if he makes less die roll resolutions during that turn than he has accumulated bonus die rolls.

4B. CONCESSION: If you have to return the same turn to an opponent for correction more than twice, even if not for the same error each time, your error-prone opponent has just lost the game and will sign your Victory slip as his apology for inconveniencing you. Again, errors that existed in a previous move returned for correction of other faults which you failed to point out at the time cannot be considered cause for a return resulting in concession. While this may seem harsh, an agreement of this sort is really necessary if you intend to take on all comers in AREA play. There aren't many bad eggs in AREA, but like every activity it has attracted a few who rather than concede a game would continue to send moves with deliberate errors in an attempt to delay an inevitable loss.

While these penalties provide incentive for players to double check their moves, they will not eliminate errors altogether. Moreover, there is a negative side to their use—some players will use them to achieve an advantage—searching for trivial errors so that they can win by a technicality. Others, more disposed to friendly play, will not want to invoke penalties—preferring to win “on the field” as it were. Were this a perfect world where we all embraced sportsmanship to the same degree, this would not be a problem. Unfortunately, no two human beings ever look upon anything in exactly the same light. Falling back upon rules like these is the best solution we poor mortals have come up with so far.

Since these rules were originally published, the procedure explained in this section has been criticized as arbitrary, and for that reason, in practise seldom used. The criticism has merit, but the solution escapes me. Most wargamers would like to retain the respect and good will of their opponents, and for that reason they do not want to be arbitrary. Even rules much longer and more elaborate than these could not truly reflect the actual conduct of a game, whether PBM or FTF, since that is done under an unspoken understanding based on common sense. This is true for most contests. Any football referee will tell you that holding could be technically called on virtually every play. Basketball isn't supposed to be a contact sport, but you couldn't prove that by watching a game. These are the rules if you want to use them, and if you want to insist that your opponent does, it is your right.

5. CONTRACT: On Page 34 of this issue is a checklist which summarizes the rules which have just been explained. We urge all AREA members to make photocopies of this form and keep them readily available. When you start an AREA game, you and your opponent should by mutual agreement fill out this form, and exchange signed copies. Having done so, you'll have agreed upon the parameters of how the game will be played and have put your fences in order. It is unlikely that you will then have any problems. But if you do have a dispute, don't bother to bring your complaints to Avalon Hill to resolve unless you can also send a photostat of this properly filled out form. It serves as proof that both players entered the match fully aware of all restrictions and options.

WHEN COMMON SENSE FAILS

Most wargamers are aware that the last decade has been at best a holding operation for our hobby, which has lost many respected figures to economic necessity. What I think many may not realize is the extent to which the very existence of the hobby is made possible by the sacrifice of those who try to make a living publishing the games and magazines which comprise it. Nobody is getting rich in wargaming, and most of those who work in it could do better elsewhere. If a typical wargaming professional were to calculate his true per-hour pay, the minimum wage might look attractive. For those whose pay is low and hours long, only the satisfaction of doing something they like makes it all worthwhile.

Something which the people at Avalon Hill *don't like* is sorting out problems relating to AREA play. Avalon Hill loses money on AREA and the whole system continues only because of the enthusiasm of a few people there who love the hobby. For that reason, if we want AREA play to continue, we should turn to Avalon Hill to sort out our problems as little as possible. And what are those problems? First, rule interpretations; second, unsportsmanlike conduct.

We've all seen the standard policy statements Avalon Hill regularly prints in their games regarding the submission of questions. Mundane as they seem to be, I am told they are ignored with regularity. Yet, those same gamers are incensed when the answers to their questions are delayed. Perhaps the list bears repeating.

1. If you expect a reply of any kind, you must enclose a stamped, self-addressed envelope (SASE). If living outside the U.S. with no access to U.S. stamps, purchase an International Reply coupon from your local post office. Do not send foreign currency or checks as the cost of collection is prohibitive.

2. If you are going to discuss more than one subject, you'll need to send a separate SASE for each. Let's pause for a moment to consider why. As the number of games grows and the faces at Avalon Hill change, those once familiar with a certain title are often no longer available to answer your inquiries. AH tries to maintain a list of volunteers willing to answer queries on old games that their current staff are no longer familiar with, but that requires forwarding your letter. If you've asked questions on five different games in the same letter, your SASE may be making a round-the-world-trip stopping in every port. Above all, keep such correspondence separate from orders which are handled by different people in a different location.

3. Keep your game questions simple and pose them so they can be answered in a “Yes” or “No” format. Do not refer to grid coordinates unless you provide a diagram of the situation. Usually a photostat of the gameboard will suffice. Make no mistake about it. If a game's rules are ambiguous or contradictory, Avalon Hill wants to hear about it—especially in the case of newer games—so that they can publicize the answers to your legitimate queries in the *GENERAL* Question Box and correct subsequent editions. However, the vast majority of questions they receive are clearly answerable by someone taking the time to reread the rules. If you are too lazy to double check the rules on your end, you're just taking away their time from designing the next great wargame for you to enjoy. ☆

AREA Briefing . . . Cont'd from Page 33

2. **VICTORY SLIPS:** Games can be reported only on official AREA Victory slips. No copies or facsimiles will be accepted. Additional Victory

claim sheets may be purchased in quantities of 40 for \$5.00 ppd at any time from the AREA system c/o Avalon Hill. Each victory claim must be signed and dated by both members and contain both membership numbers plus information for the four categories: “Game Played”, “Verified or Provisional”, “Live or PBM”, and “Rated previously vs same opponent”. It is the winner's duty to report the game. If the game played is one of the players' Specific Membership games he should use his Specific Membership Number for that game; otherwise he should just use his General Membership Number. If you wish to be informed of your new rating or receive any other type of reply you must submit a stamped, self-addressed envelope with your victory slip.

3. **RATING CHECKS:** You may request a check of your own current rating or that of an opponent at any time by sending the obligatory, stamped, self-addressed envelope. However, every additional check beyond one per envelope will require a \$1.00 service charge.

4. **PAYMENTS:** As a matter of convenience, players may pay any service charge in US postage stamps rather than sending currency through the mail.

5. **SASE:** Always include a separate stamped, self-addressed envelope when you expect a reply from AREA of any kind. Replies cannot be sent with orders for merchandise, answers to game questions, etc.

6. **VERIFIED:** Remember, once you've played ten games you lose your Provisional standing and become Verified. Sign your Victory slips accordingly.

7. **APPEALS:** All decisions of the AREA technician are final. There is no appeals process for what you may feel is a mistake in your rating.

8. **CODE OF CONDUCT:** Players may play rated games by any set of standards or rules they can agree to. However, the *only* format that AREA recognizes as binding is that put forth in the Code of Conduct. Briefly put, the Code of Conduct requires that any PBM move containing an error must be returned to the opponent for a complete redo including new resolution of “dice rolls”. Players who do not abide by those standards must not bring their disputes to AREA for a solution.

9. **INACTIVITY:** Barring unethical conduct, AREA membership is granted for the lifetime of the individual. However, players who remain inactive with no games reported for a period of two years or more may be removed from the service or the Top Player listings at the discretion of AREA.

10. **QUALIFIERS:** The Top Player listings compiled in The *GENERAL* will be based on minimum Qualifiers established by AREA as well as their numerical rankings. The lack of postal qualifiers will be waived only in the case of individuals who have played in the Avalon Hill Championships.

11. **PBM:** Matches played by telephone, computer modem, or other form of electronic media are considered PBM only if the players do not reside in the same city. Otherwise, they are considered FTF games.

12. **VOID MATCHES:** Barring a draw between equally rated opponents, any game that does not result in an exchange of points is considered invalid and will not earn Qualifiers.

13. **ACTIVE LISTS:** To promote play among active members, any AREA member may purchase a photostat of all games reported in the preceding month for a specific game which will include the players names, addresses and ratings, and whether the game was played live or by mail. Each such list costs \$1.00 and a stamped, self-addressed envelope. There is no guarantee as to how many games will be reported on each list. If none have been reported, the \$1.00 will be refunded. ☆

PLAY CONVENTIONS FOR RUSSIAN CAMPAIGN

Plugging the Holes in PBM

By Robert J. Costelloe

Living as we do in an imperfect world there are some questions in life which simply have no right or wrong answers. From now to eternity, people will be diametrically opposed on certain issues, and vehemently so. It should not be surprising then that not all players can agree on PBM procedures. So, to be fair, we must concede that not all adherents of postal play warmly embrace the AREA's Code of Conduct. Witness Robert Costelloe's following description of it as a "non-system". Avalon Hill in no way agrees with his assessment of AREA or endorses his alternative system, but in the best traditions of Voltaire, we'll defend his right to present it . . . perhaps not to the death but . . . at least we've given him a forum. Having done so, allow us to present our reservations in advance.

Although not professional engineers like Mr. Costelloe, the Code of Conduct authors are veterans of postal play who can count over 50 years of experience between them. During that time, Tom Oleson served as judge for AHIKS and Don Greenwood has handled all manner of AREA complaints with varying degrees of success. Needless-to-say, they've been witness to more acrimonious disputes than they care to count, and while they agree that Mr. Costelloe's system does provide incentive to eliminate errors, the potential for abuse and hard feelings following the inevitable game error is not, in our opinion, worth the gain in carefully checked moves. Human nature being what it is, Mr. Costelloe's system also provides an incentive to search out errors just so as to benefit from the penalties imposed. And if the real benefit in eliminating errors is in speeding up the game, why would anyone want to engage in negotiating penalties for that error—a process in the worst tradition of the U.S. court system that can drag on long past the time required for a move returned for correction? Truly, this is a system that only a lawyer could love—and without anyone paying his fees, probably few of them. Far be it from us to dictate how you should play, but if you do make use of this system, please don't refer any resulting disputes to Avalon Hill.

Newcomers to play-by-mail gaming, especially those used to playing tournament chess, are likely to enter wondering how to handle gaming errors. Unfortunately, their bewilderment is only likely to deepen as they discover that there is really very little in the way of established systems to assist them. This is a state of neglect which has cost the hobby dearly. And, in fact, it goes a long way toward explaining the relative "under-popularity" of the hobby's PBM segment. Sadly, too many games end prematurely—and on sour notes—and too many gamers leave the hobby disillusioned because of disagreements over handling game errors.

I am a registered professional engineer, trained to be perceptive to system inefficiencies and practiced in creative solutions to remedy them. It is not surprising then that a year ago, when I started to play wargames by mail, it quickly became apparent that a system was needed to handle errors. It was also clear that the official AREA position, that errors were "unacceptable", was nothing more than a cop-out, an evasion of the issue. It is hard to get data on a subject such as this one. But from discussions I've had with the gamers with whom I correspond, plus the many I spoke to at ORIGINS '87, there seems little doubt but that there's a great deal

of PBM gaming (and follow-up game sales) that does not occur because of the lack of standards for handling errors.

As a case in point, consider *THE RUSSIAN CAMPAIGN*, one of the favorites of PBMs. Although The Avalon Hill Game Company provided instructions with *THE RUSSIAN CAMPAIGN* play-by-mail (PBM) kit, they are not nearly adequate to cover the situations which inevitably arise from player oversights and errors. The guides and conventions which I devised are intended to fill this need in an optimum manner (i.e., in a way which is reasonably uniform and with the intent of keeping the game flowing, if possible). They also provide a competitive incentive for minimizing player error. But what they cannot be is a substitute for the sense of fair play and cooperation, without which a gaming relationship cannot prosper. Communications, then, is still the key ingredient for making this system a success.

The error-handling conventions which I've enclosed are designed to remedy the failings. These are designed exclusively for *TRC*, but they can provide a framework for other games as well. Although this specific set of conventions has not been extensively playtested, it is being tested now—and it is not a one-shot effort. I have been formulating and playing different methods of handling errors ever since I started playing by mail. Playing six to eight games simultaneously gives me some ability to do this, although frankly I'm not trying to sell myself as a seasoned gamer. But there is such an obvious need in this area that someone must begin. The significant aspect about this work is not so much the detailed elements of the convention mechanics themselves, but rather the error handling philosophy which underlies them and which is set forth in the section under the heading *Premises*.

Perhaps, at this point, a bit of background would help. My research indicates that there are three basic error handling systems in common use. The first is the "non-system" officially espoused by the AREA. No move can be accepted that contains an error. Although this sounds pure and simple as I write it, it is utterly unworkable in practice. The reason is that there are simply and inevitably too many errors in a game like *TRC* for there to be much else going on besides return mailings. Very few gamers adhere strictly to this system. Those that do face enormous pressures toward leniency in some form in order to keep the game moving. Then, once such leniency does occur, hard feelings are likely to eventually develop over when to be lenient and when not. ("Gee whiz, Jake; I don't understand why you returned my last impulse over this piddly little movement error. It's exactly like the last one of yours that I overlooked.")

The second system, and by far most common in use, is what I'll call the "buddy-buddy" system. Here a player tries to actually correct his opponent's errors by trying to deduce what he intended. Or he makes some correction which is relatively "revenue neutral" in terms of who benefits. The big advantage that this system has over the "non-system" is that it tends to keep the game moving. And without too much effort the gaming relationship can be kept on friendly terms. This system is widely used because it *can* be made to work. But it does have its weaknesses. It is hard to apply the corrections in an even-handed way. And many gamers have a hard

time resisting the temptation to take advantage of a system which is so unstructured and lenient. I'm reminded of a game (true story here) in which Player A received an impulse with the stock CTD specified incorrectly for Wednesday, November 11. But the 11th was a Monday. He had received the mailing on that Tuesday; the combat results, using Monday as the CTD, were terrible for his opponent. Upon phoning, Player B assured him that he had meant to mark Wednesday, November 13 as the CTD; and that's how they played it. But Player A eventually waxed resentful. He suspects to this day that his opponent took advantage of him by conniving a way to get two attack opportunities against a key objective. And, needless-to-say, the gaming relationship didn't last through the game.

The third type of system, conventions like the one I've devised, appear to be rarely used. Based on my own play experience thus far, they offer big advantages over the other systems. They tend to keep the game flowing smoother, and they provide a systematic and even-handed way of dealing with errors. But they are no panacea. The conventions provide a starting point and a framework for handling errors, but they cannot be complete enough to handle every error situation. No convention can succeed without a strong sense of fair play, compromise and a willingness to negotiate.

The most innovative aspect of these conventions, and their keynote feature, is the "penalty" system. It has also been the most controversial. Some gamers have objected, mainly on philosophical grounds, to being penalized for errors or to benefiting from the errors of others. My answer is that the system is reasonably objective in application; it actually gives the gamer more choices in error situations; and, let's face it, penalties for error is much more realistic in modelling the wartime situations which our games try to simulate. There is no "buddy-buddy" system in warfare. If generals have to live with their own and their troops' errors, shouldn't wargamers also?

These conventions are not without their disadvantages, the main one being their complexity. They are, after all, yet another set of rules with which gamers must familiarize themselves. Proper groundwork and study is definitely required. The only instances of hard feelings that have arisen in using conventions of this type have occurred when one of the players couldn't be "bothered" to understand the results and hence was shocked and dismayed to find that he had to live with the consequences of his errors. The manner in which the *TRC* conventions are written is designed to combat this problem.

I need to mention two other gaming benefits, not anticipated, that have become apparent in playtesting the system thus far. One is what I'll call the "competitive impact". Under this system, the ability to avoid errors has competitive significance. That, and the process of negotiating over errors, adds a whole new competitive dimension to the game which many find exciting. The competition can definitely be enhanced by proper use of this system. The other benefit is the effect on the number of errors. In every case that this or a related system has been playtested, the frequency of errors has plummeted. And this certainly has improved the quality and timeliness of my PBM.

As you might suspect, these conventions were not born fully developed. They have evolved as a result of play-testing various arrangements over a period

of 18 months. This specific system has been tested, but not as extensively as I would like. The system which follows, then, can be a substantial help and improvement if the players are willing to invest their time and effort in it. However, as mentioned above, my system can surely be improved upon. The author would appreciate any suggestions from readers as a result of play experience.

THE RUSSIAN CAMPAIGN

Play and NonOptional Error Conventions

This section contains conventions which players should apply uniformly and without option.

1) Postmark same as CTD is acceptable. This is justified in the Central and Eastern time zones because by the time that the financial data are available, the Post Office has already gone to the next day's AM postmark (usually around 7 PM).

2) On Mud moves, when a "Contact" combat result is obtained, unless otherwise instructed, use the same stock and next day CTD from first impulse CTD.

3) In case a specified stock is not listed (usually only the 1500 most active are listed) or an opponent forgets to specify any stock, go to the top of the alphabetical list (usually starting with AARs). But skip any stocks already used, or to be used that impulse. Use this procedure in the order specified on the combat sheet (e.g., first stock for Archangel if forgotten, second stock for first battle's stock which wasn't listed, etc.).

4) In case the Axis player forgets to specify stock and CTD for the Archangel die roll as part of his second impulse (or first impulse on mud moves), then the Soviet player goes to the top of the alphabetical stock listing (as in the convention "3" above) with the same CTD as specified by the Axis player. Also use this convention for forgotten weather rolls. If no CTD was specified, then the player must make an additional mailing (or phone call), informing his opponent of which future CTD he will use.

5) A player is always entitled to disqualify a stock listing which is in any way misspelled or misspecified. He would then use the convention for missing specified stocks (see "3" above).

6) Loser normally has choice of sides in any rematch.

7) If a player hasn't received a return mailing (with a move) in four weeks or more from the date of the mailing of his last turn, or he has not received a second impulse mailing in this time frame, then he is entitled to send his opponent written notification of the situation. The offended player is then entitled to a forfeiture (with full AREA points awarded) if the opponent hasn't gotten an impulse mailing to him within two weeks of the day he mailed his notice.

8) Illegally placed partisans are simply removed from play for the duration of the turn.

9) If a player hasn't used all of his rail capacity, and he makes a move which could only be legal if he had moved that unit by rail, then the movement is allowed.

Premises for the Conventions:

First, errors are an inevitable part of any human endeavour and competition.

Second, although it is futile and counterproductive to "condemn" wargaming errors, error-making should entail a penalty appropriate to the situation. Such penalties are designed to benefit the opposing player and to provide a competitively stimulating incentive to minimize errors in play.

Third, there is value in employing conventions which not only deal with the errors themselves but to do so in such a way as to minimize lost time and, if possible, to keep the game in motion. This is

preferable to simply demanding a game be halted to correct any error whatsoever.

Fourth, players may wish to consider (and this convention in fact proposes) that gamers be free to accept "gift" errors (i.e., those that benefit the offended party). An example would be an opponent's incorrect computation of his own first impulse combat die roll as a "2" when it was actually a "6". Such a contention would be consistent with the overall system presented here. And, in substance, it is no different than accepting a chess piece left *en prize*.

Protocol for Dealing with Errors:

The offended player always has the first and overriding option of accepting any error as "fair play". He may accept some or all errors committed against him on a given impulse/turn. However, in the event of the necessity of redoing a turn, all aspects of the impulse/turn are redone and must be accepted.

If the offended player elects not to accept some or all of his opponent's errors as fair play, then the players must mutually agree on a course of action. Generally, three courses are available:

A) Players may agree, or may have previously agreed, to use the conventions presented in this article, if applicable.

B) Players may agree to redo a turn or an impulse (in which case the new version takes precedence as stated above).

C) Players may negotiate a settlement, including penalties, which fit the unique error situation and which best satisfy player needs.

If the offended player elects not to accept errors as "fair play", then the *offending* player always has the option of a redo, provided he is willing to accept the penalties. Errors against an opponent are automatically and permanently forgiven unless the player takes action to do otherwise before mailing off his own next impulse/turn. (Players are always better off discussing any errors by phone.)

The Redo Penalty:

An error or errors requiring that an impulse or turn be redone requires a two replacement factor penalty. These factors are added to or subtracted from the next turn normal Soviet entitlement on a one-time basis. Redo penalties are cumulative: one costs two factors, two in the same turn cost four. Note, the penalty for redoing an entire turn is two factors; the penalty for redoing a second impulse is also two factors.

THE RUSSIAN CAMPAIGN

Optional Error Conventions

It is best recognized at this point that many types of first impulse errors are not amenable to automatically applied conventions because such action would be too disruptive to the second impulse. First impulse errors will therefore more often require player dialogue. However, the conventions which follow can serve as a guide for settlement—and some are suitable for automatic application towards second impulse errors as well.

1) In case of a conflict between what a player specifies on his OB chart (front page) and what he specifies in his attacks (back page), the OB chart always takes precedence. Combat odds may have to be recalculated, and retreat routes may be affected.

2) If the opponent overstacks units in a hex, then the offended player removes units of his choice to bring the stack back within legal limits. Removed units re-enter the game as replacements on the opponent's next turn.

3) If the opponent specifies a movement which is illegal, then the offended player has the choice of the following options:

a) He may, of course, forgive the error and allow it to stand.

b) He may specify that the offending unit be removed from the board for the remainder of the opponent's turn. Such removed unit(s) re-enter the game as replacements on the opponent's next turn.

c) He may specify that the offending unit remain at the last position it occupied before the error in movement occurred.

Note that in all of the above options, battle odds and retreat routes may be affected.

Players may also wish to consider this convention for the situation in which a player overspecifies his rail movement capacity. Thus, if a Soviet player specifies six units to move by rail instead of the allowable five, then his opponent could elect to apply this convention to the sixth unit listed.

4) If a player forgets to specify or illegally specifies retreats for any of his second impulse battles, then his opponent is entitled to specify retreats which are in his own best interests.

5) If a player overspecifies the number of replacement factors that he is entitled to, then his opponent may specify that next turn he is to subtract the amount of the overage plus 50% (fractions rounded up) as a penalty. If insufficient replacement factors are available, then reinforcements must be sacrificed as required.

6) If a player incorrectly specifies combat odds, composition, or results on the second impulse, then his opponent is entitled to correct the error, being sure to inform the offending player in his next mailing.

7) Illegal use for second impulse combat of those units already used for first impulse automatic victory attack is a situation which usually requires negotiation. One suggestion would be to award penalty replacement factors equal to 150% of the combat losses suffered as a result of attacks by such offending units.

Optional Special Rules:

1a) In 1941 only, a "Mud" roll in Sept/Oct is played as "Lt Mud" and a "Clear" roll in Nov/Dec is played as "Lt Mud"—OR

1b) In 1941 only, always play Sept/Oct as "Clear" and Nov/Dec as "Snow".

2) Modified Campaign Victory Conditions: To win a player must either: eliminate the enemy leader and occupy the enemy capital, or occupy the enemy capital and control every other city on the mapboard except one.



BINDERS

"Out with the old; in with the new." In short, the old style of binder for your precious copies of *THE GENERAL* (those with the metal rods locked into a spring at top and bottom) are no longer available. As part of our expansion of Avalon Hill's magazine, a new binder was developed to hold the six thicker issues comfortably. Both higher and wider than the old version, the new binder makes use of the patented "Max-Text" post lock mechanism. This utilizes short, plastic posts to hold an issue firmly, without crimping or tearing the pages as occurred at times with the older style binder. Only the new binder is available, and may be ordered direct from Avalon Hill (4517 Harford Road, Baltimore, MD 21214) for \$7.00 each (plus 10% for shipping and handling).

STORM IN THE PACIFIC

Strategy and Tactics for 7th FLEET

By Jim Eliason

7th FLEET extends Joe Balkoski's popular series on modern naval warfare games begun by *6th FLEET* and *2nd FLEET*. Its scale is strategic since the three map sheets cover the western Pacific from Guam to China and from Kamchatka to Vietnam; however, its feel is very tactical in play. Units represent individual submarines, individual surface ships (patrol craft and corvettes are in flotillas) and squadrons of 10-20 planes. What really gives the game its tactical feel is not the number of men and machines each counter represents, but the wide variety of the strengths and weaknesses of the various units. Some subs are armed with an impressive array of anti-ship and cruise missiles but are badly overmatched by enemy subs. Other subs are fast, quiet, and good at torpedo and ASW attacks, but have no long-range attack capability. Interceptors usually have high air-to-air strengths but short ranges. Long-range bombers are very effective against ships and bases but are dead meat when opposed by enemy fighters. Some ships, like the *Ticonderoga* or the Kirov-class cruisers, are excellent and others, like the Canadian frigate *Kootenay*, should stick to chasing cod poachers.

I'm sure this description makes it sound like the game is an unplayable monster—but it isn't. It is not a game for beginners, but all of the nine basic scenarios use only one map and can easily be completed in an afternoon. The four advanced scenarios use all three maps and almost the whole counter mix, but will seldom take up more than a long weekend.

The essence of good tactics is to keep your units doing what they do best and to prevent your opponent's units from using their strengths. The essence of good strategy is to force your opponent to fight in situations where you have the tactical advantage. The purpose of this article is to give some initial thoughts on how to turn these truisms into winning play. For those who don't have the game, I'll describe some of the key rules as I go along. For those who do, don't complain if the explanations don't seem quite right—I've oversimplified in places for clarity.

TACTICS

I'll discuss tactics first, starting with the plays one can use to take maximum advantage of the sequence of play. Play in *7th FLEET* is organized in "threes": three turns per day and three *Action Segments* per turn. In addition, each turn has Detection and CAP Launching Phases before the Action Segments and CAP Landing and Detection Removal following them. Several special phases (including strategic air missions) occur before the first turn of each day and others (including base repair) occur after the third turn. Many of these other phases apply only in the Advanced Game.

The Action Segments are well named, since all movement and most combat occurs then. In each segment a die is rolled to determine which player goes first. The first player then "activates" (moves and/or attacks with) all of his subs (one at a time) or all of his airplanes (from one base, one to four units at a time) or all of his surface ships (one hex at a time). The other player then has the same choice. Each player must activate a different unit class in each of the three Action Segments of a turn and the two players can activate their classes in a differing order.

The choice of which unit class to activate first is often crucial and is influenced by several factors. The first player in the first Action Segment has a chance to strike some hard blows before his opponent

can respond. There are several ways to take advantage of this opportunity. Some targets are available at once, but will not be there after your opponent has had a chance to move. For example, a weakly defended convoy has just been detected by a strategic air mission and is one turn from port. It should be attacked in the first Action Segment with whatever class of unit can deliver the most potent attack. Hammer it as many times as necessary to sink as many ships as you can. If you wait for the second Action Segment, your opponent can activate surface units in his half of the first segment and receive the convoy's large cargo of victory points. Perhaps the convoy is out in the middle of the ocean, but is between a pack of your subs and its destination. If you don't move the subs before the convoy, it will move out of range and you won't be able to attack it this turn, nor next turn unless you get to move first again. Always look for targets that are about to move into port, out of range, or into the protection of air cover, a powerful surface group, or a close defense hex, and attack them before they get away.

A variation of this theme is often available to the Allied player with his powerful carrier-based air groups. If an important enemy task force (TF) is just out of range of an air strike, activate surface units before air units and close the range before launching. This guarantees an attack if the enemy TF has already moved, but is also good if you are moving second in an Action Segment. In the following Action Segment, you may get to move first, thus getting a double move and getting off your strike before the enemy has a chance to escape.

There are often times when a target is guaranteed to be there for the whole turn; but it is still important to attack it as soon as possible. Suppose now that you are the owner of the weak convoy, that it is two turns from port this time, without air cover, and in range of several enemy bomber units loaded with deadly missiles. You can't attack the planes directly, but you can damage their base, which prevents them from being activated. If you can launch a reasonable attack against the bomber's base, you should do so immediately to try to prevent the attack on your convoy. Opportunities for this kind of preemptive strike occur every turn. Always be aware of which enemy units are threatening you the most and do unto them before they do unto you.

While it is usually good to move first in the first Action Segment of a day, it is often even more important to move last in the last Action Segment. The reason for this is that it allows you to maintain detection of key enemy units or to let your units break contact. Units must be detected to be attacked. Bases and airborne air units are always detected. Surface ships and subs are detected in essentially identical fashion, except that surface units are automatically detected when the conditions for detection are satisfied while subs are detected only after a successful die roll, and usually only if the detecting units have an ASW strength of "6" or more. Detection comes in two forms: local (which lasts for the rest of the turn at least) and strategic (which lasts the rest of the day). Strategic detection usually occurs as the result of strategic air missions [*more on that later*].

Local detection can occur at the start of a turn, or during the Action Segments. Basically, a naval unit adjacent to an enemy naval unit at the start of a turn is detected. A ship is detected if it attacks an adjacent enemy unit or moves from a hex adjacent to an enemy naval unit to another hex adjacent

to the same unit. Actually, all the pieces are on the board in full view of both players. Presumably there is enough information available from satellite reconnaissance to give the rough location of enemy ships, but since each hex represents over 1600 square miles of ocean, more detailed information is needed for a "firing solution". After the third Action Segment, local detection markers are removed from units that are not adjacent to enemy units. Any detected units that move last in that segment can break off contact simply by moving away from all enemy units. In the following turn they will not be detected and will be safe from attack. Conversely, any enemy units can be detected for the following turn simply by moving next to them after they have moved. A typical situation is for Russian submarines to play "cat and mouse" with Allied TFs, spotting them for long-range bombers as well as for themselves. The Allies often delay moving surface units till the third segment, hoping to move last and break contact, while the Russians will delay moving subs till last hoping to maintain contact.

Of course, there will be conflicting demands on your resources and you may want to move the same class of unit both first and last (e.g., because you want to launch a cruise missile attack from some subs to damage a base, but you also need to maintain contact with an enemy convoy). Sometimes you can get everything you want without breaking the rules if you are clever, or if your opponent makes a mistake. The best way to do this is to present your opponent with the same kind of hard choices. For example, if you want to maintain contact with a key surface group, encourage your enemy to move surface units early in the turn. Put an expendable TF just out of reach of your opponent's carrier-based air units so he will be tempted to pursue it and launch an air strike. Position a sub just behind a key TF so that TF can evade attack from that sub this turn if it moves before your subs. You lose one sub's attack this turn, but may gain more attacks next turn. If he doesn't bite and moves surface units in the last half of the third Action Segment, you can attack this turn and have lost nothing. If your opponent can derive a significant advantage by activating a certain class of units early in a turn, set things up so that it will cost him dearly in another part of the board.

For example, the U.S. player has two convoys at sea, each with a group of Russian subs buzzing around it. One is detected but only one turn from port, while the other is undetected and in the middle of the ocean. The Russian gets to move first and can attack the detected convoy with either subs or aircraft, either of which can cause about the same amount of damage. In most cases it pays to attack with the air first since it can never be used to spot targets for next turn; but in this case the Russian should attack with the subs first, since he can then guarantee two attacks. The subs attack the detected convoy and surround the undetected convoy so that it cannot move without being detected. If the U.S. player moves his damaged convoy into port, the undetected convoy must move now (allowing air attacks on it this turn) or not at all (it is guaranteed to be detected for the following turn). The U.S. player could delay moving surface units, hoping to move the undetected convoy after the Russian air moves, but then the detected convoy is finished off instead.

I have discussed attacking convoys a lot and it's high time to discuss how to do it. In attacking con-

voys it sometimes pays to attack the escort before the cargo ships. This strategy takes advantage of the mechanics of combat. Whenever surface ships are attacked, they get to make a "defense roll". If a sub is launching a torpedo attack, the sum of the three best ASW values of the ships in the target hex is cross-referenced with the defense roll to determine the negative modifier that the attack suffers. A key modifier to the defense roll is the number of defending ships. If there are four or more defending surface combatants (a task force), the defense roll gets a bonus of "+2", while if there are less than two ships, the defense roll is penalized by "-2". The modified combat roll gives a result from "0" to "9". If the result is equal to or greater than the defense value of the target (not the ASW value of the hex), the target is sunk; if it is half the defense value of the target, it is damaged. And if it is less than half, there is no effect. A damaged ship that is damaged again is sunk. If there are four frigates escorting several cargo units and you will be able to make many attacks on the convoy before it can get away, it will be to your benefit to attack the escort first. As the defense weakens, your attacks will suffer smaller negative modifiers and your hits will pile up with accelerating frequency. If you will be able to get in only a few licks, then hit the cargo ships since they are more valuable.

As an aside, I should mention that the second hit on a unit is more valuable than the first. Damaging a ship doesn't give any victory points (though it reduces the VP value of a cargo ship that reaches port by 25% to 33%)—which is fair enough. However, I was very surprised by the obvious game design decision to reduce the combat values of damaged ships only slightly. In no case is a damaged ship's speed or attack values reduced to less than half of the undamaged values. Reductions of only one-third are common, and many damaged ships lose no speed at all. After a single hit (plus a dud), the USS *Stark* had the combat value of a bathtub; and the British lost several ships in the Falklands to single hits. Modern ships are very good at avoiding hits, but not very capable of functioning well when damaged.

After you have decided which type of ship to attack, you now have to decide how many—and which ships in particular. Since the attack points of the attacking unit(s) can be split up in almost any way the attacker desires, this is not always an easy decision. For attacking convoys, subs are the most straightforward, since only two targets can be selected, and the defensive combat value is not dependent on which ships are attacked. Hit the highest priority target at the highest possible column on the CRT, and use any remaining attack points against the best ship among those with the lowest defense value. The secondary attack is almost sure to fail, so just give yourself the best chance to hit something. Of course, ships with defense values of "3" are the same as those with "4" for this purpose, since a result of "2" is required to hit either. Splitting the attack strength more equally is seldom good play, and is a bad gamble against anything other than two unescorted cargo ships. If you elect to attack the escort, attack the ship that is contributing most to the defense. If most of the subsequent attacks will be from the air, attack the ship with the best AA strength; while if attacks will be by subs, knock out the best ASW vessel. Don't automatically use subs to improve their own chances. Make them be team players; the bombers are more powerful. Occasionally the choice is also dependent on defensive considerations. If one of the escorts carries cruise missiles, attack it first.

The same principles apply when attacking carrier battle groups, but the defense and ASW values of the carriers are so high that it is necessary to reduce the escort before subs have a realistic chance of success. For example, the USS *Vinson* can repel the strongest Russian torpedo attack (22 attack points)

88% of the time without any escort at all (the realism of this is certainly highly questionable) and 99% of the time with the escort provided in the Advanced Game. For the weakest carrier, the *Midway*, the corresponding numbers are 70% and 94%.

In missile combat, attack and defense values are usually higher and the tactics for both sides are more subtle. The defense strength is the sum of the area AA values of all ships in the target hex, the base AA (if applicable) and the close AA values of target ships and the ships stacked directly under them. Unlike torpedo combat, a missile attack can hit up to half of all the ships in the target hex, but the choice of targets is not completely free. The defender divides his force in half and a die roll determines which half the attacker can choose his targets from. There are two basic philosophies for setting up the defense to a missile attack. The first is to stack the units with high close AA values under the targets you want to protect the most; this can increase the defense modifier. The other is to put all the important targets in one half of the stack and hope that the attacker can't hit that half. The former works best when you have a strong TF undergoing a weak attack and you can hope to prevent any damage at all. The second works best when the attacker can "deep-six" any one or two ships that he likes. Of course, a combination of these two tactics is also possible. Whenever possible, do not put two lucrative targets adjacent to one another. The attacker can then hit both and face close AA fire from only three ships. If he wants to hit two non-adjacent ships, four ships can fire close AA. For weak attacks, lucrative targets are ships with low defense values that have high attack values, high VP values, or are already damaged. For strong attacks, important targets are carriers, cargo ships and ships with strong attack values, regardless of their defense values.

Missile attacks can be as strong as 200 attack points. In the absence of any defense modifiers, a single Russian bomber squadron could automatically sink two frigates every turn. With this kind of power in hand, it is tempting to attack everything. Sometimes this is the best course; sometimes not. The more targets you attack, the stronger the defense is and the higher the chance of complete failure. However, the chances for a big victory are increased as well. Take a simple case and suppose that a Backfire squadron is attacking a relatively weak task force consisting of five Japanese destroyers (each of defense value "3", area AA "0" and close AA "7") that has been hunting submarines east of Japan and has foolishly strayed beyond the range of air cover. If the bomber unit uses all 75 of its attack points against one DD, it misses only 6% of the time and sinks the target fully 80%, getting an average of 1.74 "hits" (counting two for sinking and one for damaging). If it allocates 46 points against one DD and 28 against another, it misses everything 17% of the time, but sinks both DDs 17% as well, and gets an average of 1.95 hits. In this case it pays to split fire, especially since sinking two DDs has the added advantage of eliminating the bonus (of "2") to future defense rolls (even later in the same Action Segment) for having four or more combat ships in the defending group. Other ways of splitting these attack points exist: 58 and 15 gives 1.62 hits; and 36 and 36 gives 1.60 hits. Note that there were always a few factors left over. This is a function of the attack points columns on the CRT. These points could have been used to attack a third target assuming that the "half" of the task force attacked was the one with three DDs, but that would have increased the defense modifier to no good purpose. In those cases where the extra attack doesn't cause the total AA value to increase to the next CRT column, make the attack and hope for good luck.

Different tactics are best when attacking a formidable opponent. For example, the Russian TF including the CGN *Riga* and CV *Novorossiysk* that

starts the Advanced Game at sea has been stripped of its CAP by the *Midway* air group and is being attacked with missiles by the B-52s from Guam. The area AA is 58 and the U.S. Player has 75 attack points that can be allocated only among the three DDs (defense value "4", close AA "6" or "7"). Attacking one DD results in a 30% chance of sinking it and 1.0 expected hits. Attacking two with 46 and 28 attack points results in 0.8 expected hits and only a 0.3% chance of sinking both DDs. The moral of the story is to split your attack when the defense is weak, but concentrate when the defense is strong. Note that all the ways of allocating attack points are nearly equally effective. A lot of thought went into that deceptively simple CRT. Note also that a defense more than three times as strong reduced the damage by less than a factor of two. The best defense is still a good offense.

If you have a stack of missile units, you can launch one large attack or several small ones. For causing general mayhem, one large attack is best since the enemy AA only gets to fire once. However, if there is one high priority target in a weak TF, several weak attacks may be better since one strong attack has only 50% chance of being able to hit.

Bombing attacks have the best characteristics of both torpedo and missile attacks. There are no restrictions on the number or choice of targets. Many more airplanes can make bombing attacks than missile attacks (though BMB units can attack ships only with missiles) and bombing attacks tend to be stronger. A U.S. carrier air group can bring up to 205 attack points to bear. However, unlike torpedo or missile attacks, the attacker can take losses if defense roll result is "4" or more. Attack and defense tactics are the same as for missile combat, except that the ploy of hiding all the vulnerable targets in one-half the stack doesn't work. If you plan on attacking an enemy TF with both bombs and missiles in the same Action Segment, attack with missiles first to soften up the defenses and reduce the risk of bomber losses. In general you should think nothing of launching a weak missile attack against a strong enemy. It usually costs little, and you might get lucky. A bombing attack should have a good chance of success to make the risks to AA fire worthwhile.

ASW attacks are usually very straightforward since there is never a defense roll and only one sub can be attacked at one time, but there are a few things to consider. Since a sub can only be attacked once in a surface or air Action Segment, it is important to get the optimal attack. If more than one TF can attack the sub, make sure that you use the best one, consistent with your larger goals. It never pays to detour with a convoy escort to hunt subs. If you have several ASW aircraft at the same base and several spotted subs, make several weak attacks if the subs are weak, and make fewer concentrated attacks if the subs are strong. One ploy that can make life more difficult for enemy subs trying to mass against a large TF is splitting the TF and recombining. At the start of the surface Action Segment, split the TF into task groups of three ships, the maximum that can be used in any one ASW attack, and have each task group attack one sub. Organize your groups carefully to take advantage of the attack point columns on the CRT. At the end of the segment, recombine the groups into a single TF to provide maximum mutual defense.

One attack that comes up more often in the Advanced Game than in the basic scenarios is the "airbase" attack. It is the best way of eliminating air units, but in most of the basic scenarios the air groups are too small and it doesn't pay to risk the AA fire. It also takes three results of "4" or more to destroy any base, and no air units are destroyed if the base is merely damaged. In any scenario it can be worthwhile to damage a base to prevent its air units from activating, but it is seldom worthwhile trying to destroy one in a basic scenario.

In *7th FLEET* the only ways to attack air bases are with cruise missiles and bombers. Cruise missiles can only attack bases and Harpoons can only attack ships. Cruise missiles are few in number and fairly weak, but the only defense against them is to sink the ship that carries them before they can be launched. Bombers are strong but must risk CAP and AA fire. If your opponent is serious about defending a base, knocking it out will often require using both. Start with a dawn cruise missile attack. At the end of the turn, the CAP must land and cannot take off again until the base can be repaired at the end of the night turn. If the cruise missiles miss or are unavailable, or if CAP from a nearby base can also defend it, send a fighter escort along with your bomber strike. Since only four units can make up the combined mission, this often results in a weak escort or a weak strike, or both. If a strong escort defeats the CAP, a weak accompanying strike may not be likely to damage the base; but follow-up strikes in the same Action Segment can then hit the base with no CAP to worry about. The attacker's problem is that CAP cannot be forced to fight, and can simply refuse to engage a strong escort, trusting to the base AA to repel the weak bombing attack. The defender's problem is that he often doesn't know if the escort is strong or weak, since most interceptors can be used as fighters or bombers. (The rules make it clear that the attacker must specify which role the interceptors will play when the mission is launched, but do not say when the defender is informed of the decision; I recommend that the CAP must commit before finding out.)

When attacking a TF or base defended by CAP, check out the air-to-air values of the CAP and your own units carefully and assign your interceptors to fighter, fighter-bomber and bomber roles to maximize your bombing value consistent with getting good odds against the CAP. If you need three of four air units at a base for a good attack, send all four. Allow for surprises and losses to AA fire. The single remaining unit will not be likely to make a good attack on its own. Bluff occasionally by sending all your interceptors in the fighter or the bomber role. The CAP opponent may make a disastrous decision. If the attacker controls an airbase within four hexes of the target, he is in a much better situation. In *7th FLEET* a CAP mission of the attacker can join any air-to-air combat within four hexes of its base. Thus, a carrier that moves to within four hexes of an enemy base can send up a CAP of two F14s, an F18 and an E2 to act as "escort" for a strike force of an F18, an A6 and EA6 (which gives a "-2" modifier to both the air-to-air and AA die rolls). This attack is a heavy favorite to defeat any single squadron on CAP and is enough to get the best possible bombing attack on the CRT even if the A6 is damaged by the base AA fire. If enemy air units have not moved yet, this attack can be risky since losing the air-to-air combat leaves the carrier without air cover for the rest of the turn. In some Advanced Game scenarios the strong Allied air forces in South Korea can often destroy the whole North Korean air force in a couple of days by a similar method, even if every available North Korean interceptor is placed on CAP.

Strategic air missions are vital to successful play since they are the only way of locating enemy units without risking detection in return. The most important strategic air missions are Reconnaissance and Interception. Recon missions are launched to find enemy units in one of the 14 large areas on the three maps. Each air unit on recon can detect one enemy surface group or attempt to detect one sub. If successful, the detection lasts for the ensuing three turns, eliminating the need to remain adjacent at the end of the third Action Segment to maintain contact. Interception missions repel enemy recon missions. If both sides have interceptors in the same area, the interceptors have air-to-air combat. The winner gets to make his reconnaissance unimpeded,

while the loser gets his recon missions "bounced" before they can see anything.

Since detection is so important, it is tempting to insure it by putting the bulk of your air units on strategic missions. This is a mistake. It is just as vital to retain enough air assets to maintain CAP and a strong strike capability. Units on strategic missions cannot be activated in the following three turns, and there is no point in detecting so many enemy units that there are not sufficient forces available to attack them all. Leaving enemy units undetected and waiting to pounce on them with a large air force can deter attacks on your own ships, since a less than overwhelming attack will likely leave your enemy detected and subject to a devastating series of counterstrikes.

There are also two other strategic air missions: Tactical Coordination and Mining. The latter is an optional rule; and the former is seldom used, especially by the Allied player. A tactical coordination mission allows you to add one to your die roll for one attack; I would, however, much rather have the use of the unit for three attacks of its own during the day. The only good candidates for this mission are the Russian recon planes that have no attack capability at all, and I would rather use them for recon missions. The best use for this mission is in low-probability, high-payoff attacks—like attacks on carriers. I prefer the tactical coordination rule from Balkoski's old "Task Force" game (which in most ways is much inferior to *7th FLEET*) which provides an advantage when the same target is attacked multiple times. I suggest that a tactical coordination mission cause a +1 modifier to the attack roll for each attack on its target after the first, that it last the whole turn, and that a maximum of one be allowed per target. Also, a tactical coordination mission could be required to use the coordinated air strike optional rule, which allows air units from more than one base to combine in the same attack.

The choice of which squadrons to use for strategic missions is important. Searching for surface units can be done by any kind of air unit except electronic warfare (EW). Don't automatically use recon units. Airborne early warning airplanes are vital if carrier CAP is to fight more than one hex from the CV; but if this isn't necessary, AEW squadrons make good recon planes. The North Korean S77s don't have the range to attack ships more than six hexes from their base, but can be used on recon missions to locate enemy ships anywhere in the Sea of Japan. Consider sending an EW squadron with especially important interception missions. It will aid the air-to-air combat and guarantee that enemy recon units will be turned back if the enemy interceptors are defeated. It is vital that you keep prying eyes away from your convoys. The Russian player has convoys to protect too, and has to decide whether to use his few long-range interceptors to gain temporary air superiority over his own convoys or those of the Allies. The proper interceptor force to send to an area is highly dependent on what your opponent has sent there. Since each player must allocate all his strategic air missions before knowing what the enemy has done, no hard and fast rules can be given for deciding. Strategic mission planning, more than any other part of *7th FLEET*, requires that you know your opponent.

Surface units have many special qualities and their proper use is crucial, especially for the Allied player. Unlike air and submarine units, these can make two attacks per Action Segment (though only one of any given type). Use this capability whenever possible.

When strong air units are present, the primary consideration in deploying surface units is the availability of air cover. This cannot be overemphasized. This does not mean that all surface vessels need to stay in port or travel in a TF with an aircraft carrier. CAP can be used to restrict the movement of enemy

bombers rather than actually fly over the ships they are protecting. Japanese surface groups can operate safely in the Tsushima Strait area under the umbrella of CAP from Iwakuni and Kangnung. Be very careful here. The ships aren't immune unless all hexes within the bombers missile range are covered by CAP. This is especially important if subs are available to give midcourse correction for long-range attacks. CAP cannot prevent an attack on the northwestern three hexes of Tsushima Strait by the T30 Blackjack (whose missiles have a range of "4"). The East China Sea can also be made relatively safe by the Harriers carried by USS *Wasp* and CAP emanating from Okinawa and Kyushu, and can be turned into an Allied "lake" in the scenarios where the Chinese and Taiwanese join the Allies. Interceptors on strategic interception missions are also effective air cover if there are no enemy subs around. CAP from carriers in the Hokkaido and Sea of Okhotsk zones can force Russian Backfires to detour so far out of the way that they will be unable to reach their targets. The Russians do not have the advantage of geography possessed by the Allies and will have to cover their ships directly. Except for the two carrier based Y36 squadrons, this air cover can only protect the small strip of the board on the northwest side.

U.S. carriers are an important part of the Allied offensive capability and can deliver considerable air power to wherever it is needed. Think ahead about where you want to deploy them, however, since the board is very large and it takes many turns to go from one side to the other. It is easy to get into a situation where most of a carrier's time is spent in transit from one crisis point to another, and its planes spend most of the time on deck. The Allied carriers need defense, but their sheer size (reflected in the defense value) and their own inherent CAP and helicopter ASW will make them very hard to attack successfully. Be aggressive with them, but not reckless.

Soviet carriers are far less useful, and more vulnerable. If Balkoski's picture of naval warfare is to be believed, small carriers are good for little except convoy escort. The single Y36 squadron is very useful as a mobile CAP since it makes its TF immune to unescorted airborne missile attacks, but it is weak and must usually decline combat against enemy interceptors. It is very vulnerable to an air strike using an all bomber bluff. Since the Soviet carriers are powerful surface ships in their own right, they can operate successfully anywhere except where strong enemy interceptors are encountered. Unfortunately for the Soviets, Allied advantages in geography and carrier air groups make these areas small or remote from the main action.

Convoys are important for victory points. In the Advanced Game, landing a single convoy unit intact is worth as many VP as sinking four Russian diesel subs—and a typical convoy contains three such units! The assortment of frigates that are usually assigned to protect them may not be adequate. Consider reinforcing the escort when you can. The Russian CVs and the USS *Wasp* make ideal escorts since they provide a modest CAP. Generally move them toward their destination as quickly as possible. In the basic scenarios you don't have much time to waste, and in the advanced scenarios the game can end any day after the Negotiations Progress Box is reached. Sometimes it is necessary to make a detour to avoid detection, but don't stray too far for any other reason.

In the Advanced Game, other surface ships play primarily defensive roles in support of carriers or convoys. These escorts do plenty of attacking—but usually just counterattacking the subs, missiles and aircraft that are trying to hurt their TF. Otherwise, the only other surface ships that have an important offensive role are the few U.S. ships that carry cruise missiles. They should generally be fired early in the scenario, because ships carrying them are high

priority targets and usually have short life expectancies. Even the mighty *Missouri* will have difficulty surviving repeated air attacks. Sometimes an attack can be launched with SSMs, but this is seldom decisive except in the basic scenarios where there are few air units or submarines.

Air units pack the most powerful punch of any of the classes of units, and their long range also makes them very flexible. The ranges of heavy bombers, especially, are impressive. The Russian T30 can cover the entire board from its base near the northwest corner. However, against a wary foe, the opportunities to attack at long range will be limited by the availability of submarine or air recon and the necessity of detouring around or defeating enemy CAP missions. Even if they don't do much attacking, long-range bombers exert a great deal of pressure on enemy forces. If the Russian Backfires and Blackjacks are lost or immobilized, the numerous Japanese DDs can hunt subs with impunity and fewer Allied fighters need be sent on strategic interception.

Proper use of interceptors is crucial to making use of bombers. Keep a strong CAP at important bases to restrict enemy movement and protect your own bombers. Use overlapping CAPs so that bases can defend one another. If two CAPs can attack, it usually pays to attack separately rather than together. Try to keep a centralized long-range intercept-bomber combination together that can threaten many places at once. Try not to break up large stacks of planes by putting some on CAP or strategic air missions. It dilutes the strength of the strikes that base can launch. Use interceptors from bases with only a few planes, and use the base purely for strategic missions and CAP. However, beware of concentrating your forces too much if the enemy has cruise missiles or a large advantage in interceptors. Large stacks of recon units should not be broken up either. A stack of four P3s is very flexible in the strength and number of ASW attacks it can launch and can deliver a potent missile attack against any TF without air cover within 37 hexes of its base.

Submarines have several advantages over surface ships, the most important being the fact that they are harder to detect. They are valuable for spotting since they can frequently detect an enemy surface group without being detected themselves. Their defense values are high; their anti-ship capabilities are generally good; and they are far less vulnerable to airplanes since few planes can attack subs at all and the ASW attack values of recon aircraft are much lower than the anti-surface value of bombers.

Both sides can generally be aggressive with their nuclear subs without taking unacceptable losses. Nuclear subs are usually as fast as surface ships and can be maneuvered at will. However, going full speed causes strategic detection if any enemy vessels are within 200 miles. Don't worry about this during night turns, or if the sub already has a strategic detection marker. Subs armed with cruise missiles can often wait to fire them since the subs are hard to find if they want to hide. Allied SNs can also be used in these roles, and are even better at them than the Soviets. Their higher ASW values also make them attractive as escorts for surface groups, since their ASW value can be used for defense rolls during torpedo attacks. The problem with this is that they can't move at the same time as the surface units and thus cannot provide continuous protection.

Diesel subs must be used more cautiously than nuclear subs since they are easier to detect and their defense value is "5" or "6" instead of the "7" typical of SNs. This doesn't sound like a big difference, but it makes SSs roughly twice as vulnerable to ASW aircraft. They are also much harder to use offensively. They are slower than convoys, and some can't keep up even at full speed. They may only get one attack, so be sure to make it a good one. These boats also tend to have miserable

ASW values and if left alone, the first news they get of an enemy sub is an incoming torpedo. Keep them in stacks with a total ASW value of at least "6" so they have a chance to detect an enemy SN.

STRATEGIES

I won't go into the strategies of the basic game scenarios, but I would like to give a few thoughts on how I currently see the strategy for an Advanced Game scenario. There are four of them, each with low and medium and high states of readiness, so there are really 12 in all—and each scenario will require a slightly different approach. I am most familiar with "Invasion of Japan" starting at high readiness, so these notes should be read primarily with this in mind.

The strengths of the Russian forces are their long-range bombers and their nuclear submarines. The other forces are not trivial, but will serve a subsidiary role. The SNs should be used primarily to attack convoys and spot them for bombers. Deploy several subs around the convoys that start in the North Pacific and Central Pacific zones for attacking and spotting in case the air recon is bounced. If the convoys are detected, they should be attacked vigorously and will be rapidly destroyed unless a U.S. carrier battle group intervenes. Ignore the convoy in Guam for the time being. There will be plenty of time to deal with it later. Maneuver your SNs in packs since some will be lost to the convoy escorts and to ASW airplanes. It is risky to use subs to attack carriers, and not likely to be successful. If the Russian player is lucky though, such a policy can go a long way toward winning the game. You can make some headway attacking the carrier's escorts, but convoy units are three times more valuable.

The heavy bomber units are the Russian's trump cards. The T26s and the T30 should concentrate almost exclusively on long-range missile attacks. The ideal targets are carriers, ships carrying cruise missiles, and convoys—but don't pass up any surface target that can be attacked without risk. They are too valuable to lose and should bomb bases (and risk AA fire) only if the target is very important and there are no others available. The T16s can also be used for missile attacks, but their shorter range often makes this impractical. They and the S24s are good for attacking the Allied bases in northern Japan after the CAP has been forced down by cruise missile attacks. There are four good reasons for attacking these bases: it makes the northern Russian bases more secure; it greatly improves the chances of getting VPs for air superiority over Hokkaido (or at least deny them to the Allies); the absence of CAP there extends the range of the Russian bombers; and it makes it much easier to detect and destroy the *Missouri* and *Jones* before they get into cruise missile range since few Allied planes will be able to fly interception in the NW Pacific zone. Look for a chance to punch a hole in the Allied CAP screen in the Japanese Home Islands. If it can be done by damaging one base, by all means try it. This may let the T16s make many more missile attacks.

The Russians have as many convoy units as the Allies, and in general they are closer to their destination (Kamchatka) than the Allied convoys are to theirs. Don't even think about trying to send any convoys to Cam Ranh. If the Americans commit a carrier battle group and some subs to interdicting the convoy route, CAP from the airbases in Sakhalin, Kamchatka and the Kurile Islands is vital to give your convoys a decent chance of reaching their destination. Defend these bases as best you can. Escort the convoys with the CV *Minsk* and any other available surface vessels.

Strive to keep the Soviet bastion area free of Allied subs to keep the convoys undetected and deny the Allies victory points for harassing the Soviet ballistic missile subs (which are not included in the game).

SNs that must start the game in port and recon aircraft are the best units for this.

The *Novorossiysk/Riga* task force is strong enough to hold out a long time against anything short of a determined campaign by a carrier battle group. It should deploy after the *Midway* battle group, far away from it, and then should try to lose itself in the ocean and pick up points for "sea denial". It then leads a U.S. carrier on a long chase far away from the main scene of action or causes havoc in the rear areas. If undetected, it can even take its Y36 squadron off CAP and raid Allied bases at Guam or Iwo Jima, or join in attacking convoys.

The North Korean air units will be hard pressed to survive a determined and skillful air offensive. An evacuation to the airbases near Vladivostok should be considered, so the Allies cannot use CAP as escort for airbase attacks. Putting all eligible North Korean air units on strategic missions on Turn 1 is one way of doing this, and they can do some useful spotting. This has the advantage of preventing any attacks on them, but delays their re-entry two turns; and this might be one turn too many. After the mandatory five-turn hiatus setting up new ground facilities, they can replace longer-ranged Russian fighters on CAP.

The elderly North Korean diesel subs can get a few victory points for penetrating the Tsushima Straits if they try hard enough; but in the long run, they might lose more VPs with this strategy than they gain. Keeping them a force in being is the best use for them, to keep some Allied units tied up watching them. The same can be said for the Russian diesel subs. Most of them at least have the advantage of being able to operate in the open ocean. Hide them, preferably in the Japan zone, collect victory points for sea denial, and if the Allies chase them spot the ASW groups for bombers. Once in a while, they will get a chance to do some damage to a convoy as it nears Japan.

In Vietnam, keep every eligible squadron on CAP to hold off the *Vinson's* air group as long as possible. Keep the DDs in port unless you can move them and attack with SSMs in the same segment—and even then only if the enemy air units have already moved that turn. The subs in the South China Sea should try to sink the *Antietam* before it can launch all of its cruise missiles, and then try to keep the *Vinson* TF under surveillance if it tries to get close to Cam Ranh. SSMs from the destroyers and the submarine *Ob* may then take out a couple of escorts and/or amphibious assault ships. The alternative is to try to escape to the open sea and perhaps deter a convoy from trying to resupply Subic Bay.

The strengths of the Allied forces are their carrier battle groups and their advantages in geography and interceptors. The commanding position of the Allied bases in the Philippines, Japan and South Korea forces Soviet surface vessels to operate mostly on the far western edge of the board. The big carriers can provide local air superiority anywhere desired. The more numerous and better quality Allied interceptors prevent successful attacks on friendly bases after the Russian cruise missiles are exhausted, and allow the Allies to carry the fight to the enemy.

The *Midway* group can start almost anywhere you please; while *Midway* is not as strong as her big sisters, she is powerful enough to go in harm's way. Assuming that the *Novorossiysk* is well out of range, the *Midway* should go after Russian airbases. Vilyuy in Kamchatka can be attacked at dawn on Day 2 and is a good place to start since its only interceptor is an M31 that the Russian would love to use on strategic interception; and it also holds two squadrons of recon aircraft and one of Backfires. On the way north, her air group can hit the airbase at Yuzhno-Kurilsk and/or the convoy that starts in Korsakov. The main alternative is to stay in the Hokkaido zone and aid in the defense of the northern Japanese bases and the destruction of the Soviet convoys and air-

bases in Sakhalin and the Kuriles. This has the advantage that the *Midway* and *Kitty Hawk* can support each other, freeing interceptors for strike escort. It is possible to use the *Midway* to guarantee the safe arrival of a convoy, but she cannot protect all of them and it is a waste of the *Midway's* offensive potential to be tied to escort duty so far from the action.

The *Kitty Hawk* should first escort the accompanying amphibious assault ships to Hokkaido, and then look for something to kill. Ideal targets would be the *Minsk*, *Novorossiysk* or a convoy. Other options are the airbases on Sakhalin and Kunashir islands that defend the Soviet convoy route.

The *Vinson* group that starts in the far southern reaches has two basic options. The first is to belly up to the coast of Vietnam and try to destroy the seven air units and seven destroyers to collect the VP and make the South China Sea safe for democracy. With the help of the cruise missiles of the subs *Springfield* and *Bremerton*, plus those of *Antietan* and *Leftwich*, this should be accomplished in about three days. The other option is to ignore the Russian southern forces, which can do little damage to the Allied war effort, and proceed north to land the amphibious assault units in Korea and then join in the annihilation of Kim Il-Sung's forces. It will take two days to get into position, however, and I prefer the first option. Don't try to do both by sending the amphibious assault ships off on their own while the warships stay to blow away the Vietnamese and their Slavic patrons; the assault ships will need the protection of the *Vinson's* CAP.

The Allies have some hard choices to make in where to deploy their air units. The F18 squadron that can deploy on either the *Midway* or *Iwakuni* should start on the carrier, since one squadron of F18s is enough to provide CAP at the airbase and the range of the Hornets is so short that they can't do anything else there. The P3s should be concentrated in Kanoya and Kadena to provide powerful, flexible stacks in a central position. They will not need to do much anti-sub strategic recon, since many Russian subs will be detected when they try to attack your convoys. Wait for them to come to you, then pounce. The F111 should be deployed in Kunsan; Misawa is a better base for offensive operations, but it is often destroyed by Russian attacks. The F18 that can be deployed in Misawa, Iwakuni or Atsugi should deploy in the latter since otherwise damage to the airbase at Komatsu would leave a gap in the CAP screen over Japan. The F4s that start in the Philippines are of no real use there and should redeploy to Okinawa on the first turn. When they have established themselves there, the F15s already there can redeploy further north. The F4G at Clark should redeploy to Japan, where it will be useful in strategic interception missions.

Insuring the convoys' safety is a high priority, but don't be so preoccupied with them that you neglect the offensive. The first line of defense is strategic interception. Invest a lot of interceptors and some EW aircraft to this mission to try to keep the Russian bombers at bay. Some convoys will be spotted by subs even if your interception is successful, and some will be lost despite your best efforts. Set up a continuous line of CAP from Hokkaido to Korea to restrict the bombers' movements as much as possible and consider extending this screen with carrier CAP (especially if this will put a detected convoy out of range of a Backfire squadron). Move surface ships last to try to escape detection. The best way to deal with the bomber threat is to launch a vigorous air offensive against Soviet airbases starting with cruise missile attacks to minimize CAP. The Allies will take air losses, but the Soviets will take more; and this offensive will take the pressure off Allied air bases. Without Russian CAP to worry about, the Allies can either destroy the bomber bases or annihilate the Russian convoys, or both. Since the Soviets must deploy most of their interceptors

on CAP and must commit first, the Allied player will often find that a minimal CAP of his own will suffice, leaving most of his air units free to attack.

The aircraft in South Korea should try to begin the methodical destruction of the North Korean air force using CAP as escorts for bombers launched from further south. Use the cruise missiles elsewhere. The forces at hand should suffice to do the job. If the North Koreans bug out, evacuate the bases that may fall to a North Korean ground attack and try to do in the Soviet airbase complex just north of Vladivostok, assisted by the cruise missiles of the *Missouri* and *Jones*. Meanwhile, try to pick off the North Korean patrol aircraft. The B52 unit should attempt to stay out of harm's way and risk AA fire only for very high priority targets. It is the only unit the Allies have that can intimidate surface units anywhere on the board like the Russian bombers can.

The Japanese and Taiwanese surface ships should concentrate on staying out of the way of the Russian bombers, and trying to hunt down some Russian subs—or join a carrier battle group if possible. Some should be in position to escort the tankers coming into Japan from the East China Sea, protected by CAP from Okinawa, Taiwan and the *USS Wasp*. Don't collect the VP for landing the *Wasp* in Korea; use its CAP for protecting ASW groups and convoys. The South Koreans and a few Japanese should fight off attempts by North Korean and Russian subs to penetrate the Tsushima Straits.

The Allied SNs are highly capable ships. As with the carriers, think ahead about their deployment—and be aggressive with them, because it is bad play if they are left idle for any length of time. The boats with cruise missiles should be placed to damage Soviet airbases in the first couple of turns. Top priority targets are those with good interceptors that can be destroyed before the next day by bombers. A couple of subs should shadow the *Novorossiysk*, and a few can be used to try to help break up concentrations of Russian subs in defense of convoys or carrier battle groups.

The diesel subs should mostly be used for defending the Tsushima Strait and spotting Russian surface vessels entering the Sea of Okhotsk from the south. Deploy as many as you can north of Hokkaido where there are no Soviet close defense hexes between them and the Soviet bastion area. Move them into the bastion to listen for SSBNs and to interdict the convoy route. Like the Russian SSs, they should be used in stacks to provide a detection capability against enemy subs.

I have mostly ignored the effects of the optional rules. The logistics optional rules create a lot of bookkeeping, but the added realism is worth the effort and their use requires dramatic changes in a lot of the tactics and strategy of the game. Some of the other optional rules are interesting as well, but they must be the subject of some future articles.

I hope that these thoughts help you to get started toward winning play in *7th FLEET*. It is a very enjoyable game, one that I suspect is even more subtle than I have yet realized.



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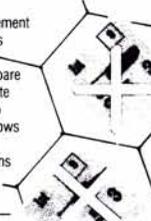
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AREA TOP 50 LIST

Rank	Name	Times On List	Rating	Previous Rank
1.	K. Combs	63	2563YOW	1
2.	D. Burdick	62	2305HHP	2
3.	J. Kreuz	57	2190IGR	3
4.	J. Beard	52	2188IR	4
5.	B. Sinigaglio	48	2179GU	5
6.	J. Noel	16	2168DDJ	6
7.	P. Siragusa	57	2114FHL	7
8.	D. Garbutt	61	2108HJP	8
9.	E. Mineman	33	2073DFG	9
10.	H. Newby	28	2051VJP	10
11.	P. Flory	39	2039EHL	11
12.	P. Gartman	28	2030HHK	12
13.	S. Sutton	30	2029GHN	13
14.	R. Beyma	38	204DDG	14
15.	T. Deane	15	1998FCB	21
16.	P. Landry	37	1987HIO	15
17.	G. Schnitker	10	1983DFG	16
18.	C. Corn	12	1970FEA	17
19.	T. Oleson	72	1965ZZZ	18
20.	J. Spontak	7	1963DCE	19
21.	B. Remsburg	46	1960HIQ	20
22.	R. Berger	3	1932DEE	22
23.	F. Reese	43	1931UDJ	23
24.	L. Barlow	10	1920JKV	27
25.	K. McCarthy	17	194CFI	24
26.	J. Eliason	11	190FIM	25
27.	E. O'Connor	22	1908GHN	29
28.	D. Mattson	5	1901KJW	30
29.	B. Schoose	2	1891GIM	28
30.	D. Kopp	8	1887GIO	34
31.	M. Rogers	23	1880CEH	32
32.	B. Salvatore	30	1871GKO	33
33.	W. Scott	60	1867MKW	26
34.	F. Preissle	60	1850MOZ	35
35.	R. Cox	2	1849YKM	37
36.	M. Frisk	17	1845CEI	41
37.	S. Johns	16	1831HFI	38
38.	R. Shurdut	8	1827FHL	39
39.	G. Smith	17	1826FGM	40
40.	K. Kinsel	8	1815GGJ	42
41.	R. Costelloe	3	1814CEH	43
42.	E. Miller	10	1812HKR	36
43.	B. LaBoon	2	1800QIM	31
44.	F. Ornstein	46	1786GHM	44
45.	J. Lutz	8	1783HGP	45
46.	L. Carpenter	8	1781CEA	46
47.	M. Cox	5	1771GDA	48
48.	M. Simonitch	1	1763EFH	—
49.	T. Jackson	1	1762CEB	—
50.	M. Dultz	5	1757OSZ	49

MEET THE 50 . . .

Mr. James Spontak is 41, single, holds an MD and is a physician in Chicago, Illinois.

Favorite Game: GOA

AREA Rated Games: GOA, TRC, 3R

AREA W-L Record: 18-0

Gaming Time/Week: 8 hours

Hobbies: Chess, Golf, History

Pet Peeve: Incongruous PBM opponents

% Time PBM: 90%

Play Preference: PBM

Dr. Spontak offers a few suggestions to potential PBM gamers:

"Do not be afraid to write *any* opponent in the 'Opponents Wanted' section and ask them to explain PBM. Many people shy away because they feel it is probably too complicated. PBM is really not complicated, and just about everybody will help—and our hobby will remain strong. I believe that before one starts a correspondence gaming relationship, a set of rules should be discussed. These rules should include time of response. People have good reasons for delays, but it only takes five minutes to send a postcard saying 'I need more time.' Anyone can spare five minutes."

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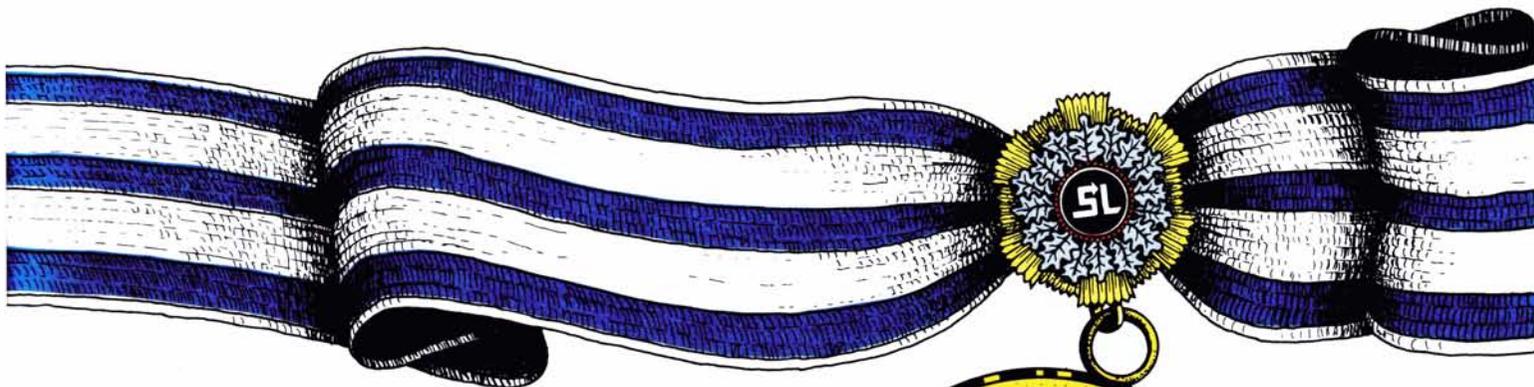


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Squad Leader Clinic



ACHTUNG MINEN!

By Jon Mishcon

The title may be a little dramatic, but I already titled an article written in 1981 (see Vol. 18, No. 3) "Minefields and Booby Traps". Long-time readers may well want to peek back at that article just to contrast what I had to say then with the current state of affairs. It was rather interesting for me to do so. For those lacking that article, it briefly reviewed who used what kind of mines (U.S. and German forces used manufactured mines while the Japanese made do with what was available) and the German approach to mine tactics. A brief reprise of those historical concepts is in order before we turn to *ASL* mine usage.

German mine policy specified usage of mines both offensively and defensively. On offense, hastily-laid mine screens were used to shield the flanks of an advance and protect key rail/road junctions that had been overrun. Defensively, minefields were emplaced to slow enemy advances, channel attacks into sited "killing grounds", and permit greater defensive troop concentrations in the unmined areas. In all cases great stress was laid on ensuring adequate firepower to protect the fields from hasty breaching.

The Germans preached relatively few keys to successful mine use. First, where mines were laid they must be of adequate depth and number to intimidate enemy movement. Second, mines are not a rigid barrier. Rather, they serve as a psychological obstruction. Third, the intent of minefields is to ensure that the employer will have adequate time and troop concentration to counterattack vigorously. Lastly, the effectiveness of any given minefield varies directly with the ability of the troops behind it to protect the field.

Standard German minefield construction involved surveying each and every mine location and type. The edge closest to the enemy was composed mostly of anti-tank mines. This was to protect the anti-personnel devices from harmless detonation by an AFV. The core of the barrier was composed of staggered rows of anti-personnel mines interspersed with anti-tank devices. Specific channels were left open to allow safe passage of patrols and counter-attacking troops. These channels were changed periodically. Time permitting, potential enemy cover beyond the mine belt was laced with booby traps. Although spreading the mines increased the difficulty of mine removal, and obviously widened the area of defense, the use of mine patches was condemned as being too easily bypassed.

ASL scenarios may give players a fixed number of mine factors which may be allocated in three manners: anti-personnel, anti-tank, and booby traps. In the standard *ASL* rules these are always hidden (unless placed upon a hardtop surface—B28.53) from enemy view. The *WEST OF ALAMEIN* module has updated the mine rules with four paragraphs that deal with "Known" and "Dummy" minefields—special applications which may appear in any scenario, but which historically were used most often in North Africa. Due to the mobile nature of that campaign, minefields were often marked with signs (the German ones usually read "Achtung Minen!") and/or perimeter wire. Often the enemy could see these indications of a minefield, yet not know its strength or even if it was just a "dummy". The new rules (F.7-7C) cover these possibilities.

We'll take a moment to review *ASL* anti-personnel mines, anti-tank mines, and booby traps before discussing the pros and cons.

Anti-personnel mines are low power explosive devices designed to go off under minimal pressure. They may be placed in concentrations of six, eight or twelve factors per hex. They can immobilize an AFV, kill or break troops. They can even take out unarmored vehicles. They go off whenever any unit enters or leaves their Location.

Anti-tank mines are available at a cost of three anti-personnel factors per anti-tank factor. These mines are big and powerful enough to rip the treads off a tank—perhaps even blow through the bottom plate armor. Because of their size, they're expensive. Thus, they're adjusted only to detonate under the kind of ground pressure generated by a vehicle. Anti-tank mines can be laid in strengths of one through five per hex. Don't go off until a vehicle enters/exits their Location and a die roll \leq the AT mine concentration is made. They always attack on the 36+ column of the IFT. Obviously, a KIA result kills an AFV, while a K or MC immobilizes it.

Booby traps are low power explosive traps that are often concealed above ground. Generally they are not set off by pressure, but rather triggered by an action (opening a door, flushing a toilet, straightening a picture—that kind of thing). Booby traps are available in three levels. Each level costs 10 mine factors. They cause Casualty Reduction on Task Check die rolls of "12" (level C), "11" (level B) or "11 and 12" (level A).

Anti-personnel mines are your "best buy". Undoubtedly they will be the overwhelming majority

of mines purchased. First and foremost, you know they'll always go off whenever a unit enters/leaves their Location. Even a six-factor minefield is a considerable threat to foot sloggers. Second, they really are a threat to AFVs. AFVs with any hull armor factor of "0" are treated as unarmored versus mines, and even medium tanks generally have about a 16% chance of being immobilized moving through the hex.

Anti-tank mines are probably only worth the expense if you face more than one AFV. If you do face a bunch of steel monsters, the anti-tank mines are valuable indeed. They can be planted in density as low as one per hex (wide coverage, but still about 30% chance of going off if a vehicle tries to move through). They don't go off if just infantry or cavalry move through. That means that maniacal HS zipping along hoping to expose mines won't reveal your little anti-tank trap unless it searches. Best of all, when AT mines do go off they always rack up some damage.

Booby traps are both wonderful and terrible. As they depend on Task Check rolls of "11" and/or "12", you can go through a whole scenario and they never have any effect. On the other hand, we've seen tough troops cut up badly by multiple Casualty Reductions. When booby traps go off, they can affect any unit (except a crew taking an Immobilization Check) and always hit (none of this "MC" jive), and it should be pointed out that booby traps can be "detonated" only by enemy units—not by units of the side with the booby trap capability.

Your use of mines should tend to follow standard patterns much akin to German mine policy.

First, ensure that the minefield is laid out in adequate depth and breadth. Mining single hexes just means that your crafty opponent will search them out and go round. This means that most of the time, you'll be using the lowest mine density. More mined hexes means more shots, more clearing, and really gives you your best odds of doing some damage.

Second, if you think your opponent is likely to use AFVs to make trail breaks, try to put anti-tank mines in front of your anti-personnel minefields. This "leading edge" can really put a crimp in his breaching.

Third, if you think your opponent is likely to use mine clearing, then invest in Level B booby traps (assuming he is not Inexperienced Infantry). That'll mean dice rolls of "11" or "12" will both clobber him.

Fourth, don't try to mine everywhere. You'll end up with fields too shallow to divert the attacker.

Last but not least, minefields *must* have some firepower protection. As a rule of thumb, I try to use mines to guard one-third or one-half my line with one-sixth to one-fourth of my force protecting the mines.

We've included revisions of two of the original *SQUAD LEADER* scenarios featuring mines on the insert to allow players to experiment with some of the ideas examined above.

These notes continue the series of commentaries in the Clinic pertaining to the scenarios published with the previous installment of the column (in this case, with Vol. 24, No. 6). The intent is to provide the *ASL* player with one of the numerous possibilities for defensive setup, attacker initial placement, and basic tactical approaches for both. Having had several months to examine your own approaches to our Clinic scenarios, the reader can now compare his findings with our summation.

After Action Report—Rocket's Red Glare

GERMAN: Place an 8-0 with squad and LMG in 3L4; squad and LMG in M5; crew and PSK in Q5; the 9-2 with three squads and HMG and MMG in R5; a single squad in U6; an 8-0 leader and squad with LMG in W8. Place the crew and artillery piece

in N8 facing M8/N7. Put the FlakPz in P8 facing O8/P7 and the StuG in R8 facing R7/S8.

AMERICAN: Relatively straightforward—the 9-2 and three squads with two MMGs and Baz44 and PF in T1; the 8-0 plus three squads with Baz45 and PF in X3. All the rest enter on I1.

ATTACKER'S TACTICS: Use your AFV only to prevent the Germans from gaining any second-level positions; it is too vulnerable to throw into a duel with the German armor or infantry. Try to concentrate on getting a second-level fire position which hinders the German movement and then moving all your forces to attack the other building in close combat. Remember, you only need one building to win.

DEFENDER'S TACTICS: Use your firepower to delay or hinder the American movement. Use the tactics of "fallback defense" until the U.S. player commits his assault to one direction—and then hunker down around that building.

Even as you read this installment, our effort on the "ASL Annual '89" (due for release at ORIGINS) enters its final stages. Articles have been selected and edited, and some 20 scenarios are ready for playtest. If you have an interest in playtesting some of these, contact Rex A. Martin by post and specify whether you'd like to test the proposed ASL, Deluxe ASL, or original SL scenarios.



AH Philosophy . . . Cont'd from Page 4

our wargames. In a few cases, this was certainly justified; in most, it wasn't—merely reflecting the lack of the critics' own knowledge and understanding. Given that no game can ever be a "perfect" simulation of war, some seemingly approach the boundaries of being a solid "historical study" of some facet. Among these must be numbered the following:

Components:

1. FLATTOP	1.76
2. ADVANCED SQUAD LEADER	2.04
3. EMPIRES IN ARMS	2.11
4. RUSSIAN FRONT	2.40
5. RAID ON ST. NAZAIRE	2.52
6. WOODEN SHIPS & IRON MEN	2.60
7. DEVIL'S DEN	2.61
8. THUNDER AT CASSINO	2.63
9. FIREPOWER	2.88
10. BULL RUN	2.93

Of great importance to most gamers is the length of time it takes to play their favorite game to conclusion; indeed, game length may be the deciding factor in making it their "favorite". Avalon Hill has long stressed playability, and this is—to some extent—reflected by the playing time demanded. Personal free time among the bulk of our readership is at a premium, what with career and family, and so the category **Shortest** gives new buyers an indication of which games can be played in a single sitting. At the other end of the spectrum are those players who like to play a game over several sessions; for them, the **Longest Game Length** ratings. Luckily, our extensive line can satisfy any gamer's choice, spanning the range from the 37 minutes it takes to play *B-17* to the 47+ hours demanded of the campaign game of *EMPIRES IN ARMS*.

For lunch-break wargamers and tournament organizers, the following are the ten games rated as quickest-playing; for the actual time in minutes, merely multiply the value given by ten:

Shortest Game Length:

1. B-17	3.76
2. NAVAL WAR	3.88

3. RICHTHOFEN'S WAR	4.74
4. GLADIATOR	4.76
5. FLIGHT LEADER	5.08
6. AIR FORCE/DAUNTLESS	5.44
7. UP FRONT	5.76
8. PATTON'S BEST	6.03
9. GETTYSBURG '88	6.39
10. ARAB-ISRAELI WARS	7.52

And for those who want some "meat", the following should keep you busy for a few days (again, just multiply the rating by ten to give the length of time in minutes):

Longest Game Length:

1. EMPIRES IN ARMS	284.16
2. Pacific War	229.80
3. Vietnam	167.16
4. 6th Fleet	84.09
5. Civil War	70.40
6. GUNS OF AUGUST	69.04
7. FLATTOP	68.56
8. THIRD REICH	67.44
9. Pax Britannia	65.36
10. 7th Fleet	64.72

When all is said and done, how does the potential buyer judge the worth of a game based on these numbers? He should be able to spot the strengths and weaknesses by comparing them with all others in our line. There are, of course, several methods to do this. One way would be to compare the ratings of the game he is interested in with one he also is familiar with; this one-on-one comparison should give him some insights on what to expect. Another method would be to find the "median value" for all the categories; then one could say whether a game's rating in a specific area was above or below the "average":

Overall Value: 3.38

Components: 3.36

Mapboard: 3.54

Counters: 3.37

Rulebook: 3.48

Complexity: 4.74

Completeness of Rules: 3.50

Playability: 3.22

Excitement Level: 3.35

Play Balance: 3.29

Authenticity: 3.93

Game Length (average): 29.40

Shortest: 15.26

Longest: 43.54

On the other hand, I employ a simpler judgment. If the numerical rating is below "2", then the game is truly outstanding in this aspect. If below "3", it is very good—a solid presentation and better than most. If in the range of "3-5", I judge it to be average. And we won't even speak of those entries that rate below "5". A crude method of evaluating worth, but it does help me perceive how the collective readership (or at least, those who responded to this survey) judges our efforts. For the designer/developers of Avalon Hill and Victory Games, these values should indicate what is well done, and what needs improvement, when they are working on a game similar to one of these in scope or subject. Hopefully, such an effort on the part of 323 dedicated hobbyists can help us make the product better for all of you. My thanks to those 323 for their time and trouble.

Before closing, a few observations on the results of our quintennial updating of the RBG. I was mildly disappointed that some 20 titles didn't make it onto the rating list, due to a lack of response. However, some of that may be explained by subject (five were fantasy or sci fi titles) or unfamiliarity (two, *KREMLIN* and *TAC AIR* have just recently been released); but surprising was the high number (11) of Victory Games titles that didn't make the "cut". The only explanation can be that the readership has not yet

had the chance to try these games, something we hope to rectify by providing a bit more coverage for them in these pages in the future. Another surprise, given the reviews and comments from dedicated players, was the less-than expected ratings for "Authenticity" for the VG line in general.

Comparison of the latest ratings to those for some of the games on the listing for the last five years also is an intriguing study, with many comments possible about the increasing sophistication of the hobbyists. Of more interest to me is the fact that a number of games make several appearances in the nine "top ten" lists above (four of which judge the components, four of which judge the titles as

a "game" and one category which looks at it as a "simulation"). For example, *ASL* and the surprising *1830* show up on eight of these lists, and *UP FRONT* on six. Given that 35 of the 69 rated titles appear on at least one list, and that 21 of those appear on two or more, this says quite a bit about the strengths of these titles.

I am sure that a great many other observations can be made about the 1989 RBG. Unfortunately, I've neither the space nor time to do so. So, I'll leave it to the good readers to draw their own conclusions and suffer their own blinding insights. If something does strike you as noteworthy, we'd sure like to hear it. Perhaps in a "letter to the editor" . . .

Key to the 1989 RBG SURVEY:

- 1.—Overall Value
- 2.—Components
 - 2a.—Mapboard
 - 2b.—Counters
 - 2c.—Rulebook
- 3.—Complexity
- 4.—Completeness
- 5.—Playability
 - 5a.—Excitement Level
 - 5b.—Play Balance
- 6.—Authenticity
- 7.—Game Length (average)
 - 7a.—Shortest
 - 7b.—Longest
- 8.—Year
- 9.—Type
- 10.—Sample Base



1989 RBG SURVEY

Title	1.	2.	2a.	2b.	2c.	3.	4.	5.	5a.	5b.	6.	7.	7a.	7b.	8.	9.	10.
ADVANCED SQUAD LEADER	1.80	1.77	1.76	1.68	1.92	9.25	2.11	3.44	2.37	2.32	2.04	33.02	11.76	54.29	1985+	2P	172
1830	1.85	2.00	2.39	2.32	2.33	3.88	2.72	2.04	2.43	1.81	3.20	24.52	20.92	28.12	1986	MP	50
CIVILIZATION	1.97	2.60	2.88	2.92	2.41	3.20	2.03	1.72	2.63	2.73	4.09	32.08	26.32	37.85	1982	MP	152
FLATTOP	2.00	2.47	2.12	2.88	3.18	3.61	3.12	3.56	2.40	2.61	1.76	43.96	19.37	68.56	1981	2P	95
EMPIRES IN ARMS	2.08	2.45	3.15	2.12	3.05	8.08	2.94	3.84	2.42	3.08	2.11	156.86	29.56	284.16	1986	MP	71
UP FRONT	2.11	2.24	—	2.60	2.85	4.36	2.83	2.38	2.00	2.32	3.56	10.16	5.76	14.56	1983+	2P	126
RUSSIAN FRONT	2.12	2.33	1.68	2.56	3.00	5.32	2.88	2.67	2.36	2.84	2.40	40.16	16.40	64.28	1985	2P	113
BRITANNIA	2.31	3.08	3.28	3.32	2.81	2.93	2.89	2.07	2.57	3.00	3.52	23.72	19.77	27.67	1987	MP	77
VICTORY IN THE PACIFIC	2.55	3.12	3.63	2.77	3.32	2.56	3.32	1.91	2.76	3.33	5.56	21.09	15.72	26.47	1977	2P	183
THE RUSSIAN CAMPAIGN	2.60	3.35	3.44	3.36	3.12	3.85	3.10	2.28	2.61	3.15	4.22	35.44	18.84	52.04	1976	2P	220
7th Fleet	2.62	2.77	3.64	2.44	2.83	6.47	2.96	3.40	2.99	3.04	3.16	38.01	11.29	64.72	1987	2P	50
THUNDER AT CASSINO	2.68	2.71	2.40	2.90	2.64	4.43	2.75	2.32	2.24	2.87	2.63	23.67	14.16	33.19	1988	2P	52
DIPLOMACY	2.71	3.36	3.28	3.91	3.53	3.00	2.69	2.92	2.80	2.71	5.16	33.26	24.68	41.84	1976	MP	169
RAID ON ST. NAZAIRE	2.72	2.56	1.97	2.68	3.07	4.01	3.12	2.80	2.77	3.48	2.52	18.92	13.64	24.20	1977	SO	98
FIREPOWER	2.76	3.03	3.16	3.29	4.12	6.42	3.63	3.76	3.11	2.85	2.88	15.48	8.92	22.04	1985	2P	94
STORM OVER ARNHEM	2.78	2.68	2.35	2.92	2.82	3.84	2.84	2.32	2.52	3.50	3.49	24.35	21.00	27.69	1981	2P	87
FLIGHT LEADER	2.79	2.20	1.87	2.20	3.04	4.62	3.00	2.77	2.83	2.44	3.20	10.18	5.08	15.28	1986	2P	76
BULL RUN	2.80	2.67	2.48	3.05	3.08	3.80	2.95	2.96	3.27	2.76	2.93	23.76	19.92	27.60	1983	2P	62
DEVILS DEN	2.81	2.85	2.41	2.89	2.92	5.04	2.99	3.52	2.59	2.90	2.61	24.58	14.92	34.24	1985	2P	60
B-17	2.83	2.87	3.44	3.71	2.92	2.93	2.83	2.00	3.20	3.16	3.33	8.82	3.76	13.88	1983	SO	192
SQUAD LEADER	2.84	2.11	1.69	2.06	3.64	8.05	3.68	4.27	2.55	2.88	3.00	21.37	9.72	33.03	1977+	2P	231
2nd Fleet	2.89	3.35	3.72	2.84	2.99	5.27	3.44	3.28	3.04	3.52	3.55	32.23	9.67	54.80	1986	2P	55
WOODEN SHIPS & IRON MEN	2.92	3.24	3.91	2.97	3.10	5.64	3.00	3.04	2.72	2.53	2.60	20.07	7.95	32.20	1975	2P	172
THIRD REICH	2.95	3.56	3.32	3.55	4.24	8.83	3.70	4.00	2.90	3.36	3.51	45.83	24.21	67.44	1981	MP	227
BATTLE OF THE BULGE '81	2.96	3.11	3.03	3.36	3.48	4.21	3.24	2.92	3.08	3.24	3.19	28.02	17.36	38.67	1981	2P	155
PANZER LEADER	3.12	2.79	3.52	3.00	3.48	5.63	3.72	3.32	3.11	3.20	3.82	19.47	10.28	28.65	1974	2P	210
WAR & PEACE	3.13	3.44	3.88	2.89	3.01	4.55	3.68	2.95	3.80	3.64	3.15	36.80	12.24	61.36	1980	2P	138
TITAN	3.16	2.68	1.95	3.08	2.95	3.48	2.66	2.47	2.83	1.81	4.48	29.08	21.52	36.64	1982	MP	65
Civil War	3.20	3.69	3.72	3.63	4.12	6.95	3.92	4.17	3.71	4.77	3.58	46.96	23.52	70.40	1983	2P	112
DUNE	3.21	2.48	2.52	3.19	3.08	3.29	2.93	2.88	3.04	3.84	4.28	15.84	12.32	19.36	1979+	MP	87
MAGIC REALM	3.29	2.44	1.91	2.63	2.93	8.41	4.08	4.20	3.36	3.73	3.79	20.76	11.36	30.16	1979	MP	75
Battle Hymn	3.32	3.33	3.41	3.60	3.80	5.24	4.32	3.48	3.33	4.01	3.89	21.26	14.20	28.32	1986+	SO	51
NAVAL WAR	3.35	4.20	—	4.04	3.71	1.12	3.40	1.60	2.71	2.48	6.72	6.00	3.88	8.12	1983	MP	81
STARSHIP TROOPERS	3.36	3.12	3.65	3.20	3.33	4.84	3.32	3.20	3.16	3.53	3.12	16.37	9.61	23.12	1976	2P	110
KINGMAKER	3.39	3.21	3.44	2.96	3.73	5.65	4.48	3.49	3.56	2.84	4.63	27.98	21.84	34.12	1976	MP	141
PANZERGRUPPE GUDERIAN	3.40	3.24	3.67	2.95	2.85	5.44	3.20	3.28	3.25	3.66	3.32	22.87	19.20	26.53	1984	2P	90
PATTON'S BEST	3.43	3.22	3.16	3.41	3.84	4.16	4.23	3.25	3.52	3.92	3.87	14.13	6.03	22.24	1987	SO	109
GLADIATOR	3.44	3.36	5.03	2.56	3.44	3.89	3.32	2.56	2.76	1.93	3.20	8.69	4.76	12.63	1981	2P	56
CIRCUS MAXIMUS	3.47	3.60	4.03	3.68	3.43	3.28	3.39	2.64	2.59	1.47	3.36	11.70	9.44	13.96	1980	2P	91
6th Fleet	3.48	3.04	3.73	2.97	3.24	5.64	3.73	3.88	3.44	3.57	3.64	47.67	11.24	84.09	1985	2P	59
AIR FORCE/DAUNTLESS	3.48	4.27	6.12	4.00	3.84	5.36	3.64	3.61	3.07	2.20	3.12	12.90	5.44	20.35	1980+	2P	76
ARAB-ISRAELI WARS	3.49	3.25	3.92	3.04	3.80	6.93	3.72	3.52	3.41	4.15	3.72	16.37	7.52	25.23	1977	2P	123
PANZERBLITZ	3.56	3.55	3.96	3.20	4.57	4.92	4.16	3.26	3.32	3.73	4.50	18.25	10.36	26.13	1970	2P	215
PANZERARREE AFRIKA	3.63	3.68	4.02	3.48	3.56	4.23	3.36	3.19	3.96	3.71	3.88	25.14	19.56	30.72	1981	2P	80
Pacific War	3.64	3.57	3.87	3.39	4.21	7.98	4.32	5.28	4.05	4.72	3.19	120.63	11.47	229.80	1986	2P	66
Pax Britannia	3.64	3.60	3.53	3.64	3.69	4.85	3.91	4.25	3.92	4.42	4.61	52.14	38.92	65.36	1985	MP	50
MIDWAY	3.65	4.48	5.16	4.03	3.81	2.80	3.16	2.43	3.09	3.89	4.52	21.10	16.68	25.52	1964	2P	130
DOWN WITH THE KING	3.68	3.56	—	4.01	3.45	4.88	4.28	3.85	3.63	3.89	3.89	22.82	20.04	25.60	1981	MP	52
Ambush	3.68	4.08	4.33	4.20	3.96	4.94	4.40	3.91	3.64	4.36	4.61	19.69	12.51	26.88	1983+	SO	121
FORTRESS EUROPA	3.73	3.23	3.68	3.44	3.33	5.36	3.78	3.88	3.85	3.96	3.57	42.44	30.32	54.56	1980	2P	157
AFRIKA KORPS	3.77	4.43	4.68	4.49	4.09	2.20	2.84	1.88	3.43	3.65	5.40	21.44	11.08	20.72	1964	2P	167
HITLER'S WAR	3.80	3.89	4.09	4.04	4.62	4.20	4.25	3.44	3.71	3.83	4.68	34.79	16.85	52.64	1984	2P	78
WIZARD'S QUEST	3.82	3.07	2.52	3.44	3.12	2.11	2.94	2.15	3.36	2.12	4.92	20.92	16.08	25.76	1979	MP	85
GETTYSBURG '88	3.84	3.52	3.18	3.75	3.91	1.98	3.72	3.36	3.89	3.64	4.36	9.53	6.39	12.68	1988	2P	50
Vietnam	3.89	3.35	3.28	3.29	4.22	8.60	3.83	5.26	4.22	4.44	3.75	90.86	14.56	167.16	1984	2P	80
WAR AT SEA	4.04	3.94	4.57	3.52	3.68	1.40	3.40	1.87	3.41	3.82	6.72	12.80	10.24	15.36	1976	2P	155
STELLAR CONQUEST	4.11	3.92	3.95	3.88	3.45	4.80	4.22	3.82	4.16	2.48	4.55	35.86	28.52	43.20	1984	MP	53
BLITZKRIEG	4.19	4.36	4.56	5.01	4.24	5.84	3.87	3.60	4.18	2.08	5.57	33.76	22.52	45.00	1965	2P	136
1776	4.25	3.64	2.91	4.12	3.63	5.28	3.88	3.24	4.07	3.85	4.40	26.30	12.84	39.76	1974	2P	154
D-DAY	4.32	4.73	5.52	4.51	4.36	3.56	3.45	2.91	4.25	4.03	5.08	27.16	21.64	32.68	1977	2P	125
RICHTHOFEN'S WAR	4.33	3.78	3.56	3.44	4.07	3.99	3.60	3.24	3.82	3							

THE PIECES OF ARAB-ISRAELI WARS

A Unit-by-Unit Review

By David Howery

ARAB-ISRAELI WARS is the third in the *PB* series—but it is more of a cousin than a brother. *AIW* has extensive rules additions to allow for modern weaponry (such as missiles and helicopters) and the speed of modern armored combat. It is undoubtedly the most realistic game of the series, particularly with regard to artillery and movement. And the optional rules add extra dimensions to the game; all of them should be used for the full flavor of play.

This article follows the format of its two predecessors: "The Pieces of PANZERBLITZ" by Larry McAneny (in the *Wargamer's Guide to PANZERBLITZ*) and "The Pieces of PANZER LEADER" by Robert C. Clark (Vol. 23, No. 2 of *THE GENERAL*). Uniformity is maintained. My thanks to both these gentlemen for blazing the trails.

The discussions below assume that the Advanced Rules are in use. Another rule that should be instituted is the artillery field-of-fire experimental rule introduced in *PANZER LEADER*. This rule requires that ATGs and howitzers be oriented so that the top of the counter is the front facing the field of fire. The two Arab howitzers (25 lb. and 122mm) must have a truck in their hex to change facing. Any AT/howitzer unit that changes its facing cannot fire in the same turn. This rule adds an extra touch of realism, and it has been instituted in my games.

Some general points about *AIW* to remember. H and M units that Direct Fire at non-armored units have their Attack Factor doubled. Infantry units can now Direct Fire at armored targets in the one- to two-hex range. G-class weapons can attack only armored targets. AA-class weapons can attack aircraft, but nothing else. Wrecks are placed on roads, bridges and in towns—not in empty countryside. Finally, morale levels are used to undisperse; it's not automatic anymore.

In addition to the regular units in *ARAB-ISRAELI WARS*, this article will also consider the three new units from "Lebanon" by Michael Anchors (Vol. 21, No. 6 of *THE GENERAL*): the T-72 tank, the Merkava tank, and the Gazelle helicopter.



1. Forts; Improved Positions

Forte: Defensive bonus.

Foible: Stability; you can't move them later, if you change your mind.

Threat: Channelizing. The enemy will prefer to go around rather than through.

Pals: Artillery units inside, and outside to cover the approaches. Infantry; anyone can make good use of an I.P.

Enemies: These units have no particular enemy, since they simply augment the defense of whoever is residing in them. However, forts do tend to draw concentrated Indirect Fire and airstrikes.

Fate: Survival.

Loss: Impossible.

Deployment: On roads, behind terrain lines, at artillery positions; anywhere that you want to have a unit fight from one position for several turns.

2. Blocks

Forte: Slows the enemy down considerably.

Foible: But the enemy will eventually get through them.

Threat: Channelizing. Blocks hold the enemy units for a while so you can punish them.

Pals: Engineers to create them, and artillery to plaster whoever moves onto them.

Enemies: Engineers, who can remove them.

Fate: Survival, unless they are really in his way. It's simply easier to go around them.

Loss: Shruggable.

Deployment: On roads and in open areas that are easy to spot. Don't block off your own roads that you need for moving reserves; blocks don't discriminate.

3. Mines

Forte: You don't have to calculate combat odds.

Foible: Immobility.

Threat: Channelizing.

Prey: No one will chance going through a 2:1 or 3:1 field. A 1:1 minefield might be chanced, but the mines can't kill by themselves.

Range: 0 hexes.

Execution: Dispersal forever. A 1:1 minefield has only half a chance to disperse enemies.

Pals: Artillery to cover them.

Enemies: Engineers and flail tanks.

Fate: Survival, unless your opponent decides that he needs to open a gap where your minefield is located. Even then, it takes some effort to remove it from play.

Loss: Damaging if the field was holding back a horde of enemy troops. Shruggable otherwise.

Deployment: Roads or anywhere that you want to create an obstacle. Minefields should be an integrated part of the defensive bulwark, not isolated out in the open. One of the best uses is to place them in front of a gun position, so the enemy cannot CAT or overrun the position.

4. Wrecks

Forte: Stacking effects; two wrecks block a road, four wrecks block the whole hex.

Foible: What it costs to create them.

Threat: Channelizing.

Pals: Artillery to cover the path around them.

Enemies: Battle tanks, who can move them.

Fate: If they are in the way, they'll get moved. Otherwise, no one will bother; battle tanks have other tasks to perform.

Loss: Annoying; after all, you had to go to some effort to put them there.

Deployment: You can purposefully sacrifice your armor to create wrecks where you want them. Otherwise, it is up to the gods of chance.

5. Trenches

This counter represents either an anti-tank ditch or a cut in the banks of the Suez Canal. Trenches can be bridged, but not destroyed. As an AT ditch, the defender needs to prevent enemy bridging tanks from getting next to the trench for a full turn. As a cut, trenches are necessary for amphibious units; protect them with infantry and AA.

6. Canal Bridge (Pontoon, Infantry)

Forte: They get your troops across the canal.

Foible: None really; they do the job they are designed for very well.

Threat: Pressurizing. Bridges can funnel your units across quickly.

Pals: Construction Engineers, infantry and AA.

Enemies: Massed artillery or airstrikes.

Fate: Usually will survive, since the owning player will do all he can to protect the bridges.

Loss: Shocking, could be terminal if there is no other way across.

Deployment: Very carefully. Pontoon bridges can only be placed at a cut in the canal, but infantry bridges are built in any hex without a cut. There is normally only enough time to build one in a scenario, so watch where you put it.

7. AT Ditch Bridge

Forte: Allows armor to cross the obstacle.

Foible: Again, none for its purpose.

Threat: Pressurizing. An unexpected gap is opened in the defensive lines.

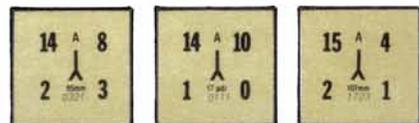
Pals: The bridgelayer, of course.

Enemies: Massed artillery and/or airstrikes.

Fate: Will probably survive and be left behind as the battle progresses.

Loss: Serious if you're not across the ditch yet.

Deployment: Usually, there's not much choice on this. Bridgelayers are vulnerable, and must go where they can stay out of enemy fire for a turn or two.



Since they can't hide or ambush, anti-tank guns have a hard time in this game system. The ATGs are all Arab, and they are facing Israeli tanks that actually can shoot farther. In addition, all ATGs are weak in defense factors. Consequently, it is difficult to deploy ATGs effectively. They don't dominate the ARAB-ISRAELI WARS as they did the battlefields of WW2.

8. Arab 85mm AT

Forte: Attack factor. And the mobility is high for an AT gun.

Foible: Range and defense factors.

Threat: Pressurizing; the light Israeli armor will stay out of range.

Prey: Transport and light armor.

Range: 1-8 hexes.

Execution: Dispersal, with a kill possible.

Pals: Trucks for transport and infantry for protection.

Enemies: Infantry and heavy tanks; the latter can shoot out the gun at a distance.

Fate: If something gets close enough to shoot, the 85mm usually dies. But the gun can use its mobility to stay away from enemy infantry. However, any armed vehicle in the countermix can easily catch it and overrun it.

Loss: Annoying. The attack factor is simply too big to shrug off.

Deployment: In fort, wood or town hexes; right next to roads if possible.

9. Arab 17 lb. AT

Forte: Attack factor.

Foible: Defense and movement factors.

Threat: Pressurizing.

Prey: Transport and armor.

Range: 1-10 hexes.

Execution: Dispersal, with a possible kill at times.

Pals: Trucks and infantry, for the same reasons.

Enemies: Infantry.

Fate: Again, if shot at, the gun will probably die.

Loss: Serious. This is one of the longer-ranged Arab A-class weapons.

Deployment: In forts or woods.

10. Arab 107mm RG

Forte: Attack and movement factors.

Foible: The abominable range renders this weapon near impotent.

Threat: Little. It is easy to stay out of range or shoot the gun as it moves closer.

Prey: Well, if any enemy armor does happen to blunder into range . . .

Range: Too little, 1-4 hexes.

Execution: Dispersal or kill, depending on the range and target.

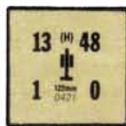
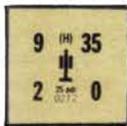
Pals: Any transport, infantry, G-class weapons and other AT guns.

Enemies: Again, battle tanks can shoot this gun down from a comfortable distance.

Fate: Death.

Loss: Annoying.

Deployment: Don't use this gun to try to protect a position. It works better as a companion to other units. For example, the gun could travel with the Sagger units to cover the "dead zone" of one to two hexes. This gun is also a handy companion for the commando units; they have the same movement and range. The gun adds a stiff lead-in punch to the commando's CAT attack.



Once again, the howitzer counters in AIW belong only to the Arab player. But each side has off-board artillery to call upon for Indirect Fire. Howitzers are the greatest traditional killers in warfare. In this game, their main victim is infantry, but armor is not entirely safe. A deficiency common to howitzers is their lack of mobility.

11. Arab 25 lbr. Howitzer

Forte: Range.

Foible: Defense factor.

Threat: Pressurizing; infantry will have to keep a wary eye out for these.

Prey: Infantry and light vehicles.

Range: 6-35 hexes, but try to stay at the long end of that for obvious reasons.

Execution: Direct Fire will probably disperse infantry; Indirect has half a chance to do so.

Pals: Spotters, infantry, trucks to move, and AA.

Enemies: Mortars and OBA, heavy armor and aircraft.

Fate: Killed if caught, but the Arab player will usually try hard to protect it.

Loss: Damaging.

Deployment: At long range; or in forts. Keep as many terrain features as you can between the gun and the main battle area.

12. Arab 122mm Howitzer

Forte: Range and attack factors.

Foible: Defense factors.

Threat: Pressurizing.

Prey: Mainly enemy infantry and light vehicles. If Optional Rule 1A is used, armor also becomes a prime target.

Range: 12-48 hexes.

Execution: Dispersal or kill on infantry; dispersal on armor.

Pals: Spotters and trucks; AA to cover them from above.

Enemies: Mortars and OBA, armor and aircraft.

Fate: Usually survival, due to distance and

protection.

Loss: Damaging.

Deployment: At very long range, in cover. Use the terrain to separate the howitzer from most threats.

13. Off-Board Artillery

Forte: Invulnerability; the enemy can't attack it.

Foible: Indirect Fire only; no targets of opportunity.

Threat: Pressurizing.

Prey: Infantry, artillery, and dispersed target.

Range: Anywhere you can spot a target.

Execution: Kill possible; dispersal likely.

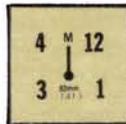
Pals: Spotters—no one else is needed.

Enemies: None.

Fate: Survival of course.

Loss: Impossible.

Deployment: Out of the player's control.



Even the smallest mortars have a bigger role in AIW than in PL or PB. Mortars are doubled in Direct Fire against unarmored targets. This makes the small ones just big enough to get a 1:1 attack on infantry. In addition to the units on the map-board, the Arab player has a 240mm mortar which is available as OBA.

14. Arab 82mm Mortar; Israeli 81mm Mortar

Forte: Range, particularly for the Israeli unit.

Foible: Defense factor.

Threat: Pressurizing.

Prey: Trucks and artillery; infantry with Direct Fire.

Range: 1-12 hexes for the Arab; out to 19 hexes for the Israeli. Try to fire at the long end of the range.

Execution: Kill trucks and weak artillery; dispersal on all others.

Pals: Forts, I.P.s, infantry. Spotters are helpful, too.

Enemies: Tanks and infantry.

Fate: Killed if caught, but that's not so easy to do.

Loss: Annoying.

Deployment: If these units can roam around a bit and do some long-range damage, turn them loose. Otherwise, keep them in the back near your artillery.

15. Arab 120mm Mortar

Forte: Range.

Foible: Defense factor and immobility.

Threat: Pressurizing.

Prey: Infantry, light vehicles.

Range: 8-23 hexes.

Execution: Dispersal.

Pals: Spotters, infantry and trucks.

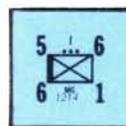
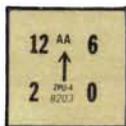
Enemies: Mortars, tanks, infantry and OBA.

Fate: Survival, since it is well in the back lines. Of course, if the Arab player meets with total disaster, the mortars are likely to be killed along with the rest.

Loss: Damaging.

Deployment: As with howitzers, in artillery positions. Keep these at long range.

Historical: This ordnance was of WW2 vintage, but was still cheap and effective. Even the Israelis used a version of this old warhorse.



Anti-aircraft weapons in the PANZERBLITZ and PANZER LEADER tend to get hijacked for duty as anti-infantry weapons. Not so in ARAB-ISRAELI

WARS; AA-class weapons can only be used against aircraft. As such, they are defenseless against ground attackers. Too bad—the Shilka would make a fine assault gun.

16. Arab ZPU-4 Anti-Aircraft

Forte: Attack factor.

Foible: Range; it's much too easy for enemy aircraft to stay out of the way.

Threat: Only to aircraft who wander too close.

Prey: Aircraft.

Range: 1-6 hexes.

Execution: Dispersal.

Pals: Infantry to guard them. Trucks to move them.

Tanks for long-range cover.

Enemies: Any ground combat units.

Fate: Picked off at long range.

Loss: Could be serious if no other AA is available and the Israeli air force is overhead.

Deployment: The ZPU-4 is weak by itself. Deploy it with other AA units in an integrated defense. Protection should be given to likely targets for the enemy: forts, bridges, etc.

17. Arab S-60 Anti-Aircraft

Forte: Range.

Foible: Defense factor.

Threat: Pressurizing. Aircraft can never be safe from the S-60.

Prey: Aircraft.

Range: 1-48 hexes.

Execution: Dispersal.

Pals: Ground units to guard them and trucks to move them.

Enemies: Anyone that can fire.

Fate: Killed if attacked, but the S-60 can often be placed out of harm's way.

Loss: Damaging if the Israelis have airstrikes left.

Deployment: Deep in friendly territory, with the long-range artillery. Keep a truck nearby.

18. Israeli 20mm AA on M3

Forte: Attack factor and mobility.

Foible: Defense and range factors.

Threat: Only to those aircraft that come too close.

Prey: Aircraft.

Range: 1-6 hexes.

Execution: At best, dispersal.

Pals: G- and A-class weapons.

Enemies: Armor; the enemy infantry can be outrun.

Fate: If there is room to run away, the gun will survive.

Loss: Serious. There are only two of these guns, and they are the only AA in the Israeli camp.

Deployment: Around likely airstrike targets.

19. Arab Shilka

Forte: Attack and movement factors.

Foible: Defense factor.

Threat: Pressurizing.

Prey: Aircraft.

Range: 1-10 hexes.

Execution: Dispersal possible on jets; can kill a UH-1.

Pals: Ground combat units to guard them.

Enemies: Armor; again, infantry can be outrun.

Fate: Survival—the Shilka will run away from danger.

Loss: Damaging, if the Israeli is still in the air.

Deployment: As with the ZPU-4, around airstrike targets.

As usual, the infantry is the core of the contending armies. Although tanks and aircraft are glamorous, and artillery hard-hitting, the infantry

are the branch that hold defensive lines together and crack open enemy lines. Armor can rarely do the job alone. Scenarios S-7, S-8 and S-9/10 show what happens when armor is committed alone. The CAT attack is deadly to armor in AIW due to the improvements in infantry AT capability. Although infantry can now even Direct Fire at armor in the one- to two-hex range, it is rarely worth the effort to do so, when the CAT is so much more effective.

20. Combat Engineers

Fort: CAT bonus. Can also build blocks and remove enemy blocks and minefields.

Foible: Attack factor is weak.

Threat: Antagonizing or mobilizing. If the engineers get close to a minefield or a block, the enemy will strike back. If accompanying other infantry, enemy troops tend to concentrate.

Prey: Anyone when CAT attacking.

Range: 1 hex.

Execution: Dispersal possible; automatic clearance of mines and blocks.

Pals: Friendly infantry.

Enemies: Artillery, airstrikes and infantry.

Fate: Destroyed in action.

Loss: Damaging.

Deployment: Stacked with infantry near the front, with access to transport.

21. Arab Commando; Israeli Machine Gun

Fort: Defense strength.

Foible: Attack factors.

Threat: Antagonizing.

Prey: Artillery and transport.

Range: 1 hex.

Execution: Dispersal.

Pals: Other infantry and friendly transport.

Enemies: Artillery and infantry.

Fate: Inevitably lost in combat.

Loss: Annoying.

Deployment: These units shouldn't be stacked with other infantry. Instead, they serve as spotters or are mounted in armored transports.

Historical: Commando units are the elite of the Arab infantry. A good optional rule would have them operate at a morale level at least one higher than the rest of the army. Otherwise, they are simply weaker infantry without any saving graces.

22. Arab Construction Engineers; Israeli Pontoon Engineers

Fort: Building infantry bridges is their only real function. Other operations take too long; who's going to play AIW for 60 turns?

Foible: These platoons are not meant to fight, and their own factors reflect this. They are much too weak on their own; and they can't use CAT or OF. **Threat:** Antagonizing; if building a bridge or spotting for artillery, the enemy will try to take them out.

Prey: None.

Range: 2 hexes, if they have anything to shoot at.

Execution: Dispersal with amazing luck.

Pals: Other infantry, artillery to cover them while they work, and transport to get them where they are needed.

Enemies: Almost everyone, but especially the enemy mortars and artillery.

Fate: Slaughtered while spotting.

Loss: Damaging if you need a bridge built.

Deployment: On the canal of course. Keep their transport nearby. After the bridge is up, spotting is the only thing left for them to do. Be careful where you place the bridge, though. There is usually only enough time to build one.

23. Infantry Companies

Fort: Defense factor, CAT ability.

Foible: Movement factor.

Threat: Mobilizing.

Prey: Infantry and anything immobile.

Range: 1 hex.

Execution: Dispersal; kill possible.

Pals: Combat engineers and transport.

Enemies: Artillery, overrunning armor, and enemy infantry.

Fate: Some will be lost; just how many will depend on the scenario.

Loss: Serious or damaging, depending on the scenario and the number that die.

Deployment: On the front line, where the fighting is hottest, with a few in reserve, loaded on transport.

24. Arab Sagger; Israeli Cobra

Fort: Attack and range factors.

Foible: G-class weapons can't harm infantry; and there are a limited number of shots.

Threat: Pressurizing.

Prey: Armor.

Range: 3-12 hexes.

Execution: Dispersal, with a kill possible. If you bunch these, a kill becomes probable.

Pals: Transport and infantry guards.

Enemies: Infantry and artillery.

Fate: The survivors run out of ammo and get blown away while spotting.

Loss: Serious if they still have ammo left. Shrugable otherwise.

Deployment: These units are excellent for both attacking along the front lines, and for defending choke points, where the enemy armor is expected to pass.

Historical: Technically, these units can only attack armor. But it would be realistic to allow G-class weapons to also attack unarmored vehicles (if the player wants to waste a shot on them). Any weapon that destroys a tank should be able to kill a truck.



These are the least glamorous units in war, but their role is vital. Infantry and artillery simply can't keep up without them. In PB/PL/AIW, however, transport is often wasted as spotters (except trucks, of course). This is unrealistic in the extreme, as battlefield commanders value their transport very highly. Out of the battle, they carry supplies and wounded, as well as troops. Note that the bulk of the amphibious units in the game are transport.

25. Truck

Fort: Movement Factor.

Foible: Defense strength and off-road penalties.

Threat: Mobilizing or pressurizing, depending on what they are carrying.

Pals: Infantry and artillery.

Enemies: Anyone with a weapon.

Fate: Killed if caught.

Loss: Serious, for it slows your development.

Deployment: Keep them for use as a shuttle service on roads.

26. Israeli M3 Halftrack

Fort: Movement factor.

Foible: Defense factor.

Threat: Pressurizing.

Prey: Trucks; can overrun infantry with luck.

Range: 1-4 hexes.

Execution: Dispersal.

Pals: Friendly infantry.

Enemies: A- and G-class weapons.

Fate: Killed while spotting.

Loss: Should be serious, but no one seems to think so.

Deployment: Near the front lines, close to their passengers.

Historical: This is another piece of WW2 vintage equipment with a good record on the modern battlefield. The Israelis made excellent use of all they had, including mounting all manner of weaponry on them (like missiles, mortars and AA guns).

27. Arab BTR 152; Arab BTR 60

Fort: Movement factor; BTR 60 can swim too!

Foible: Off-road penalties.

Threat: Pressurizing.

Prey: Enemy trucks.

Range: 1-8 hexes.

Execution: Dispersal; kill possible.

Pals: Infantry.

Enemies: A- and G-class weapons.

Fate: May be sacrificed to create wrecks or as spotters.

Loss: Mildly annoying.

Deployment: As with the trucks, try to keep them on the roads. The BTR 60 may be needed to ferry troops across the canal, so position them accordingly.

28. Arab BTR 50; Arab OT 62

Fort: Transport ability. The OT 62 has a nice AF for a transport. Both can swim.

Foible: Movement; this is slow, for transport, and both can consequently be caught by tanks.

Threat: Pressurizing.

Prey: Trucks and artillery; light armor for the OT 62. Both can overrun infantry.

Range: 1-4 hexes.

Execution: Dispersal.

Pals: Infantry of all types.

Enemies: A- and G-class weapons.

Fate: Often killed while spotting or retreating.

Loss: Serious.

Deployment: Put your less important infantry on these if you have other transport available. Both are useful for the commandos to ride; and they can use mounted fire. Both types also serve as ferry service across the canal.

29. Arab M113; Israeli M113A1

Fort: Movement, and both are amphibious.

Foible: Defense strengths.

Threat: Pressurizing.

Prey: Trucks and artillery.

Range: 1-4 hexes.

Execution: Dispersal.

Pals: Infantry.

Enemies: A- and G-class weapons.

Fate: Killed if caught.

Loss: Moderately serious.

Deployment: Put them on or near the front line, near their passengers. The Israeli player will often have enough to use some as spotters. The Jordanians never have enough to spare.

Historical: Both of these vehicles are made in the United States. The Jordanian vehicle is older, and has only one machine gun, while the Israeli unit is newer and mounts two MGs.

30. Arab BMP

Fort: Movement factor. The AF is also excellent, and the vehicle can cross the canal.

Foible: Range, which doesn't allow you to make much use of its excellent Attack factor.

Threat: Mobilizing. Things tend to get out of the way.

Prey: The BMP can overrun almost anything.

Range: 1 hex.

Execution: Dispersal or kill, depending on the target.

Pals: Infantry.

Enemies: A- and G-class weaponry.

Fate: Often shot down by enemy tanks or hit in airstrikes.

Loss: Damaging.

Deployment: On the front; don't use the BMP as a reserve. They are easily the best transport unit in the game, and have a healthy combat value in their own right.



This catch-all category—"Light Armor"—includes three miscellaneous units. Note that there are no armored cars or assault guns in AIW. But these units can serve many of the same functions as armored cars. The two jeeps in the game are the fastest ground units (the truck, BRDM-1 and BTR-60 all have the same movement factor as the jeeps, but these three unit types have off-road penalties attached.)

31. Israeli Scout Jeep

Forté: Movement.

Foible: Everything else.

Threat: Antagonizing, if the jeep is spotting. Otherwise, just an irritant.

Prey: Anything with a Defense Factor of "1".

Range: 1-4 hexes.

Execution: Dispersal is most likely.

Pals: The 106mm jeep is a nice companion, if available. If not, don't bother giving this jeep any help.

Enemies: Anyone who gets close enough to shoot.

Fate: Killed after being cornered, or picked off by a long-range shot.

Loss: Shruggable.

Deployment: This unit is best at making a nuisance of itself. It can run around in the enemy backfield, outrun the competition, take potshots at trucks and use SMF to get away. And, worst of all, spot for artillery. Thus, the Arab player is forced to try to corner it, which draws good units away from his front lines. The scout jeep is a nuisance far out of proportion to its combat value.

Historical: This jeep was widely used in the 1948, 1956 and 1967 wars, particularly in the famous parachute brigades. A photograph in the book *The Arab-Israeli Wars* (Chaim Herzog) shows an Arab village surrendering to one of these MG-armed vehicles.

32. Jeep-mounted 106 RR

Forté: Movement and attack factors. The Arab unit is the only one they have that can split-move and fire.

Foible: Range and defense factors.

Threat: Antagonizing; the enemy will usually shoot at this jeep as it closes in for a shot. After all, there's not much chance of running it down.

Prey: Transport. The Jordanian unit can be used to chase down the Israeli scout jeep.

Range: 1-4 hexes. Don't bother getting closer; the attack will be either normal or doubled, depending upon the year and the nationality.

Execution: Dispersal, even kills possible. An almost automatic kill on enemy transport.

Pals: The Israeli one can hang around with their scout jeep, if available. Otherwise, neither should have any companions. Nothing else can keep up with them anyway.

Enemies: Anyone with a weapon.

Fate: Killed, usually while moving in to take a shot.

Loss: Annoying for the Israeli; serious for the Arab. The attack values are too large for its loss to be shruggable off.

Deployment: The Israeli unit can harass the enemy transportation lines. The Jordanian unit is needed elsewhere. At Irbid (S-3) the doubled AF and SMF ability means that the jeep is dangerous to the Syrian T-34s and T-55s. At Jenin (S-5), the Jordanian is facing an uphill task, and that jeep is necessary to hold the front line.

33. Israeli Armored Infantry

Forté: Movement and attack factor; can use amphibious mode.

Foible: Defense factor; I-class weaponry.

Threat: Pressurizing.

Prey: Any unarmored target—which are to be overrun.

Range: 1-6 hexes. Massed Direct Fire at weak targets can be deadly, even at maximum range.

Execution: Good chance for a kill.

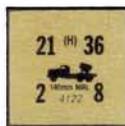
Pals: Tanks, to provide some A-class support and covering fire.

Enemies: A- and G-class weapons.

Fate: Some will be lost. If more than half are killed, you are doing something wrong.

Loss: Serious; in 1973 and later dated scenarios, the armored infantry makes up the large part of the Israeli forces.

Deployment: Armored infantry must often take the place of regular infantry for the Israeli player. However, unlike regular infantry, they must stay out of the way of tanks/missiles. Armored infantry's role is to break into the enemy backfield as well as to overrun enemy infantry positions on the front lines. These units should run in packs.



There are only two types of self-propelled artillery in AIW. With the OBA available, SPAs become much less important in play. However, the doubled Direct Fire against infantry positions should not be overlooked. It can be important in opening a gap in defensive lines.

34. Israeli 120mm Mortar on M3

Forté: Range.

Foible: Defense strength.

Threat: Pressurizing.

Prey: Infantry and artillery.

Range: 8-25 hexes.

Execution: Dispersal.

Pals: Tanks, AA and any spotters.

Enemies: Enemy armor.

Fate: Survival usually; the M3 can run from danger.

Loss: Damaging.

Deployment: Artillery positions, under cover if possible.

35. Arab 140mm Rocket Truck

Forté: Attack and range factors.

Foible: Defense factor; off-road penalties when moving.

Threat: Pressurizing.

Prey: Infantry and light vehicles.

Range: 8-36 hexes.

Execution: Direct Fire will slaughter infantry in the open. Indirect Fire will probably disperse them no matter what.

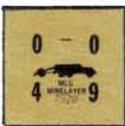
Pals: Spotters and any AA you can provide.

Enemies: Almost everyone. This unit is weak and unarmored, but a terrible threat.

Fate: Due to its range, the rocket truck is usually out of danger. Occasionally, it is surprised by roving Israeli jeeps or planes.

Loss: Shocking.

Deployment: Keep it way in the back with the howitzers. If necessary, it can move forward to pulverize some target in the enemy rear.



The engineering vehicles are defined as units which have one special function each. Losing them can be critical at the wrong time. All must be deployed with great care.

36. Arab MTU-2; Israeli M60 AVLB

Forté: Bridgelaying.

Foible: There are only two of them in any scenario.

Threat: Neutralize trenches.

Pals: Tanks for cover while the bridges are laid.

Enemies: A- and G-class weapons.

Fate: Often killed while moving forward to the trench line.

Loss: Damaging to lose one; shocking to lose both if there is no bridge down yet.

Deployment: These must stay out of enemy fire. Tanks to escort them are necessary. Pick your target to be bridged very carefully.

37. Arab PT-54 Flail; Israeli Sherman Flail

Forté: Clearing minefields.

Foible: Limited numbers available.

Threat: Neutralize mines.

Pals: Covering fire from friendly tanks and artillery.

Enemies: Whatever is covering the mines.

Fate: Depends on what is covering the minefields.

Loss: Damaging.

Deployment: Close behind the front lines, to be ready for quick use.

38. Arab GSP Ferry; Israeli Motorized Ferry

Forté: Crossing the canal.

Foible: Agonizingly slow; two full turns to ferry one unit across.

Threat: Antagonizing. There will be a slow build-up of troops on the far side of the canal. The enemy will attack before too large a force is moved over the water.

Pals: Give the ferries whatever they need for complete protection—tanks, infantry, AA, etc.

Enemies: Artillery and airstrikes.

Fate: Will survive if given heavy protection.

Loss: Shocking, could be terminal if there is no other way to get non-amphibious units over.

Deployment: Very carefully. The ferry has to go on a cut, of course, but the player usually has the choice of where to place the cuts.

39. Arab PMP

The PMP's sole purpose is to carry bridges. Think of it as a slow truck. The PMP should try to stay on roads, and must have an escort at all times. If destroyed, the Arab player will have no other way to move the bridge.

40. Arab MLG

The MLG is a minelaying vehicle. Although this sounds like a useful function, in practice the MLG will be restricted to laying minefields to protect secondary lines that you plan to retreat to, or in front of artillery positions. It is much too thinly protected to go into the front lines.



There are two distinct types of aircraft in ARAB-ISRAELI WARS—jets and helicopters. The main purpose of both is to deliver airstrikes. The targets are usually artillery positions or areas in the enemy line where you want to open a gap. Remember that airstrikes are limited in numbers; use them wisely and sparingly. Helicopters also have a secondary role in spotting or transport.

41. Arab Mi-8; Israeli UH-1.

Forté: Transport and airstrike capabilities.

Foible: Lack of firepower of their own.

Threat: Pressurizing.

Prey: Depends on the type of airstrike.

Range: G-strikes are at maximum range. Others are delivered at 0-2 hexes.

Execution: At the very least, dispersal.

Pals: Infantry to transport.

Enemies: AA guns.

Fate: Most often survive.

Loss: Damaging, both for lost transport and lost airstrikes.

Deployment: Keep them away from the long-ranged AA weapons. The UH-1 should usually use NOE movement.

42. Arab Gazelle

Fort: Airstrike.

Foible: Uselessness after airstrike; nothing to do but spot.

Threat: Pressurizing.

Prey: Armor.

Range: Maximum.

Execution: Dispersal, with a kill possible.

Pals: None.

Enemies: AA guns.

Fate: Should usually survive.

Loss: Damaging if strike not delivered.

Deployment: This unit can use NOE movement, and should do so.

Historical: The Gazelle was designed to deliver a missile attack and then run. It has no weapons of its own. As an optional rule, allow the Gazelle to leave the map, at no penalty, after delivering its strike.

43. Israeli Huey Cobra

Fort: Airstrike and intrinsic attack strength.

Foible: Range of intrinsic Attack Factor.

Threat: Pressurizing.

Prey: Armor.

Range: Depends on airstrike type; the cannons' range—six hexes.

Execution: Dispersal or kill.

Pals: None.

Enemies: AA guns.

Fate: Survival.

Loss: Shocking.

Deployment: Up front, to attack the enemy armored front line.

44. Arab/Israeli Jet Aircraft

Fort: Airstrike.

Foible: Limit on airstrikes.

Threat: Pressurizing.

Prey: Depends on type of airstrike.

Range: Maximum for G-2 strikes; 0-2 hexes for all others.

Execution: At least a dispersal.

Enemies: AA guns.

Fate: Sometimes dispersed; rarely killed.

Loss: Damaging.

Deployment: Attack either enemy artillery positions or front line troops.



In PB/PL, tank destroyers are turretless tanks. In AIW, there are some weak defense, missile-armed units in the same category. Missile units are restricted to firing at armor, but the others are also useful for attacking infantry.

45. Arab SU-100

Fort: Almost everything; a very well-balanced unit.

Foible: Range; not quite enough to trade shots with

some Israeli tanks.

Threat: Antagonizing.

Prey: Armor.

Range: 1-6 hexes.

Execution: Dispersal.

Pals: Infantry (if overrun) and armor.

Enemies: Enemy battle tanks, any G-class weapons.

Fate: Might survive, as it has a higher than average movement allowance.

Loss: Damaging.

Deployment: At the cutting point of any attack.

Historical: This is yet another WW2 survivor, which was used to good effect in the Arab-Israeli wars.

46. Arab T-34/100

Fort: Attack strength and range.

Foible: Defense factor is painfully low.

Threat: Antagonizing.

Prey: Enemy armor.

Range: 6-12 hexes.

Execution: Dispersal.

Pals: Tanks and infantry.

Enemies: Armor, of course.

Fate: Killed in battle.

Loss: Damaging.

Deployment: Due to the weak defense factor, this tank destroyer should be just behind the front lines, trying to score on long-range shots.

47. Israeli 90mm ATG on M3

Fort: Attack factor.

Foible: Range and defense values.

Threat: Antagonizing.

Prey: Armor.

Range: 1-6 hexes.

Execution: Dispersal.

Pals: Tanks and infantry.

Enemies: A- and G-class weapons.

Fate: Inevitably killed in battle.

Loss: Annoying; but the battle tanks are so much better, you hardly miss the ATG much.

Deployment: At the point of attack. Get what use you can out of it while the 90mm ATG is alive.

48. Arab BRDM-1; Israeli SS11 on M3; Israeli TOW on M113A1

Fort: Attack factors, the largest on the mapboard. The TOW and BRDM can swim.

Foible: Defense factors. G-class weapons can't harm infantry. The BRDM has severe off-road penalties.

Threat: Antagonizing.

Prey: Armor.

Range: 10-12 hexes. No use getting any closer; the odds don't improve.

Execution: Dispersal with some kills possible.

Pals: Tanks and infantry.

Enemies: Infantry, if they get too close. Armor at all times.

Fate: Can be lost in combat if cornered. Otherwise, these can usually avoid serious trouble.

Loss: Damaging and disheartening.

Deployment: Just behind the point of the attack, to use missiles at long range.



Tanks, more than any other type of unit, show why a handful of Israelis have managed to defeat hordes of enemies. Israeli tanks have several advantages, like superior attack factors, defense factors and range, doubled attack factors out to six hexes, and SMF. But the tanks are not totally dominant. Infantry CAT attacks, and G-class weapons, go a long way toward forcing the tanker to be cautious in modern war.

49. Arab PT-76; Arab T-34/85

Fort: Attack factor—not much, but it will do against the right targets. The PT-76 is amphibious.

Foible: Range and defense factors, especially the PT-76.

Threat: Antagonizing.

Prey: Transport.

Range: 1-6 hexes.

Execution: Dispersal.

Pals: Bigger tanks and Sappers.

Enemies: Even bigger tanks.

Fate: Killed in combat.

Loss: Annoying.

Deployment: Potential use as spotters or over-running enemy light units.

50. Arab T-55

Fort: Large numbers; they're weak, but they can gang up on the biggest enemy.

Foible: Range, attack and defense factors.

Threat: Antagonizing.

Prey: Usually, the T-55 is forced to take on Israeli tanks since there is no better one available to the Arabs in many scenarios. If given a choice, go for the Israeli transport.

Range: 1-8 hexes.

Execution: Dispersal.

Pals: Sappers and stronger tanks to coordinate with.

Enemies: Tanks.

Fate: Large numbers are killed. Some should survive, if only to run away.

Loss: Merely annoying until losses mount too high.

Deployment: *En masse*; if committed in small bunches, most or all will be left burning.

51. Arab T-10M

Fort: Attack factors, low but sufficient.

Foible: Everything else.

Threat: Antagonizing.

Prey: Any armor that comes into range. Enemy infantry can be overrun.

Range: 1-8 hexes.

Execution: Dispersal.

Pals: Other tanks and Sagger positions.

Enemies: Main battle tanks.

Fate: Caught and killed.

Loss: Serious.

Deployment: Due to its speed, it is usually a straggler. Infantry may be all it can catch.

52. Israeli AMX-13

Fort: Attack and range factors. Movement is better than average, too.

Foible: Defense factor is a bit too low for comfort.

Threat: Antagonizing.

Prey: Transport and any enemy tank weaker than a T-72.

Range: 1-6 hexes.

Execution: Dispersal or kill.

Pals: Infantry and other tanks.

Enemies: Any enemy tanks stronger than a T-62, Sappers, SU-100s.

Fate: A few will be lost.

Loss: Serious, especially if that's all you've got.

Deployment: On the attack. Although it is a "mere" light tank, the AMX-13 can trade shots with T-62s and is superior to anything weaker. The speed allows it to chase down transport off roads, since it doesn't incur the cross-country penalties.

53. Arab T-62

Fort: The attack value is better, but the main advantage still lies in numbers.

Foible: Range and defense factor; no improvement over the T-55.

Threat: Antagonizing.

Prey: It will have to take on tanks, since it is often the best tank the Arab player has.

Range: 1-8 hexes.

Execution: Dispersal.

Pals: Sagger and as many other tanks as can be gathered.

Enemies: Tanks.

Fate: Many are killed in battle; be prepared for some heavy losses.

Loss: Serious, as is the loss of any tank.

Deployment: Again, massed at the point of the attack.

54. Israeli Sherman Mk 50; Israeli Sherman Mk 51 and Sherman Mk 51 HV

Forte: Attack factors.

Foible: Movement and defense factors. Range, if only because the Israeli player is used to better things.

Threat: Antagonizing.

Prey: Armor, and overrunning infantry.

Range: 6-10 hexes. These tanks are weak enough that it doesn't always pay to stay at a six-hex range.

Execution: Dispersal or kill.

Pals: Faster tanks.

Enemies: Faster tanks and Sagger.

Fate: You will probably lose a few, whether on attack or defense.

Loss: Serious; damaging in the case of the 51 HV.

Deployment: At the front. The Shermans may be outrun by enemy tanks, and will have to settle for attacking infantry.

55. Arab T-72

Forte: Attack factor.

Foible: Range; still no improvement on the T-55. (What are those Russians doing with their time?)

Threat: Antagonizing.

Prey: Armor.

Range: Still 1-8 hexes.

Execution: Dispersal on enemy tanks and kills on transport.

Pals: Sagger and other tanks.

Enemies: Main battle tanks; G-class weapons.

Fate: Even the best Arab player is likely to lose a few.

Loss: Damaging.

Deployment: At the front. In Lebanon, it is the best tank the Arabs have.

Historical: NATO planners used to agonize over the capabilities of the T-72, but not any more. The Israelis reported that not only was the T-72 destructible, it even exploded violently when hit properly.

56. Arab/Israeli Centurians

Forte: Almost everything. The Jordanian counter is easily the best Arab tank available.

Foible: Movement factors.

Threat: Antagonizing.

Prey: Armor, if you can catch it.

Range: 3-6 hexes is best.

Execution: A kill on any armor; dispersal on any infantry.

Pals: Other tanks.

Enemies: Large tanks and G-class weapons.

Fate: Will survive, unless swamped by the enemy regardless of losses.

Loss: Damaging and disheartening.

Deployment: On the attack. At Irbid (S-3), the Jordanian tanks have the edge on the Syrian armor, so it must move out quickly to the attack.

Historical: The Jordanian unit is the older model, and carries a 90mm gun. The Israeli version is a newer model and mounts a 105mm main gun.

57. Israeli TI-67

Forte: Almost anything. Is easily capable of taking on any Arab armor.

Foible: Only a +1 on hull-down; a minor problem, but this fact is annoying for the Israeli.

Threat: Antagonizing.

Prey: Armor.

Range: 3-6 hexes.

Execution: Kill!

Pals: Doesn't really need many.

Enemies: Heavy armor and the ever present Sagger.

Fate: Most should survive.

Loss: Damaging.

Deployment: At the point of the attack or counter-attack.

Historical: These are T-55 and T-54 tanks that the Israelis captured and converted. Their new crews undoubtedly hated the cramped quarters after having become used to Western-built AFVs.

58. Israeli M48A5; Israeli M60A1; Israeli Patturion and Merkavah

Forte: Everything.

Foible: None, in and of themselves. Lack of infantry support is the usual problem.

Threat: Antagonizing and mobilizing. Weak units will get out of the way, while the stronger Arab units must fight back.

Prey: Anyone, especially if these tanks work in pairs.

Range: 3-6 hexes.

Execution: Armor is demolished; infantry is at least dispersed; guns are obliterated. Even helicopters must take pains to avoid them.

Pals: Infantry support is needed.

Enemies: Sagger, big A-class guns, mad Egyptian infantry in 1973.

Fate: The bulk will survive—with infantry support. Without it, destruction will come after a long and bitter struggle.

Loss: Depends on how many the Israeli has. In situations like Kunietra (S-11), each loss is damaging. At Deversoir (A-5), the Israeli has plentiful supply, and each loss is only a bit serious.

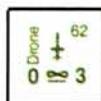
Deployment: Most should be attacking, but keep a few as a mobile reserve.

Historical: All of these units use some form of the 105mm gun. Jordan used the M48 in 1967, but with a 90mm gun. The Israelis used their antique Shermans to destroy Jordan's M48s. Lebanon was the baptism of fire for both the T-72 and the Merkavah. As mentioned earlier, it was a triumph for the Israelis.



GENERAL Variant Counters

With the second issue of the year (Vol. 25, No. 2), subscribers were treated to a half-sheet of counters (130, mounted and die-cut) intended for use with several variants appearing in *The GENERAL*. These counters included new ones for *TAC AIR, 1776, EMPIRES IN ARMS* and replacement counters for *BULGE '81* and are necessary to play the variants appearing in Vol. 25, No. 2 through Vol. 25, No. 4. These were enclosed as a bonus for subscribers only, and readers should note that issues purchased at stores do not contain these counters. Nor will this counter sheet be included when customers order back issues of Vol. 25, No. 2. The variant counter sheet may be ordered separately direct from Avalon Hill (4517 Harford Road, Baltimore, MD 21214) for \$3.00; please indicate "GENERAL Vol. 25, No. 2 Counters" on your order form. Usual shipping and handling charges apply.



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Desire ftf in Ft. Wayne area. Play most historical games. Will travel for rated opponents. My specialties are: CAE, 1776, AK, BB'81, AZ, FT, TRC and 3R. John F. Ade, 534 Meyer Ave., Ft. Wayne, IN 46807, (219) 456-2045.

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B-17 Queen of The Skies . . . PILOTS . . . Am forming pbm Air Force. For more details send large, business size SASE. Robert W. Wilson, 3202 S. 12th St., Lot 102, Marshalltown, IA 50158, (515) 753-8408.

New kid on block wishes player who will challenge me. Will play GOA, STAL, FITW. All letters answered. Try me if you dare! Jesse Severe, 105 Lincoln Street, Sheffield, IA 50475, (515) 892-4639.

KC HMGS Chapter meets monthly at Johnson County Community College. We do boardgames as well as miniatures. Also, would like to start EIA campaign game. Jeff Cornett, 4044 W. 124 Ter., Leawood, KS 66209, (913) 345-1130.

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Attn. Southern Maine! Average adult gamer looking for ASL, UF, TT or any Victory or AH game opponents. Willing to travel reasonable distance. Robert S. Gamez, RR 2, Box 1990, Lisbon Falls, ME 04252, (207) 353-9432.

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Adult seeks adult opponent for pbm, AREA rated game of WSIM, VITP, PB, PL and SL. P. Chinnery, 409 N. Rath, #3, Ludington, MI 49431.

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If you're interested in "play-by-computer" or development of public domain software supporting wargames, then pick up my message on the following BBS's: NYC PC Club, NY (212) 633-1870 8N1 BBBS, CooperWorks, WI (608) 271-3685 8N1 PCBBS. Go to the GAMES sub-conference. On DELPHI my user name is ANOTHERGUY. I hope to confirm a BBS in the west and south by the end of this year. I can also be contacted as Frank Lucas, P.O. Box 4826, Ft. Greene Sta., NY 11240.

AREA 1200 (Prov.) seeks pbm BL, ASL, ftf ASL, KM, SC. Moderate 'Blind' pbm, ASL, send \$1.00. SASE for info. Frank Stolte, 35 Lakeside Crescent, Lancaster, NY 14086, (716) 684-4303.

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I live at SW corner of loop. I play many games including ASL, BRIT, 1830 and computer games. Chris Kolenda, 10122 Oboe, Houston, TX 77025, 666-8871.

Beginning wargamer needs club or opponent in Tyler area. I play AIW, GE, PL, SL and 2R. All letters answered. Matthew Scheffran, 226 Molly Lane, Mineola, TX 75773, (214) 569-3672.

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Adult players wanted for CIV, UF, Tac Air, Kremling, GOA, AIW, RF, TT etc. Weekend ftf only. Newcomers welcomed. Ian L. Straus, 12013 Ash Rock, San Antonio, TX 78230, 699-8810.

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1914 GUAD best offer some counters missing. Many others available; plus old GENERALS. SASE for list. Quitting hobby, must sell. P.R. Scroggie, P.O. Box 1345, Medical Lake, WA 99022.

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Opponents Wanted! Interest Group Milwaukee wants you! 12-year old group looking for new blood. Regular meetings, many games including most multi-player. No Dues! Contact: Jayson Gralewicz, 1413 240th Ave., Kansasville, WI 53139, (414) 878-0618.

Cheyenne Armchair Generals meets each Sunday. Twenty members and growing. SL, TRC, EIA, CM, DIP, many others and various miniature systems. Larry Sturgeon, 3508 Amherst, Cheyenne, WY 82001, (307) 635-0512.

Pbm or ftf GOA, 3R, and TRC. Also seeking for wargamers in PR. All letters answered. Rated 1500 in AREA. Juan Jose Nolla, P.O. Box 872, Arcibo, PR 00613, (809) 879-4906.

Student seeks gaming opponents AF, SL, GI, AIW, UF, FP, GSL, 3R; amongst others owned, but will learn. Ftf preferred but will pbm your system. Andrew Henton, Rose Cottage, Horton-Com-Studley, Oxon OX91BN, ENGLAND, UK, (086735) 8854.

Exp. 3R, long time SL system player looking for mature ftf opponents. New to ASL BV, Yanks, but anxious to play. Also W&P, FT, FL, Steve Foren, St. Marhins, St. John Co., N.B. Canada E0G2Z0, (506) 833-4363.

Experienced Italian player seeks opponents (rated only) for AZ, DIP, FT, KOTA, PL. Pedrazzi Davide, Via Gallotti B., No. 106, 44100 Ferrara, Italy.

Pbm opponents wanted for PB. Also would like ftf matches, no preferences as to which games. Willing to travel within Holland or nearby Germany. Richard Geller, Van Eckstraat 47, 6814 HW Arnhem, The Netherlands, 085-456-805.

Ludwigsburg-Kornwestheim strategic games club invites you to attend our meetings on the last Saturday of every month at 1200 hours at Wilkins Rec. Center. Michael Cetta, F Co 51st, INF, Box 1049, APO NY 09279, Ludwigsburg, West Germany, 07141-57433.

Where are you GSMC wargamers? I'm ready for ftf play today in UF, FP, FT, FL, GL, WSIM and others. Experienced will gladly teach newcomers. Paul Lebowitz, Box 125, B Co 511th MI BN, APO NY 09279-0270, Stuttgart, Germany, 07141 605594.

THE QUESTION BOX

ADVANCED SQUAD LEADER

A11.52 How does Infantry capture an armed and manned, unarmored vehicle?

A. Assuming the vehicle is Stopped, the attacking unit applies a +1 Capture Attempt DRM to its CC DR (in addition to other applicable DRM). If it captures the vehicle, it may man it as per A21.22; the captured crew becomes unarmed, and a prisoner if the captor side can Guard it. (If that vehicle is not manned, it may be captured as per the second sentence of A11.52.)

A12.11 & A12.2 If a scenario OB gives a side a number of "?" counters, can the player choose $\frac{1}{2}$ -inch "?" even if the OB pictures only a $\frac{1}{2}$ -inch "?" counter?

A. Yes.

A12.152 May a unit in an A-P minefield Location conduct a Search?

A. Yes, but the presence of the minefield allows the DEFENDER to make a Casualty dr (A12.154).

A15.2 & A17.11 If an already wounded Hero fails a MC, is he eliminated or only wounded again?

A. He is eliminated.

A15.41 A 9-2, 8-1 and 4-6-7 are in the same Location, and the 8-1 becomes berserk. What happens to the other units?

A. The 9-2 must take his NTC next, using the berserk leader's -1 DRM (but not his own -2 DRM; A10.7). If the 9-2 becomes berserk, the squad then takes its NTC using his -2 DRM. If he does not become berserk, the squad still takes its NTC but is subject to the DRM of the 8-1 only.

A19.12-13 If a Finnish 8-0 leader suffers Replacement, is it replaced by a German 7-0?

A. No; it becomes disrupted.

A20.54 If a Guard and its prisoner both undergo a MC, what are the possible outcomes of Pin results?

A. A prisoner is not subject to pinning directly. However, if its Guard pins, then the prisoner automatically becomes pinned too. A non-prisoner, unarmed unit is subject to pinning in the normal manner.

A23.71 How does a Set DC (not in a bridge Location) affect an AFV?

A. It doesn't attack the AFV itself, but does attack any Vulnerable PRC in/on it. Otherwise it can affect the AFV only via Rubble.

A25.222 Is a Commissar immune to DM when attempting Self-Rally?

A. No, a leader cannot affect his own performance (A10.7).

A25.23 Can a Human Wave be declared on the basis of having a LOS only to an enemy concealed stack?

A. Yes—a concealed/Dummy stack is still an enemy "unit".

A26.21 If a Gun has been captured but is currently possessed by neither side, does it still count towards the captor's Casualty VP total during play? And as doubled VP at game end (assuming it has not been recaptured)?

A. Yes to both questions.

B13.41 When a full-tracked AFV on a woods-road moves into the woods portion of the hex, where is the partial-TB placed?

A. From the center dot to either hexside in its current VCA (or "rear" VCA if using Reverse movement).

B13.421 If a fully-tracked AFV sets up in woods, may it place a TB? If the answer is no, then if it exits that hex without changing its VCA, must it undergo a Bog DR for "exiting the woods without using a TB"?

A. No to both questions.

B23.32 & C3.71 How does the "+1 DRM for each level above" apply to a unit in a building when hit by a FFE CH?

A. These extra DRM do not apply to FFE CH resolution.

B23.9221 What is the MF cost to Place (A23.3) a DC against a Fortified Building? Does it differ if that building Location cannot be entered by the placing unit?

A. The normal two MF for building entry. No.

C1.2 & C9.3 Does guarding prisoners affect a unit's ability to act as a mortar Spotter or use a radio/field phone?

A. A Guard cannot perform these functions if his US# < the total US# of his prisoners.

C2.2401 If an AFV successfully passes a Motion Attempt dr in the enemy MPh and changes its CA (D2.401) but then becomes involved in a Gun Duel, must it use TH Case A?

A. Yes.

C10.11-12 May a unit change a Gun's CA as it unhooks that Gun?

A. Yes, and its CA may also be changed as part of the hooking-up procedure.

C10.3 If a unit successfully pushes a Gun into a new hex, may it also change the Gun's CA in the new hex? May it change the CA if it fails to push the Gun?

A. Yes. No.

D.5341 Can a Recalled vehicle attempt ESB?

A. No.

READERS BUYER'S GUIDE

The following games are ranked by their reader-generated overall Value rating. Further aspects of reader response to our titles are indicated by the ratings in other categories. By breaking down a game's ratings into these individual categories, the gamer is able to discern for himself where the title's strengths and weaknesses lie in the qualities he values highly. Readers are reminded that ratings take the form of a numerical value ranging from 1 to 9 (with "1" equalling "excellent" and "9" equalling "terrible"). However, the Game Length category is measured in multiples of ten minutes (thus, a rating of "18" equates to three hours). A "+" following the Year of release indicates that the game is continued or complemented by additional modules in successive years (for instance, the ratings for SL reflect the entire system—original game plus add-on modules). Game Type is broken down into three broad categories: SO=Solitaire; MP=Multi-Player; 2P=Two Player. Finally, it should be noted that a minimum requirement of 50 responses (see the "Sample Base") was judged necessary for a valid representation; additional titles that garner such will be added to the RBG in the future.

WARGAME RBG

Title	Overall Value	Components	Complexity	Completeness	Playability	Authenticity	Game Length	Year	Type	Sample Base
ADVANCED SL	1.80	1.77	9.25	2.11	3.44	2.04	33.02	1985+	2P	172
1830	1.85	2.00	3.88	2.72	2.04	3.20	24.52	1986	MP	50
CIVILIZATION	1.97	2.60	3.20	2.03	1.72	4.09	32.08	1982	MP	152
FLATTOP	2.00	2.47	3.61	3.12	3.56	1.76	43.96	1981	2P	95
EMPIRES IN ARMS	2.08	2.45	8.08	2.94	3.84	2.11	156.86	1986	MP	71
UP FRONT	2.11	2.24	4.36	2.83	2.38	3.56	10.16	1983+	2P	126
RUSSIAN FRONT	2.12	2.33	5.32	2.88	2.67	2.40	40.16	1985	2P	113
BRITANNIA	2.31	3.08	2.93	2.89	2.07	3.52	23.72	1987	MP	77
VITP	2.55	3.12	2.56	3.32	1.91	5.56	21.09	1977	2P	183
RUSSIAN CAMPAIGN	2.60	3.35	3.85	3.10	2.28	4.22	35.44	1976	2P	220
7th Fleet	2.62	2.77	6.47	2.96	3.04	3.16	38.01	1987	2P	50
CASSINO	2.68	2.71	4.43	2.75	2.32	2.63	23.67	1988	2P	52
DIPLOMACY	2.71	3.36	3.00	2.69	2.92	5.16	33.26	1976	MP	169
ST. NAZAIRE	2.72	2.56	4.01	3.12	2.80	2.52	18.92	1987	SO	98
FIREPOWER	2.76	3.03	6.42	3.63	3.76	2.88	15.48	1985	2P	94
STORM OVER ARNHEM	2.78	2.68	3.84	2.84	2.32	3.49	24.35	1981	2P	87
FLIGHT LEADER	2.79	2.20	4.62	3.00	2.77	3.20	10.18	1986	2P	76
BULL RUN	2.80	2.67	3.80	2.95	2.96	2.93	23.76	1983	2P	62
DEVIL'S DEN	2.81	2.85	5.04	2.99	3.52	2.61	24.58	1985	2P	60
B-17	2.83	2.87	2.93	2.83	2.00	3.33	8.82	1983	SO	192
SQUAD LEADER	2.84	2.11	8.05	3.68	4.27	3.00	21.37	1977+	2P	231
2nd Fleet	2.89	3.35	5.27	3.44	3.28	3.55	32.23	1986	2P	55
WS&M	2.92	3.24	5.64	3.00	3.04	2.60	20.07	1975	2P	172
THIRD REICH	2.95	3.56	8.83	3.70	4.00	3.51	45.83	1981	MP	227
BULGE '81	2.96	3.11	4.21	3.24	2.92	3.19	28.02	1981	2P	155
PANZER LEADER	3.12	2.79	5.63	3.72	3.32	3.82	19.47	1974	2P	210
WAR & PEACE	3.13	3.44	4.55	3.68	2.95	3.15	36.80	1980	2P	138
TITAN	3.16	2.68	3.48	2.66	2.47	4.48	29.08	1982	MP	65
Civil War	3.20	3.69	6.95	3.92	4.17	3.58	46.96	1983	2P	112
DUNE	3.21	2.48	3.29	2.93	2.88	4.28	15.84	1979+	MP	87
MAGIC REALM	3.29	2.44	8.41	4.08	4.20	3.79	20.76	1979	MP	75
Battle Hymn	3.32	3.33	5.24	4.32	3.48	3.89	21.26	1986+	SO	51
NAVAL WAR	3.35	4.20	1.12	3.40	1.60	6.72	6.00	1983	MP	81
STARSHIP TROPPERS	3.36	3.12	4.84	3.32	3.20	3.12	16.37	1976	2P	110
KINGMAKER	3.39	3.21	5.65	4.48	3.49	4.63	27.98	1976	MP	141
PG GUDERIAN	3.40	3.24	5.44	3.20	3.28	3.32	22.87	1984	2P	90
PATTON'S BEST	3.43	3.22	4.16	4.23	3.25	3.87	14.13	1987	SO	109
GLADIATOR	3.44	3.36	3.89	3.32	2.56	3.20	8.69	1981	2P	56
CIRCUS MAXIMUS	3.47	3.60	3.28	3.39	2.64	3.36	11.70	1980	2P	91
6th Fleet	3.48	3.04	5.64	3.73	3.88	3.64	47.67	1985	2P	59
AIR FORCE	3.48	4.27	5.36	3.64	3.61	3.12	12.90	1980+	2P	76
ARAB-ISRAELI WARS	3.49	3.25	6.93	3.72	3.62	3.72	16.37	1977	2P	123
PANZERBLITZ	3.56	3.55	4.92	4.16	3.26	4.50	18.25	1970	2P	215
PA AFRICA	3.63	3.68	4.23	3.36	3.19	3.88	25.14	1981	2P	80
Pacific War	3.64	3.57	7.98	4.32	5.28	3.19	120.63	1986	2P	66
Pax Britannia	3.64	3.60	4.85	3.91	4.25	4.61	52.14	1985	MP	50
MIDWAY	3.65	4.48	2.80	3.16	2.43	4.52	21.10	1964	2P	130
DWTK	3.68	3.56	4.88	4.28	3.85	3.89	22.82	1981	MP	52
Ambush	3.68	4.08	4.94	4.40	3.91	4.61	19.69	1983+	SO	121
FORTRESS EUROPA	3.73	3.23	5.36	3.78	3.88	3.57	42.44	1980	2P	157
AFRIKA KORPS	3.77	4.43	2.20	2.84	1.88	5.40	21.44	1964	2P	167
HITLER'S WAR	3.80	3.89	4.20	4.25	3.44	4.68	34.79	1984	2P	78
WIZARD'S QUEST	3.82	3.07	2.11	2.94	2.15	4.92	20.92	1979	MP	85
GETTYSBURG '88	3.84	3.52	1.98	3.72	3.36	4.36	9.53	1988	2P	50
Vietnam	3.89	3.35	8.80	3.83	5.26	3.75	90.86	1984	2P	60
WAR AT SEA	4.04	3.94	1.40	3.40	1.87	6.72	12.80	1976	2P	155
STELLAR CONQUEST	4.11	3.92	4.80	4.22	3.82	4.55	35.86	1984	MP	53
BLITZKRIEG	4.19	4.36	5.84	3.87	3.60	5.57	33.76	1965	2P	136
1776	4.25	3.64	5.28	3.88	3.24	4.40	26.30	1974	2P	154
D-DAY	4.32	4.73	3.56	3.45	2.91	5.08	27.16	1977	2P	125
RICHTHOFEN'S WAR	4.33	3.78	3.99	3.60	3.24	4.87	8.23	1983	2P	53
PANZERKRIEG	4.35	4.02	5.11	3.84	3.83	3.28	24.49	1973	2P	137
GUNS OF AUGUST	4.41	4.00	5.32	4.56	4.51	3.83	44.72	1981	2P	139
WATERLOO	4.44	4.48	2.24	3.08	2.21	5.55	17.99	1962	2P	104
Mosby's Raiders	4.53	4.55	4.63	4.36	4.42	5.13	20.85	1985	SO	60
LUFTWAFFE	4.80	4.27	4.16	4.08	3.91	5.33	20.08	1971	2P	170
Neto	4.96	4.16	6.28	5.24	4.76	4.63	33.70	1983	2P	73
TACTICS II	5.88	6.22	1.52	3.89	2.96	6.80	14.87	1961	2P	108
Gulf Strike	5.93	4.33	6.96	4.55	4.38	4.13	39.22	1983	2P	51

THUNDER AT CASSINO

The Tactical Game of the 3rd Battle for Cassino

\$25.00

The full, "new" RBG listing to the right shows the ratings garnered from the recent survey of the entire Avalon Hill/Victory Games line, while the numbers that appear below show the ratings sent in for *CASSINO* on the usual form found on the insert of Vol. 24, No. 6. Too, readers can find the entries for all categories for the game on Page 49 of this issue. Not unsurprising, the values in most of the categories do not vary greatly for the game, regardless of system; if anything, the ratings for *CASSINO* that appear in the current RBG are harsher than the ones reported below.

Regardless, both sets of numbers show the game to be a solid, challenging game—a worthy successor to the popular and innovative *STORM OVER ARNHEM*. Graced with excellent graphics, it rated high in "Playability" and was considered of moderate "Complexity". Length of playing time ranges from two to five hours, perfect for the gamers in our hobby. The shorter scenarios make for good tournament play or an evening's entertainment, while the full flavor of the "Campaign" game can be savored over the course of a winter weekend afternoon. The only disappointment for us was the low response to the survey for this game, indicating that too many have not yet

had the pleasure of sampling what is one of the best challenges on the market.

With this rating of *CASSINO*, the new RBG becomes the standard by which to judge our products. Readers who may not be familiar with the changes involved may wish to peruse the "AH Philosophy" of this issue.

Overall Value: 2.13

Components: 2.34

Map: 2.08

Counters: 2.43

Player's Aids: 2.61

Complexity: 4.34

Completeness of Rules: 2.91

Playability: 1.95

Excitement Level: 1.82

Play Balance: 2.35

Authenticity: 2.86

Game Length

Shortest: 2 hrs., 9 mins.

Longest: 5 hrs., 48 mins.

Year: 1988

Sample Base: 37

While the issue featuring *THUNDER AT CASSINO* (Vol. 24, No. 6) didn't rate as highly with the readers as other issues in the past (perhaps I was looking ahead to the Anniversary issue and did not give this one the attention it deserved), still-and-all it garnered a respectable Overall Rating (3.45). And, of course, the lead articles—along with Mr. Nixon's excellent piece on *THIRD REICH*—dominated the polling. Based on a random sampling of some 200 reader responses, the ratings for all the articles are as follows:

SERIES REPLAY	245
THE BATTLES OF CASSINO	223
AXIS SOUTHERN YEARNINGS	197
DIGGING IN	189
SQUAD LEADER CLINIC	102
BY THE BOOK	90
THEATER MODIFICATIONS	55
HOLDING HITDORF	54
AH PHILOSOPHY	30
ASSAULT ON ITALY	15

From Ken Peel (8708 First Avenue #T2, Silver Spring MD 20910) comes a copy of his first issue of *Diplomatic Contraband*. This first newsletter introduces the concept of a gaming organization for any American posted abroad at a U.S. diplomatic or consular post or parent department/agency in Washington DC. Mr. Peel has himself been a professional staff member of the House Foreign Affairs Committee for some years, and hopes to bring his love of *DIPLOMACY* to his co-workers and compatriots. At the very least, he hopes to feature PBM *DIP* games involving diplomatic personnel posted so far from home. He may also expand the concerns of *Diplomatic Contraband* to cover other games of similar ilk. Any readers who may be in service in the U.S. Foreign Service (USUN or State) that are interested in his effort, Mr. Peel asks that you please contact him directly.

The *Boardgame Challenge* is a new 'zine devoted to our brand of gaming from Edward Campisano (P.O. Box 724, Norwood, MA 02062). The first (?) issue certain indicates that it has the potential to become one of the premier efforts in amateur publishing. Besides a most interesting editorial on introducing teens to wargaming, the issue carried a number of "standard" features—"Club News", "Club Profile", a review of the latest professional "Hobby Zines", and a game review (this time, *Cold War*). According to the editor, he hopes to add other columns in the near future, such things as "Opponents Wanted", letters to the editor, convention reports, "Games for Sale/Trade". By appearances, the *Boardgame Challenge* looks to be an all-around read for all interested in our hobby. For more detailed information, readers should contact Mr. Campisano.

Infiltrator's Report

One of the most deserving winners of the new "F&M/Charles Roberts Awards) is *Volunteers*, which took the prize for Best Amateur Wargame Magazine of 1987. This 16-page "Newsletter of Civil War Gaming" is produced quarterly, and takes a loving look at Civil War games of all ilk—miniatures systems as well as board games. Interviews with designers, reviews of new books and games, new scenarios, with the occasional touch of history of the period, makes it most interesting reading for any gamer enamoured of the Civil War. The quality of the production is as high as that of the content. And there are even "classified ads" of items and opponents on the back cover. Subscriptions run \$10.00 for one year (four issues) and \$18.00 for two years. They may be had by contacting the editor, Mr. Bill Koff (146 Chimney Lane, Wilmington, NC 28403).

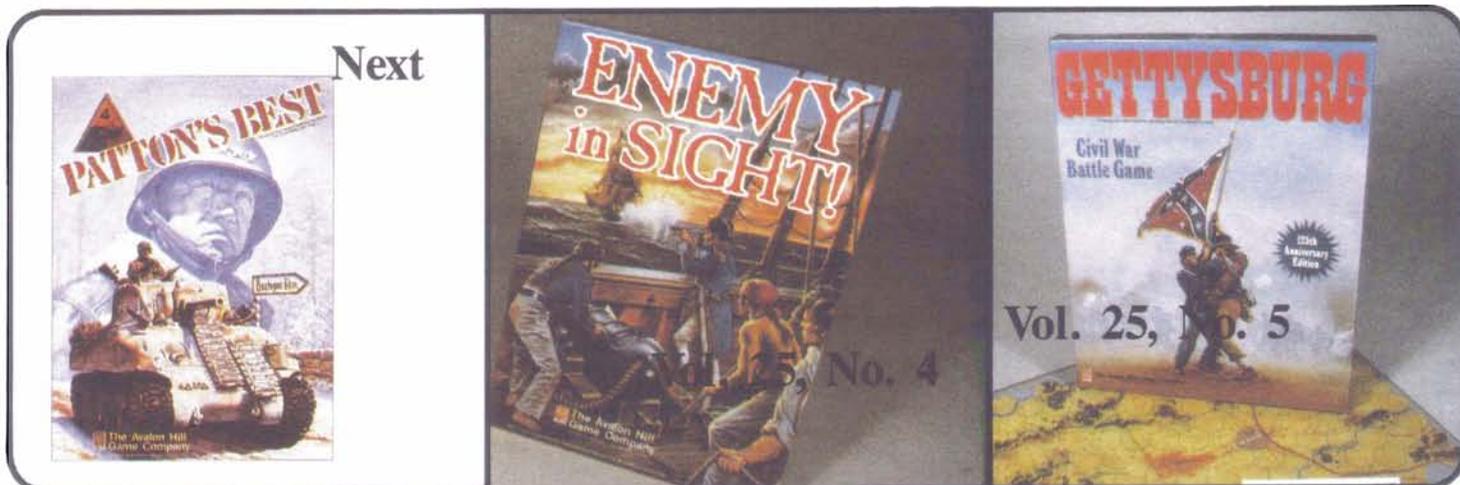
This summer past, two major *DIPLOMACY* conventions provided plenty of opportunities for skullduggery and treachery an ocean apart. First came DIP-Con, the rotating national championship held this year in San Antonio, Texas. When the dust had settled in the several rounds of play, Dan Sellers (of Chapel Hill, NC) was the new North American champion. Shortly after the festivities in Texas, the first "World DIP-Con" was held in Birmingham, England. Both individual and team play were judged. Phil Day, a Britisher, beat out 187 other players to claim the individual title. An all-British team from the "War & Peace", a popular English pub, took the team title over some 25 other teams (including one made up of an American, a Canadian, two Dutchmen, a Belgian and a Norwegian—one must wonder at what discussions of strategy amongst such an international team must have been like). Already those who finished lower than top place in the rankings are sharpening their knives for the next meetings. The 1989 national DIP-Con will be held in San Diego, California over the last weekend in July. The 1990 World DIP-Con (a biannual event) will be held in an East Coast location not yet selected.

Seems Contest #142, presenting a tricky situation in *THUNDER AT CASSINO*, was a bit too tricky. Or perhaps the simple fact is that not enough readers have yet become familiar with this challenging game system to see all the possibilities open to the players. In short, we had no winners for the contest. The key to solving this puzzle was to lay

Smoke in Area 27 with the artillery, and to use the tank to try to draw the Advantage chit from the opposing player. The actions of the various other Indian infantry, once these had occurred, were pretty obvious. However, most who responded tried to use the artillery to blow open Area 31 or 27 with brute firepower—which would not give the Allied player his highest chance of taking a VP area for the win.

In Contest 143, your best chance to save of Leonid is to play the "Visit Sanatorium" card immediately. By making him inactive, the ranking active politician becomes KGB Head Schukrutoff, and that means that Blue will be the *last* player to place his extra IP. This is vital because as Blue is already showing a pair of sights on Schukrutoff and Karrienko he must have his (undeclared) nine or ten on one or both of them. You cannot take the chance that Blue will declare his 10+ on Karrienko before you do because you haven't enough secure votes in the Politburo to stop a Spy Trial charge and vote. A hostile Defense Minister will be the end of Bungaloff, so you must declare your recorded 9IP on Karrienko plus your two new IP and go to 10+ on him.

With the Defense Minister thus secured, Bungaloff's main detriment to a safe convalescence is the KGB—who barring play of favorable Intrigue cards has a 15% chance of purging Bungaloff (30% if he's at the Sanatorium) and a 30% chance to get rid of Karrienko. Using your other Intrigue card to assassinate Schukrutoff only passes the purge power to the Ideology Minister. While you currently control Palavrian, your hold is weak and liable to fail during this Influence Declaration Phase. By attempting to assassinate Palavrian *instead* while you still control him, you can denounce Schukrutoff for the attempt with a 10% better chance of eliminating him indirectly! If the assassination and condemnation attempts both succeed, the Ideology post will be vacant—preventing any purge attempt in the coming year if Bungaloff returns from the Sanatorium or Manjak goes to it. More importantly, if the assassination attempt fails, Palavrian will be the politician automatically progressed by age to fill the KGB vacancy. If your feeble control over him holds up (a decided possibility given your two additional undeclared IP on him), you'll hold the three seats of power. This play should be made immediately following the successful play of your "Visit Sanatorium" card before someone else takes control of Palavrian. Your hold on Bungaloff himself can be assumed secure with three additional undeclared IP on him. Anyone with enough influence over him to take him away from you would almost certainly have done so before he waded twice. Thus entrenched, you can hope Bungaloff recovers sufficiently in Year 4 to wade and win in Year 5.



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In **MERCHANT OF VENUS** you play the part of such a merchant, exploring a cluster of stars to find what remains of the civilizations that once dwelt there. The map portrays a small cluster of star systems, where 14 intelligent species lie hidden in the ruins of the First Empire. Each species is the dominant culture of a different system, but after centuries of savagery, no one knows where each culture dwells. As you discover the cultures you can trade with them, buying and selling exotic trade goods and special devices. In your journeys you can also stumble across other remnants of the First Empire, including unique treasures and weapons that automatically attack passers-by.

MERCHANT OF VENUS is a game of luck and skill. You start with a small spaceship racing to accumulate wealth by transporting, trading and investing. You make money by buying trade goods from one culture and selling them to other cultures. You can use your profits to buy bigger spaceships, with high-speed drives and shields to protect you



from the dangers you will meet! As your profits increase, you can build ports and factories to make trading more profitable. As the game progresses, profits will accelerate until one merchant accumulates enough wealth to win the game. The optional rules allow you to play a darker version of the game, in which the cluster is torn with strife and warfare. These rules introduce weapons, forts, swindles, revolts, piracy and the Rastur, an army of xenophobic megalomaniacs who are trying to conquer the Galaxy.

MERCHANT OF VENUS is a design with remarkable versatility. Few, if any, games can claim to be equally exciting whether played solitaire, head-to-head or with three, four, five or six players. Not only can this game claim that distinction, **MERCHANT OF VENUS** uses it to vary the strategy dramatically as the number of participants change.

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INSTRUCTIONS:

Rate each category by placing a number ranging from 1 through 9 in the appropriate space to the right ("1" equating to excellent; "5", average; "9", terrible). EXCEPTION: Rate items 7a and 7b in terms of minutes necessary to play the game, in ten-minute increments. (Example: If you've found it takes two and a half hours to play the basic scenario of *HITLER'S WAR*, enter "15" for category 7a.) For an explanation of the categories, refer to the AH Philosophy of Vol. 24, No. 5. Enter ratings only for those categories relevant to the game in question. Note that AH's ratings for Complexity, Year of Publication and Type (2P=two player; MP=multi-player; SO=solitairs) have been provided for your information.

- 1. Overall Value _____
- 2. Components _____
- 2a. Mapboard _____
- 2b. Counters _____
- 2c. Rulebook _____
- 3. Complexity _____
- 3a. Avalon Hill Complexity 5
- 4. Completeness _____
- 5. Playability _____
- 5a. Excitement Level _____
- 5b. Play Balance _____
- 6. Authenticity _____
- 7. Game Length _____
- 7a. Shortest _____
- 7b. Longest _____
- 8. Year of Publication 1988
- 9. Type 2P

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WHAT HAVE YOU BEEN PLAYING?

Top ten lists are always in vogue—be the subject books, television, shows, movies or even games. The public seems never to tire of seeing how its favorite way of spending their leisure time stacks up against the competition. So, to cater further to your whims (and to satisfy our own curiosity), this is The GENERAL's version of the gamer's top ten. From the responses to this form the editors produce the regular column "So That's What You've Been Playing" found elsewhere in this issue.

We aren't asking you to subjectively 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 fewer) games which you've spent the most time playing since you received your last issue of The GENERAL. With the collation of these responses, we can generate a consensus list of what's being played by our readership. This list can serve both as a guide for us (for coverage in these pages) and others (convention organizers spring instantly to mind). The degree of correlation between this listing, the Best Sellers Lists, and the RBG should prove extremely interesting.

Feel free to list any game of any sort regardless of manufacturer. There will be, of course, a built-in bias to the survey since the readers all play Avalon Hill games to some extent; but it should be no more prevalent than similar projects undertaken by other periodicals with special-interest based circulation. The amount to which this bias affects the final outcome will be left to the individual's own discretion.

- 1. _____
- 2. _____
- 3. _____

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- 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.

Advanced Squad Leader—ASL, Afrika Korps—AK, Air Force—AF, Arab-Israeli Wars—AIW, Blitzkrieg—BL, Britannia—BRIT, Battle Of The Bulge—BB, Bull Run—BR, Circus Maximus—CM, Civilization—CIV, D-Day—DD, Devil's Den—DEV, Diplomacy—DIP, Empires in Arms—EIA, Enemy in Sight—EIA, Firepower—FP, Flat Top—FT, Flight Leader, FL, Fortress Europa—FE, France 40—FR, Gettysburg—GE, Gladiator—GL, Guns of August—GOA, Hitler's War—HW, Kremlin—KREM, Kingmaker—KM, Knights of the Air—KOTA, Luftwaffe—LW, Magic Realm—MR, Merchant of Venus—MOV, Midway—MD, Naval War—NW, PanzerArmee Afrika—PAA, Panzerblitz—PB, PanzerGruppe Guderian—PGG, Panzerkrieg—PK, Panzer Leader—PL, Patton's Best—PAT, Platoon—PLA, Raid on St. Nazaire—RSN, Rail Baron—RB, Richthofen's War—RW, The Russian Campaign—TRC, Russian Front—RF, Stellar Conquest—SC, Squad Leader—SL, Storm Over Arnhem—SOA, Tac Air—TA, Tactics II—TAC, Third Reich—3R, Thunder at Cassino—CASS, Titan—TT, Up Front—UF, Victory In The Pacific—VITP, War and Peace—W&P, War At Sea—WAS, Waterloo—WAT, Wooden Ships & Iron Men—WSIM.

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CONTEST 144

Indicate the starting locations of these NATO units in Scenario One of *TAC AIR* (abbreviations are as per the Series Replay on Page 13):

- 9th Engineer:
- 223rd Helicopter:
- 3/7 Air Def HQ:
- A/3/7 Air Def:
- 3/7 Supply:
- 2C HQ:
- 2C Artillery:
- 2C Art Supply:
- 2C Helicopter:
- 2C Armored:
- A/2C Cavalry:
- B/2C Cavalry:
- C/2C Cavalry:
- 2C Supply:

Issue as a whole _____ (Rate from 1 to 10, with "1" equating excellent and "10" terrible). To be valid for consideration, your contest entry must also include the three best articles, in your view:

- 1. _____
- 2. _____
- 3. _____

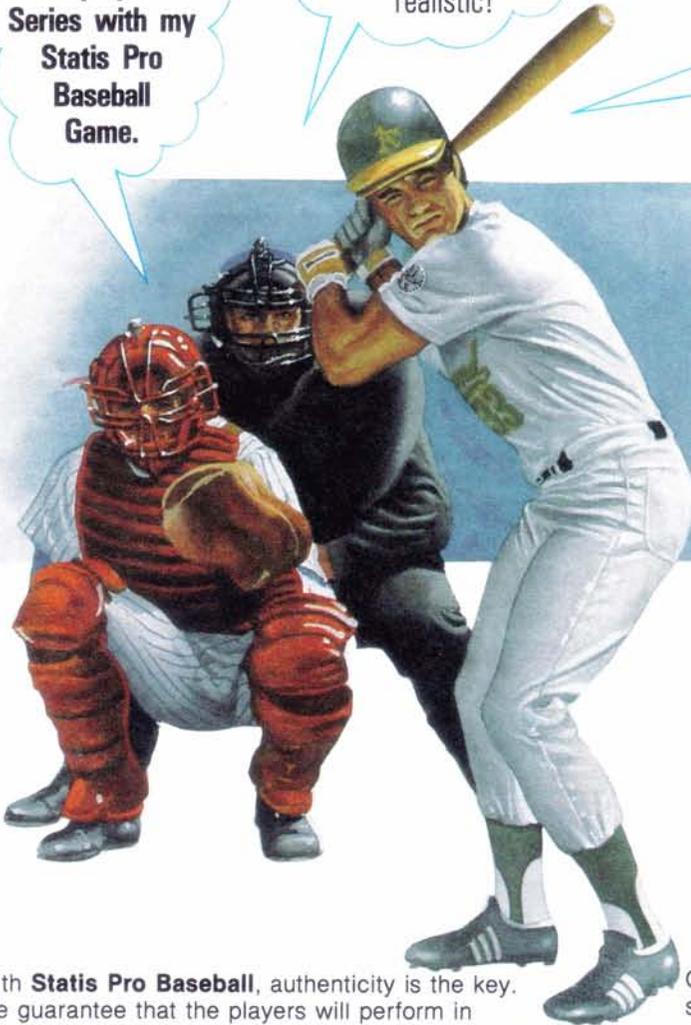
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The GENERAL

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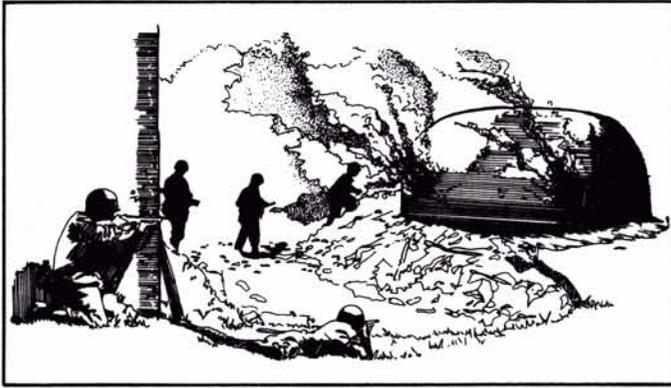
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THE CANNES STRONGPOINT

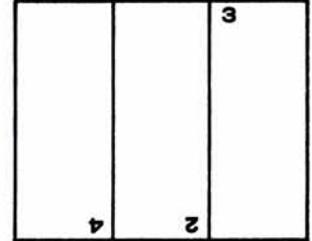


ASL Scenario K



CANNES, FRANCE, 23 August 1944: Generally the American advance through Southern France was so swift that it was rare when the Germans stayed and fought. However, the swiftness of the advance often caused German elements to be cut off and faced with the decision either to fight on in an isolated pocket or to surrender. Outside Cannes on a small hill, one such group set up a well dug-in perimeter and seemed determined to hold out. To dig them out, the Americans committed elements of the 509th Parachute Battalion, supported by heavy weapons and the guns of the 463rd Parachute Field Artillery.

BOARD CONFIGURATION:



BALANCE:

- ☆ The German player must amass ≥ 20 Casualty VP to win immediately.
- ♣ The AT gun need not be placed in a pillbox (negate SSR 3).

VICTORY CONDITIONS: The Germans win immediately when they have amassed ≥ 16 Casualty VP. Otherwise they win at game end if they have at least one east- or west-edge road hex within the LOS and normal range of a Good Order German MMC or SW/Gun that is functioning and manned by a Good Order German unit.

TURN RECORD CHART

♣ GERMAN Sets Up First	1	2	3	4	5	END
☆ AMERICAN Moves First						

Elements of Reserve Division 148 [ELR: 3] set up on Board 2: {SAN: 3}

8-3-8	4'-6-7	2-2-8	10-3	6-7	7-8	8-9	7-10	5-12	3-9	?	
2	4						2	2	2	12	90 factors

75L	2+5+7	1+5+7	3+3+5	2+3+5	1+3+5	
	2				2	18

Companies A and B, 509th Parachute Battalion, Supported [ELR: 5] set up on Board(s) 3/4: {SAN: 2}

7'-4-7	9-2	9-1	8-0	7-0	8-10	24-1	30-1	8-4	
12	3				4	2	4	3	2

75	105	20
2	2	4

SPECIAL RULES:

1. EC are Moderate, with no Wind at start.
2. The Americans receive two OBA modules: one of 80+mm battalion mortar, and one of 100+mm.
3. The German AT gun must be set up within a pillbox.

AFTERMATH: The attack was well coordinated by one company of the airborne battalion which used flamethrowers, demo charges and tank support to systematically reduce the bunkers. Casualties were heavy but not excessive. Finally, after half the bunkers had been reduced, the remaining Germans surrendered en masse, disheartened by the futility of their stand.

Final Ballot for the
Origins Awards 1988

Presented by the Academy of Adventure Gaming Arts and Design

1. **Best Historical Figure Series, 1988**
 - ___ 1200 AD Aztec Army, Ral Partha Enterprises
 - ___ Biblical Period Chariot Miniatures, Stone Mountain Miniatures, Inc.
 - ___ Blandford Warriors, Citadel Line, Games Workshop, Inc.
 - ___ Riel's Rebellion, 25mm, RAFM
2. **Best Fantasy or Science Fiction Figure Series, 1988**
 - ___ Citadel Plastic Kits, Games Workshop, Inc.
 - ___ Julie Guthrie's Fantasy Personalities, Grenadier Models, Inc.
 - ___ Renegade Legion - 25mm Circus Imperium Figures, Ral Partha Enterprises
 - ___ TSR's AD&D Series, Ral Partha Enterprises
 - ___ Warhammer 40,000, Games Workshop, Inc.
3. **Best Vehicular or Accessory Series, 1988**
 - ___ BattleTech Mechs, Ral Partha Enterprises
 - ___ Blood Bowl, Games Workshop, Inc.
 - ___ Napoleonic Villages, 15mm Hovels Line, Stone Mountain Miniatures, Inc.
 - ___ Rhino Armored Assault Vehicles of the 41st Century, Games Workshop, Inc.
 - ___ Siege Equipment, RAFM
4. **Best Miniatures Rules, 1988**
 - ___ Barbarossa/25, Command Decision, Game Designers' Workshop
 - ___ Combined Arms, Game Designers' Workshop, Inc.
 - ___ To the Sound of the Guns, Johnny Reb, Game Designers' Workshop
 - ___ Warhammer 40,000 Chapter Approved, Games Workshop, Inc.
 - ___ Warhammer Battle, 3rd Edition, Games Workshop, Inc.
5. **Best Role-Playing Rules, 1988**
 - ___ Ars Magica, Lion Rampant
 - ___ Bullwinkle and Rocky Role Playing Party Game, TSR, Inc.
 - ___ Cyberpunk, R. Talsorian Games, Inc.
 - ___ GURPS Basic Set, 3rd Edition, Steve Jackson Games Incorporated
 - ___ Space Master: The RPG, Iron Crown Enterprises, Inc.
6. **Best Role-Playing Adventure, 1988**
 - ___ Battle for the Golden Sun, Star Wars, West End Games
 - ___ Castle Greyhawk, AD&D, TSR, Inc.
 - ___ Harkwood, GURPS Fantasy, Steve Jackson Games Incorporated
 - ___ Kell Hounds, Mech Warrior, FASA Corp.
 - ___ Orion Rising, Top Secret/S.I., TSR, Inc.
 - ___ Unnigh, GURPS Space, Steve Jackson Games Incorporated
7. **Best Role-Playing Supplement, 1988**
 - ___ Cthulhu Now, Call of Cthulhu, Chaosium, Inc.
 - ___ Field Guide to Monsters, Cthulhu, Chaosium Inc.
 - ___ Freelancers, Top Secret/S.I., TSR, Inc.
 - ___ Gamer's Handbook of the Marvel Universe, Marvel Super Heroes, TSR, Inc.
 - ___ GURPS Space, GURPS, Steve Jackson Games Incorporated
 - ___ Kara-Tur Trail Map, AD&D, TSR, Inc.
8. **Best Graphic Presentation of a Role-Playing Game, Adventure or Supplement, 1988**
 - ___ Bullwinkle and Rocky Role Playing Party Game, TSR, Inc.
 - ___ Field Guide to Monsters, Cthulhu, Chaosium Inc.
 - ___ Gazeteer Series, D&D, TSR, Inc.
 - ___ Kara-Tur Trail Map, AD&D, TSR, Inc.
 - ___ Tatooine Manhunt, Star Wars, West End Games
9. **Best Pre-20th Century Boardgame, 1988**
 - ___ Enemy in Sight, The Avalon Hill Game Company
 - ___ Gettysburg, The Avalon Hill Game Company
 - ___ Grand Army of the Republic, Task Force Games
 - ___ The Horse Soldiers, S&T #119, 3W
 - ___ Indian Mutiny, S&T #121, 3W
 - ___ Lee vs. Grant, Victory Games
 - ___ Manchu, S&T #116, 3W
 - ___ Zulu War, Battleplan #7, 3W/DTI
10. **Best Boardgame Covering the Period 1900-1946 for 1988**
 - ___ Great Patriotic War, Game Designers' Workshop, Inc.
 - ___ Kremlin, The Avalon Hill Game Company
 - ___ Open Fire!, Victory Games
 - ___ Raid on St. Nazaire, The Avalon Hill Game Company
 - ___ Tokyo Express: The Guadalacanal Naval Campaign, 1942, Victory Games, Inc.
11. **Best Boardgame Covering the Period 1947-modern day for 1988**
 - ___ Chieftain, Assault, Game Designers' Workshop
 - ___ Desert Falcons, Air Superiority, Game Designers' Workshop
 - ___ The Hunt For Red October, TSR, Inc.
 - ___ Seventh Fleet, Victory Games, Inc.
 - ___ Sniper Special Forces, TSR, Inc.
 - ___ Test of Arms, First Battle, Game Designers' Workshop
12. **Best Fantasy or Science Fiction Boardgame, 1988**
 - ___ Assault on Hoth, West End Games, Inc.
 - ___ Buck Rodgers Battle for the 25th Century Game, TSR, Inc.
 - ___ Dragonlance game, TSR, Inc.
 - ___ Mertwig's Maze, TSR, Inc.
 - ___ Sky Galleons of Mars, Game Designers' Workshop, Inc.
13. **Best Graphic Presentation of a Boardgame, 1988**
 - ___ Assault on Hoth, West End Games, Inc.
 - ___ Blood Bowl, Games Workshop, Inc.
 - ___ Buck Rodgers Battle for the 25th Century Game, TSR, Inc.
 - ___ The Hunt For Red October, TSR, Inc.
 - ___ Sky Galleons of Mars, Game Designers' Workshop, Inc.
14. **Best Play-By-Mail Game, 1988**
 - ___ Continental Rails, Graaf Simulations
 - ___ Feudal Lords, Graaf Simulations/ Flying Buffalo, Inc.
 - ___ Heroic Fantasy, Flying Buffalo, Inc.
 - ___ Kings & Things, Andon Games
 - ___ Mobius I, Flying Buffalo, Inc.
 - ___ World Wide Battle Plan, Flying Buffalo, Inc.
15. **Best Fantasy or Science Fiction Computer Game, 1988**
 - ___ Bard's Tale III: The Thief of Fate, Electronic Arts
 - ___ BattleTech, Infocom
 - ___ Heroes of the lance, Strategic Simulations, Inc.
 - ___ Neuromancer, Interplay Productions
 - ___ Pool of Radiance, Strategic Simulations, Inc.
16. **Best Military or Strategy Computer Game, 1988**
 - ___ Battlehawks 1942, Lucas Films
 - ___ Battles of Napoleon, Strategic Simulations, Inc.
 - ___ Decisive Battles of the American Civil War, Volumes 2 & 3, Strategic Studies Group, LTD.
 - ___ F-19 Stealth Fighter, Microprose, Software, Inc.
 - ___ Red Storm Rising, Microprose Software, Inc.
 - ___ Universal Military Simulator, Firebird
17. **Best Screen Graphics in a Home Computer Game, 1988**
 - ___ Battlehawks 1942, Lucas Films
 - ___ BattleTech, Infocom
 - ___ F-19 Stealth Fighter, Microprose, Software, Inc.
 - ___ Heroes of the lance, Strategic Simulations, Inc.
 - ___ Pool of Radiance, Strategic Simulations, Inc.
18. **Best Professional Adventure Gaming Magazine, 1988**
 - ___ Challenge, Game Designers' Workshop, Inc.
 - ___ Dungeon Magazine, TSR, Inc.
 - ___ Gateways, Jaf Publications
 - ___ Polyhedron, TSR, Inc.
 - ___ Strategy & Tactics, 3W
19. **Best Amateur Adventure Gaming Magazine, 1988**
 - ___ ETO, Bill Stone
 - ___ Midwest Wargamer's Association Newsletter, Hal Thinglum
 - ___ Savage & Soldier, Lynn Bodin
 - ___ Sorcerer's Scroll, Tori Berquist
 - ___ Volunteers, The Newsletter of Civil War Gaming

Signature: _____

Address: _____

These are the final nominees for the Origins Awards for 1988. Vote for only one nominee per category by checking or marking the line preceding your choice. Fill in your address and sign your ballot. Mail the completed ballot to: Origins Awards, 950-A 56th ST., Oakland, CA 94608.

The deadline for return of the ballot is June 10, 1989. Ballots post-marked after the deadline will not be counted. The Origins Awards will be presented at Origins '89 in Los Angeles, June 28-July 2, 1989. The awards ceremony will be Saturday, July 1st at 8pm. Members of the Academy of Adventure Gaming Arts and Design will receive a final ballot in the mail. If you have any questions concerning the ballot or the Academy, please write: Origins Awards, 950-A 56th ST., Oakland, CA 94608.

The General

Volume 25 Number 2

Front

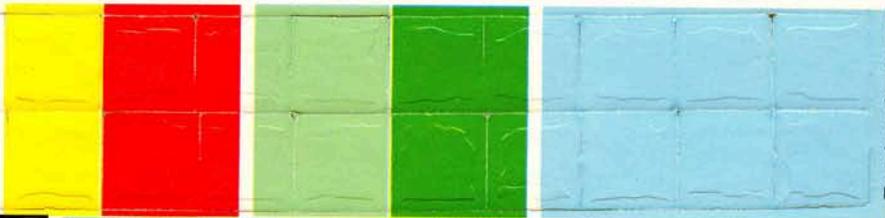
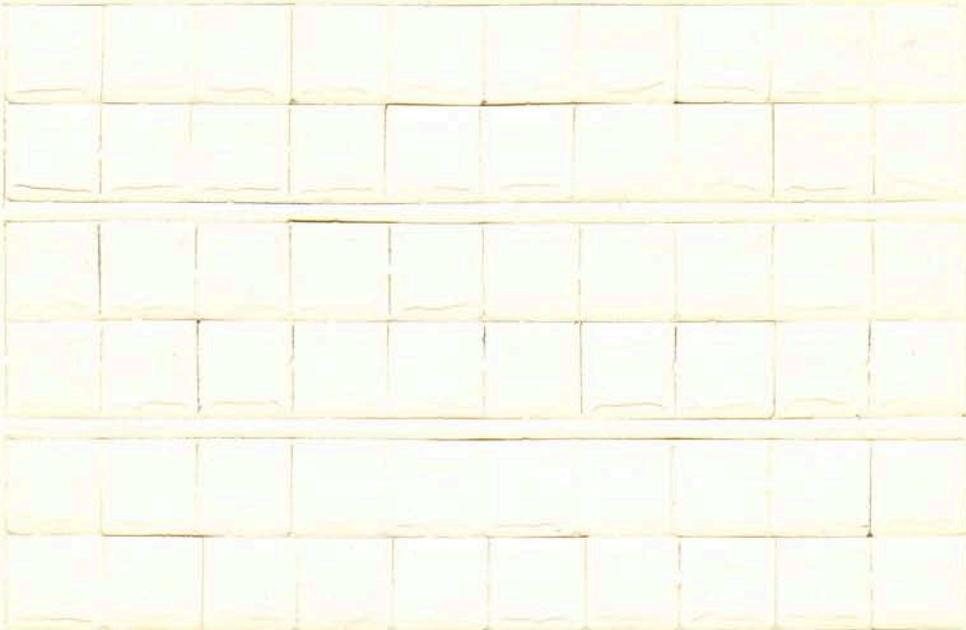
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Bulge '81

Empires in Arms

TAC AIR

Hows ★★ 1-0-10	H. Clinton ★★ 2-1-10	Cornwallis ★★ 3-1-10	Burgoyne ★★ 4-0-10	Leslie ★★ 5-1-10	Grey ★★ 6-1-10	Prevost ★★ 7-1-10	Carleton ★ 1-2-10	Frazier ★ 2-1-10	Phillips ★ 3-1-10
B. Clinton ★ 4-1-10	vonRedest ★ 5-1-10	Knyphazen ★ 6-1-10	von Heister ★ 7-1-10	Rall ★ 8-1-10	Tarleton ★ 9-2-10	Rowdon ★ 10-2-10	Leader A ★ 0-0-10	Leader B ★ 0-0-10	Leader C ★ 0-0-10
Leader D ★ 0-0-10	Arnold ★ 11-1-10	Arnold ★ 2-2-10	Washington ★★ 1-1-10	Lee ★★ 2-0-10	Gates ★★ 3-0-10	Green ★★ 4-2-10	Lincoln ★★ 5-1-10	Leader A ★ 0-0-10	Leader B ★ 0-0-10
D'Estrang ★★ 1-1-10	Rchambeau ★★ 2-1-10	Leader A ★ 0-0-10	Sullivan ★ 1-1-10	de Lafayette ★ 3-2-10	Sterling ★ 4-1-10	Wayne ★ 5-2-10	Montgomery ★ 6-1-10	Morgan ★ 7-2-10	Schuyler ★ 8-0-10
6 III 2 III 23 6-4	A III 1 III 16 6-4	XII III 1 III 404 4-2-4	9A III 3 III 9 7-4	E III 2 III 9 9-4	7 III 9 III 33 8-4	4-2 402	5-3 410	4-2 388	4-2 408
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MOREAU 4.4.4C	BONAPRTE 5.5.3C	BONAPRTE 5.5.4.B	SUVAROV 4.5.4.B	ACHMED PASHA 2.3.2.B	YORK 2.2.2.A	DE LA HAYEN 2.2.3.A	WURMER 1.3.2.B		
HOICHE 4.5.3C	DUMDRIEZ 3.3.3.B	PCHEGRU 3.4.3C	FERSEN 2.3.2.C		BRCHWBY 3.4.2.B	RUBY 1.2.2.B	MEAS 2.3.3.D		
10F4ICE 33 3 3	10F4ICE 34 3 3	10F4ICE 35 3 3	4 0/2(10)	IRCHA 3-2(8)	RCD 6-5	4 3-4	IRCHA 0:1(6)		
10F4ICE 36 3 3	Torn 43 1 4	Torn 44 1 4			2PP 3-4	1/22 3-4	4 0:1(6)		
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Empires in Arms

4 0/1 (6)	4 2/5	4 0/2	4 0/2(20)			
4 0/1 (6)	4 2/5	4 2/5				



TAC AIR