

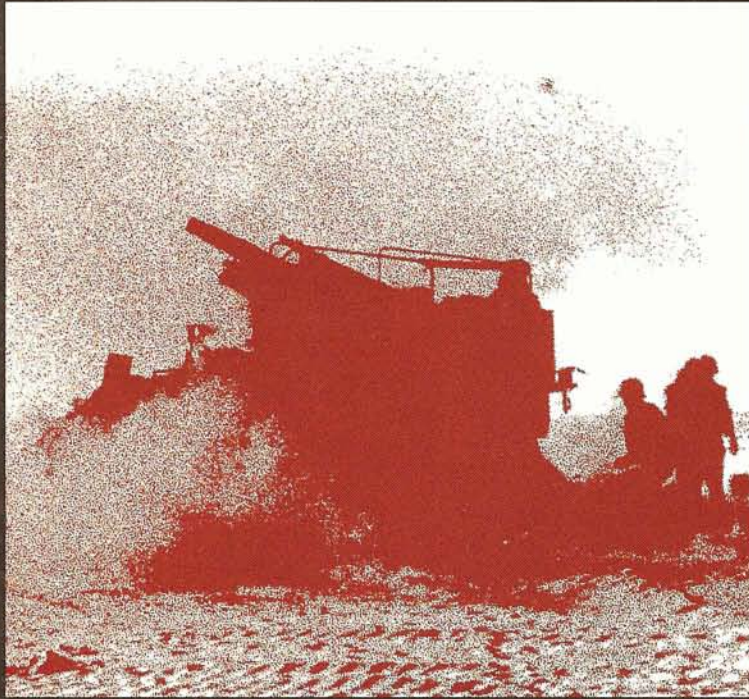
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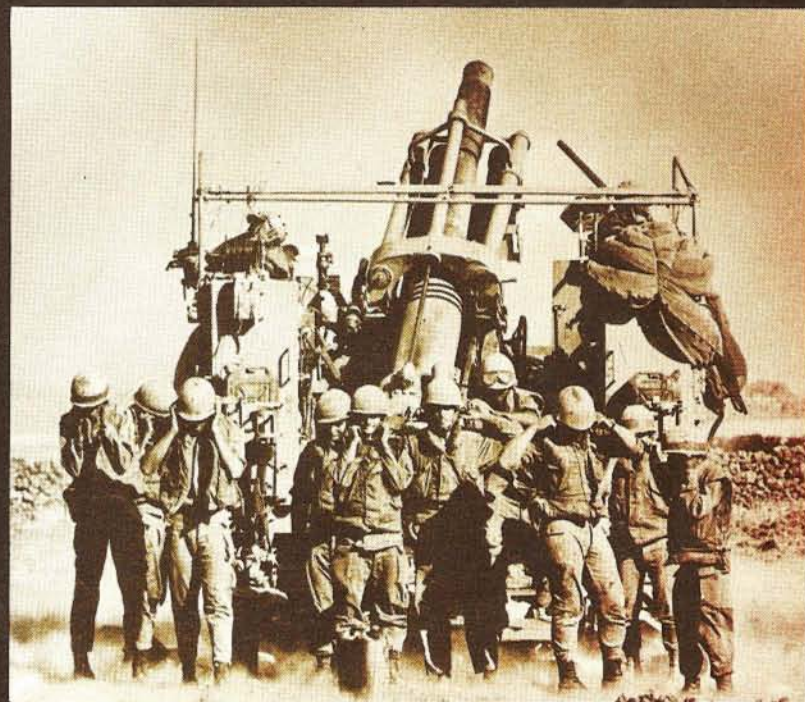
The AVALON HILL
GENERAL

September—October 1977

Volume 14, Number 3



**THE
ARAB-
ISRAELI
WARS**



Avalon Hill Philosophy Part 63

The AVALON HILL GENERAL The Game Players Magazine

The Avalon Hill GENERAL is dedicated to the presentation of authoritative articles on the strategy, tactics, and variation of Avalon Hill games of strategy. Historical articles are included only inasmuch as they provide useful background information on current Avalon Hill titles. THE GENERAL is published by the Avalon Hill Company solely for the cultural edification of the serious game aficionado; in the hopes of improving the game owner's proficiency of play and providing services not otherwise available to the Avalon Hill game buff.

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Our apologies for the extreme lateness of the last issue. The availability of our new four color press which enabled us to go into a four color format in the first place was also the major villain behind the delay of the August issue. It takes awhile to get accustomed to any new press and this one proved no exception, resulting in a 3 week delay in getting the magazine out. We'll redouble our efforts to get back on schedule with this and following issues.

Progress often is accompanied by minor inconveniences for a few. In this case, it has brought about the technical end of a 14 year tradition for the GENERAL . . . that of the free opponents wanted ad. The combination of increasing circulation and inclusion of the wanted ad form on an insert rather than as a part of the magazine itself has resulted in a response bigger than our poor backcover can handle. To reduce the amount of trivial adverts submitted by those who do so just to use the form, rather than due to any real need, we are immediately implementing a token charge for the service. Henceforth, no opponents wanted ad will be accepted unless accompanied by a 25¢ token fee. For sale, trade, or wanted to buy ads will cost \$1.00. The money is, of course, secondary to the primary purpose of weeding out insincere ads. The cost to typeset these messages is far more than any mere quarter can begin to offset. As before, we retain the right to edit or discard inappropriate ads. Ad purchases will not be subject to refund.

We have more or less finalized our publishing schedule for the coming year. The titles below should round out our offerings up to and including ORIGINS IV. All the titles discussed below are scheduled for release next July.

The BISMARCK project, after a stormy course, is finally sailing towards completion under the guidance of that inveterate globetrotting political analyst Jack Greene. BISMARCK is really three games in one, covering the breakout and pursuit of the German battleship Bismarck and heavy cruiser Prinz Eugen in May of 1941. Originally published in the early 1960's, this is an intensive redesign of the same game. The basic version is the original game with some additional scenarios, air rules, changed order of appearance, and other refinements. Played with a screen separating two identical search boards, it should take anywhere from 30-90 minutes to play and is an ideal "Beer & Pretzels" game, with the added advantage that it should be quite good at introducing a new player to the Hobby as well.

The Intermediate Game is an upgned version of the Basic Game with a wider scope for tactical play, ammunition, off board movement, Ultra, additional air rules, weather effects, and more. Two players (or three if one plays with the De Gaulle Free French scenario) should have a great deal of enjoyment as well as getting a feel for operations in the North Atlantic.

The Advanced Game goes all the way with rules for shadowing (as well as breaking shadowing contacts), accurate movement rates, increased daylight in the northern latitudes, destroyers, fuel, submarines, and the chance to repair battle damage at sea. Going hand in hand with this is an Advanced Tactical Game played on any 3' x 3' playing surface a la JUTLAND.

Rules cover damage to the Main Fire Control Director, Plot, Rudder, turrets, superstructure, hull, secondary, as well as rules for angle of shot, range, armor penetration (broken into 2" increments), and much more. BISMARCK will allow one to pit many might have been against each other including the TIRPITZ, GRAF ZEPPELIN, SCHEER, NORTH CAROLINA, DUNKERQUE, etc.

BISMARCK will be developed by the capable Mick Uhl and should be ready for ORIGINS '78. Those who are familiar with Jack's reviews of other people's games may be assured that he promises BISMARCK will be accurate in its history (British authorities Andrew Smith and Nathan Okun have contributed greatly to the historical research), and well playtested. The Basic Game has been playtested on four continents! It has been purposely designed to be as flexible as possible so as to allow the player to select the type game he wants to play. What's more important the victims of Jack's prior reviews may now smack their collective lips and check their ink supply in anticipation of sweet revenge.

TRIEMER will be a tactical level game of naval war in ancient times, when the Mediterranean Sea was the center of the known world. The players control individual multi-hex galleys and triremes, maneuvering them as they sail and row into position, then ram and melee to win the naval battles that determined the fate of civilizations.

Individual triremes and galleys are represented in detail, with each section of each multi-hex counter loaded down with the proper soldier groups, archers and war engines. Combat is a matter of maneuvering and ramming in the midst of vast floating melees, with archers and special engines adding complications.

Each player can handle up to ten vessels easily, but the game system is simple enough so that players can add more if they wish. With a few vessels the players can accurately re-enact sections of the great naval battles between Persia, Greece, Rome, Carthage and others—or they can combine games to recreate whole battles with hundreds of triremes. TRIEMER, designed by Richard Hamblen, will be exciting either as a two-player, solitaire, or multi-player game in much the same mold as WOODEN SHIPS & IRON MEN.

TALES OF THE OLD WEST is a role playing board game of life and conflict in a typical town of the American frontier. For players who like a straight and simple show down, there are fast and clean rules for gun battles, knife fights, and even bar room brawls. But the flavor and code of the old west is also captured as the various drifters, townsfolk, farmers, and troublemakers move through the dusty streets, each with his own purposes, ambitions, and grudges.

The players can "be" any of the tough characters of the old west, and the game's isomorphic boards can be rearranged to form any kind of settlement, from an isolated camp to a staid, sedate town.

Continued on Pg. 32, Col. 1

THE ARAB-ISRAELI WARS ARMIES IN CONFLICT

TO&E: Anatomy of a War

By Seth Carus

Organization

Accurate organizational information for the armies of the Middle East is difficult to obtain. Security restrictions prevent official sources from providing information and journalistic accounts are usually inaccurate and misleading. Only the analysis of battles consistently provides accurate information on the organization of the combatants. This analysis requires a detail and precision rarely found in either official or journalistic accounts. Even when it is possible to discern an organizational pattern, the relatively small size of the armies involved insures the existence of numerous modifications of "normal" tables of organization. While the data provided is as accurate as possible, 'educated guesses' were often made, which may or may not be correct.

Israel

1956: At this early date, virtually all field units were infantry formations. Of the 15 brigades mobilized during the Sinai Campaign, eleven were infantry brigades. Of the other units, one was a paratroop unit and the remaining three were armored brigades. The predominance of infantry units was a result of doctrinal circumstance. Israel's top military leaders were all infantry officers, with little idea of the utilization and effectiveness of tanks. Nor was it easy to obtain armored equipment; all tanks and halftracks had to be bought from abroad. With limited financial resources, Israel usually could only afford surplus World War Two equipment. Even this was often difficult to obtain: all the parties to the 1948 war were subject to an arms embargo imposed by the major arms suppliers. Only after French officials agreed to aid Israel was it possible for them to obtain sizeable numbers of tanks; French *AMX-13s* and war-surplus *Shermans*. Starting in 1954, this permitted Israel to expand the number of armored brigades from one to three.

Each infantry brigade was organized into three infantry battalions, a scout company, and headquarters and support units. Every infantry brigade

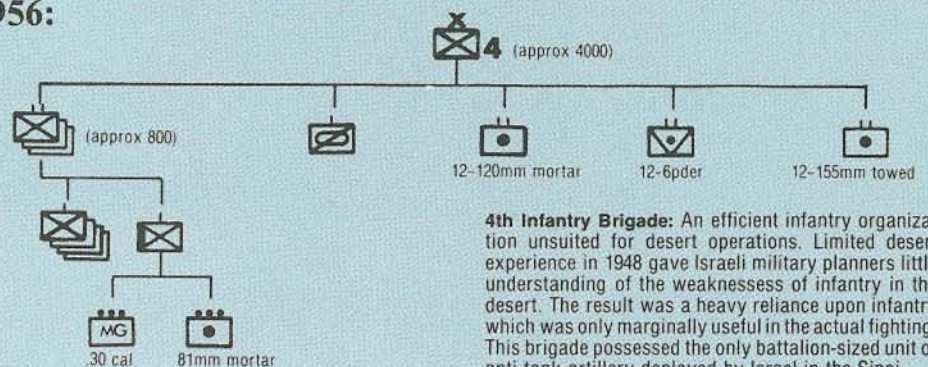
also had one or more additional combat units attached. All possessed at least one artillery battalion (always with 120mm mortars), possibly supported by field artillery battalions equipped with British 25 pounders or French 155mm howitzers. Attached to the five infantry brigades deployed in the Sinai were tank companies, additional infantry battalions detached from other brigades, engineer battalions, an anti-tank unit, and several companies of NAHAL. The NAHAL are special troops manning strategically sited settlements in peacetime that act as elite infantry or scouts in wartime.

None of the armored brigades had exactly the same organization. Basically, two different formations were used: The 7th Armored Brigade had two armored battalions (one with *Shermans*, the other with *AMX-13s*), two infantry battalions (one mounted in halftracks, the other in trucks), a field artillery battalion, as well as headquarters and support units. The 37th Brigade was similarly organized, except that it only had a company of thirteen *AMX-13s*, not a battalion. In contrast, the 27th Brigade had only four armored companies, organized into three "armored battalion combat teams" and a battalion of motorized infantry. The "armored battalion combat teams" were composed of a tank company, a company of halftrack-mounted infantry, a reconnaissance unit

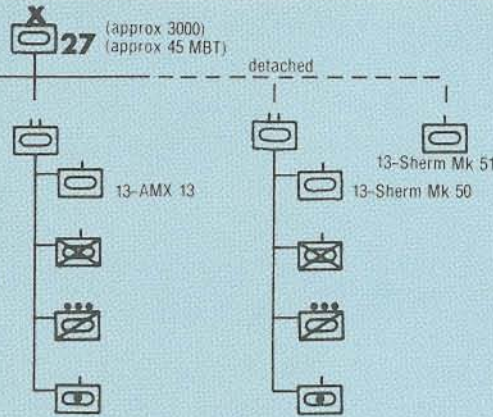
mounted on jeeps, engineers, and a unit of self-propelled artillery. The brigade's four armored companies (with only about 50 tanks) used tanks of three different types (*AMX-13s*, *Sherman Mk. 50s*, and *Sherman Mk. 51s*). Before entering combat in the 1956 war, the brigade was severely weakened by the loss of half its tanks: one "armored battalion combat team" (with *Sherman Mk. 50s*) and a *Sherman Mk. 51* company were attached to other brigades. Thus this "armored" brigade went into combat with only 25-30 tanks. While the "armored battalion combat teams" constituted well-balance combined arms units, with armor, infantry, and artillery, they possessed limited combat capabilities. With an effective strength of only two companies, they were so weak that the brigade's sole infantry battalion was responsible for its success. The armored units were able to accomplish little. Only in the pursuit that followed the heavy fighting around Rafa did they make a major contribution. With only limited combat power, the organization of these "armored battalion combat teams" was too complex for the inexperienced Israeli commanders.

In the field, differences between the organization of the 7th and 27th Brigades were not as great as it might appear from the above discussion. Before entering combat, the commander of the 7th Brigade reorganized his battalions into three

1956:

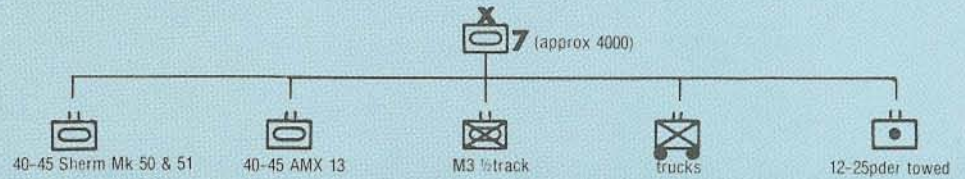


1956:



27th Armored Brigade: An abortive attempt at creating balanced combined arms teams at the battalion level. Each of the brigade's "armored battalion combat teams" was a self-contained unit with tanks, mechanized infantry, scouts, and artillery. With only two combat companies, the teams were slightly weaker than normal battalions. With the same number of mechanized infantry and motorized infantry companies as in the stronger 7th Armored Brigade, the 27th had only four companies of tanks—two less than in the 7th Brigade. Diversion of one of the "armored battalion combat teams" and the extra *Sherman* company before the start of hostilities cut the number of tanks in half, effectively reducing this armored brigade to a motorized infantry unit.

7th Armored Brigade: Largely responsible for Israel's success in the Sinai. Prior to entering combat the brigade's tank and armored infantry battalions were reorganized into three combat teams, each with two tank companies and an armored infantry company. These teams, with twice the number of tanks in the 27th Brigade's teams, proved highly successful.



combat teams, each with two tank companies and one infantry company. The major difference here was that the combat teams were field expedients organized or reorganized to meet temporary battlefield conditions. This flexibility set a pattern that has been followed ever since.

The single paratroop brigade of 1956 (the 202nd Brigade) was organized much like the infantry units. Attached to it were two companies of NAHAL, an *AMX-13* company (of 13 tanks), and several battalions of artillery.



1967: The composition of the army changed radically in the decade following the Sinai Campaign. The number of brigades was increased to twenty-one: nine armored, three mechanized, three paratroop, and six infantry. The increase in armored/mechanized brigades was partly accomplished by the conversion of existing infantry brigades. The 10th Brigade ("Harel"), an infantry brigade in 1956, was mechanized in 1967. This conversion was accomplished by replacing one of its infantry battalions with a tank battalion. This tank battalion was equivalent in strength to two normal tank battalions, indicating that eventually the brigade was intended to have two tank battalions. A number of the additional tank brigades and all the paratroop brigades were new units, formed after 1956. (The 202nd Paratroop Brigade was apparently broken up to create cadre for the formation of the new paratroop brigades).

The organization of infantry and paratroop forces differed little from 1956. The 55th Paratroop Brigade is probably typical of such units. Its three battalions were each organized into three rifle companies, a support company, and a headquarters unit. The support company possessed a platoon with 81mm mortars, and at least one more platoon with medium machine-guns. The brigade also had a strong scout company provided with mechanized equipment.

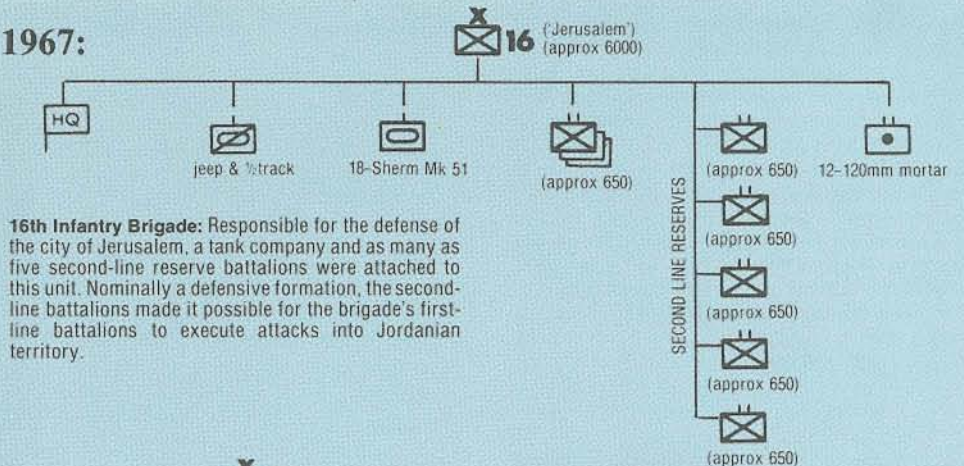
The infantry brigades were supported by tank companies as in the case of the 16th ("Jerusalem") Infantry Brigade which had a company of 18 *Sherman Mk. 51s*. Reportedly, all the infantry brigades were provided with similar armored units.

The typical armored brigade, similar to the 1956 organization of the 7th Brigade, was organized into two tank battalions (each with 36 tanks), a mechanized infantry battalion, a mortar battalion (a dozen 120mm mortars mounted on halftracks), a scout company (mounted on jeeps and halftracks), and (possibly) an engineer company. Little effort was made to ensure that both tank battalions were provided the same type of tanks. The benefits of providing tanks with differing capabilities were felt to offset logistical problems. One brigade had *Sherman Mk. 51HV*s and *AMX-13s*, another had *Centurions* and *Pattons*, yet a third had *Centurions* and *Shermans*. The four brigades with only one type of tank were equipped with *Centurions* or *Shermans*.

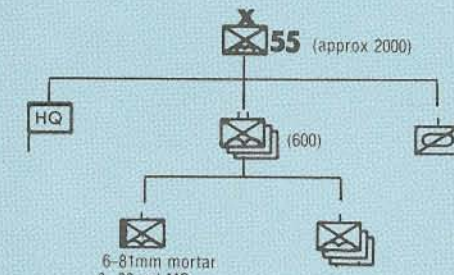
The mechanized brigades were transitional units, converted from infantry into armor. As such they seem to have had no standard organization. The 10th Brigade ("Harel") is the only mechanized unit about which much is known. Its single tank battalion possessed about 70 tanks, organized into five tank companies: four with *Shermans* (each with 14 tanks) and one with *Centurions* (with a dozen tanks). The remainder of its forces comprised two halftrack-mounted infantry battalions, a scout company (with *AML-90* armored cars), an engineer unit, and probably a 120mm mortar battalion.

The other two mechanized brigades were considerably different. One, deployed along the

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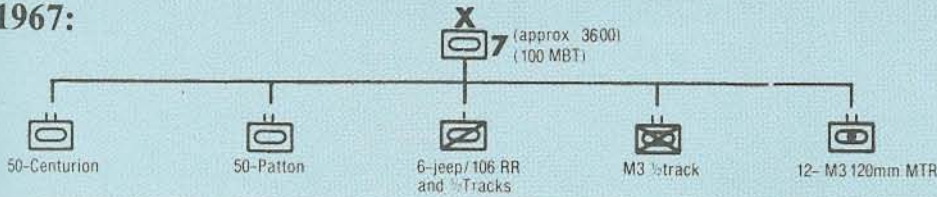


16th Infantry Brigade: Responsible for the defense of the city of Jerusalem, a tank company and as many as five second-line reserve battalions were attached to this unit. Nominally a defensive formation, the second-line battalions made it possible for the brigade's first-line battalions to execute attacks into Jordanian territory.



55th Paratroop Brigade: Responsible in large part for the capture of Jerusalem. This unit was slated for a paratroop drop onto El-Arish, but the rapid advance of the 7th Brigade made it unnecessary. With the increase in tensions along the Jordanian border, it was transferred to Jerusalem. There it participated in some of the most intense fighting of the war. The paratroops, while air-transportable, are basically elite infantry, capable of fighting in virtually any situation.

1967:



7th Armored Brigade: This was the only armored brigade that was always maintained at full-strength (the others were reserve units mobilized when needed). For this reason, it was stronger than the other brigades, with a total of about 100 tanks. Probably the most effective unit then in the Middle East, the 7th Brigade was largely responsible for the destruction of the Egyptian 7th Infantry Division within 24 hours after the start of hostilities, and was still able to spearhead the subsequent advance to the Suez Canal.

Gaza Strip, had an *AMX-13* battalion. Many of its halftracks, however, were taken away and given to paratroop units, converting it into an infantry unit. The third mechanized unit was deployed in the north, and was formed just prior to the 1967 war.



1973: The size of Israeli ground forces increased only marginally after 1967. In 1973, 24 brigades were mobilized, only slightly greater than the 21 mobilized in 1967. The porportion of armored units, however, increased significantly. All but four of the brigades mobilized in 1973 were armored. The non-armored brigades included three paratroop brigades and one infantry brigade (the 1st "Golani" Brigade). A variety of different considerations led to this increased reliance on armor. Armored units possess much greater combat power in the desert than comparably-sized infantry units. They also expose fewer soldiers to enemy fire, thus suffering fewer casualties. Finally, Israeli superiority over Arab forces was greatest in tank forces, so naturally they were stressed.

Organizations in 1973 differed little from 1967. Those changes that were made generally represented relatively small evolutionary developments of existing structures. The most important of the changes was the creation of combat divisions. Prior to 1973, brigades were grouped for specific operations during each war on a temporary basis. In 1956, two "Brigade Groups" were formed in the Sinai. They possessed limited authority, with the

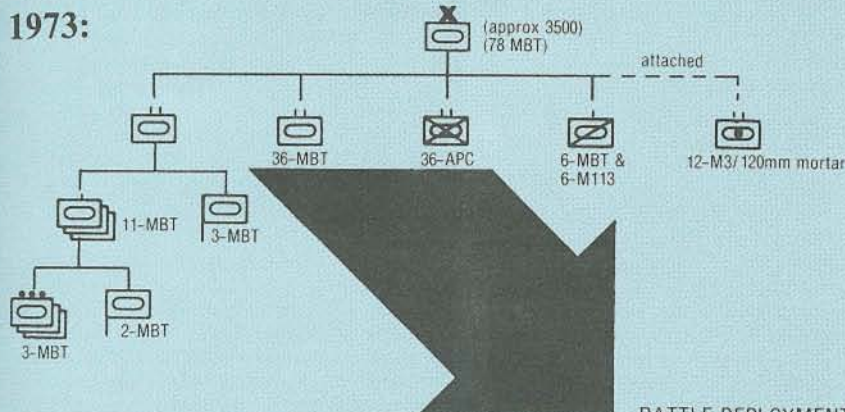
higher command actually directing the actions of the brigades. To rectify this, a number of divisions were created on a temporary basis just beofre the start of the 1967 war. In addition to two or three infantry armored and mechanized brigades, assigned units included engineer, artillery, and reconnaissance battalions. The 1973 divisions, formed on a permanent basis after 1967, usually contained three armored brigades, a reconnaissance battalion (with about 25 tanks), an artillery brigade (with 36 155mm self-propelled howitzers and some anti-aircraft guns), probably an engineer unit, and service and support formations. On occasion infantry or paratroop units would be temporarily attached.

On paper, the organization of the brigades differed little from 1967. The only significant change was the adoption of medium tanks to replace the jeep-mounted 106mm recoillness rifles in armored birgade reconnaissance companies. The Israelis (like the Germans of World War II) believe that reconnaissance units should also be strong combat units, able to fight as well as scout. Experience during 1967 indicated that reconnaissance units equipped only with jeeps and half-tracks were too weak, consequently suffering heavy casualties in combat. Therefore, tanks were added to the reconnaissance units. While this implies a loss of mobility, Israeli commanders believe that, effectively, greater mobility can be achieved with slower but better-protected vehicles. Experience in 1973 seems to support this belief.

Many of the tank brigades lacked mortar battalions, severely hampering efforts against infantry. Some sources also claim that many brigades lacked infantry battalions. While this may possibly be correct, these reports probably originated due to the noticeable absence of mechanized infantry during the first days of the war. At the start of the war, limited road capacity restricted movement towards the battle areas to only the most important vehicles. This meant that tanks were usually sent to the front ahead of supporting infantry and artillery. On the whole, it is probable that all brigades had mechanized infantry units, but that they were not available all of the time.

It appears that armored brigades usually deployed *three* tank battalions. This was probably achieved by rearranging all of the companies to give each battalion two tank companies and a mechanized infantry company. It is definitely known that the 7th Armored Brigade did something like this just before the start of hostilities. While mechanized infantry is often mentioned in battle accounts, there are no references to what can be identified as armored brigade mechanized infantry battalions. Finally, it is clearly evident that, in general, Israeli tank battalions rarely had more than about 25 tanks (about the strength of two companies). While it is uncertain that all Israeli tank battalions were reorganized in this fashion, available evidence does seem to support this theory.

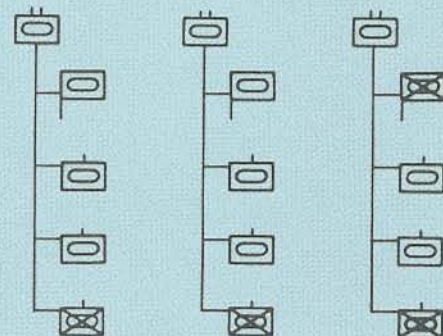
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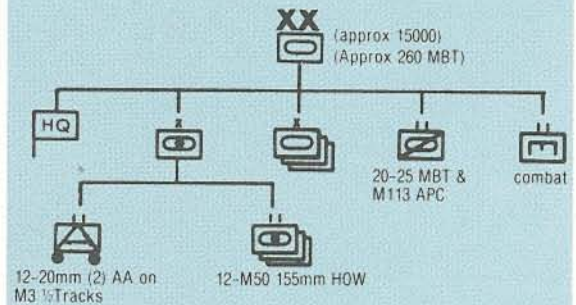
1973 Armored Brigade: A tank-heavy formation well suited to desert conditions. When provided with a mortar battalion, the brigade was satisfactory for most situations. Its only real weakness was the lack of any supporting infantry able to fight on foot (the armored infantry received no training in dismounted combat).

Armored Brigade reorganized: Israeli armored brigade commanders often reorganized their units to provide three tank-equipped units. This was accomplished by taking the six tank companies (in two battalions) and three armored infantry companies (in one battalion), and reorganizing them into three tank battalions, each with two tank companies and one armored infantry company.

BATTLE DEPLOYMENT



1973 Armored Division: About seven divisions of this type were deployed. These divisions were potent units: The majority of fighting in the Sinai was conducted by only three such divisions, divisions that never had more than 200 tanks after the first days of the war. The only weaknesses with the divisions were inadequate numbers of artillery and mortars, lack of infantry trained to fight on foot, and the use of obsolete halftracks to transport the armored infantry.



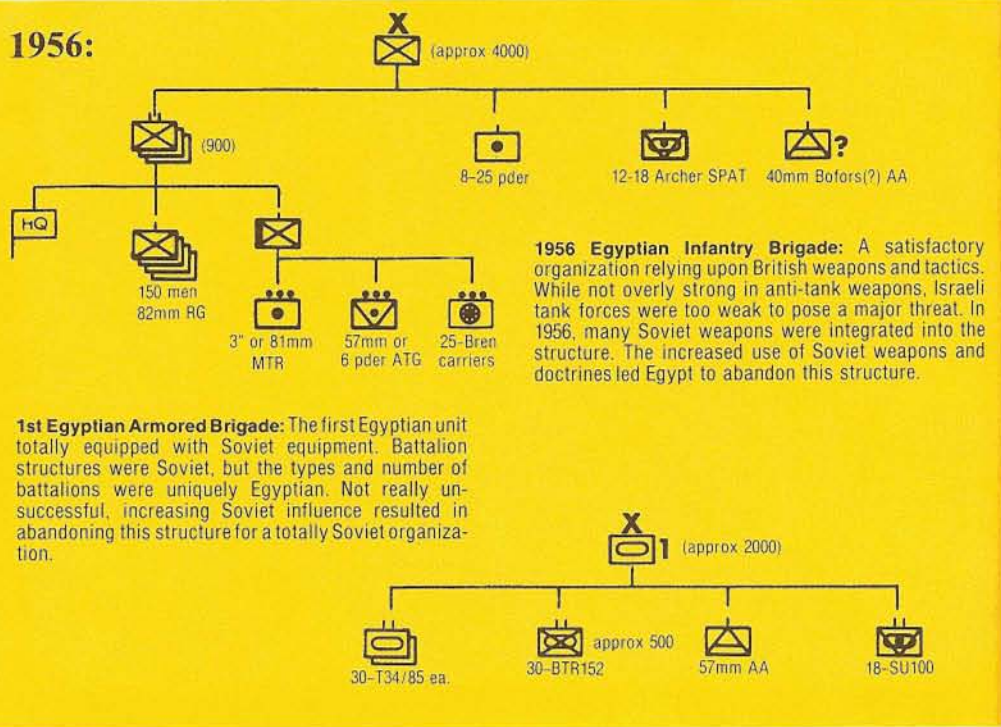
Post-1973: Israeli ground forces changed enormously after the 1973 war. Unfortunately, it is impossible to discover much about these changes. The size of the military has clearly increased with the creation of large numbers of new units. Large quantities of equipment have been obtained to replace old equipment, to supplement existing equipment, and to form new units. It is not yet possible to determine how the equipment and units have been integrated into 1973 structures. All that is known with any certainty is that a new level of field organization, the corps, has been added. The corps will assume operational control of field forces, directly under the control of the Chief of Staff. Previously, field units were controlled by Area Commands. The Area Commands, of which there are three, are geographically-based, each covering roughly a third of Israel proper, adding the occupied territories to their areas of responsibility. In addition to controlling field forces, they had been also responsible for extensive administrative tasks. Presumably, Israeli planners felt that Area commanders could not effectively conduct these administrative tasks and at the same time control field formations. Therefore, a new, intermediate, level of command was added to permit higher authorities to devote their attention more fully towards planning, logistics, and administration.

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Egypt

1956: Egyptian ground forces were organized into five divisions (four infantry and one armored), supplemented by independent brigades and battalions. The lack of information on those units not in the Sinai makes it difficult to discern a pattern of divisional organizations. While two divisions were deployed in the Sinai (the 3rd Infantry and the 8th Palestinian), they were definitely atypical. The 8th Division was a second-line unit of Palestinians with attached National Guard forces. The National Guard was Egypt's reserve force; limited training and poor equipment made it largely irrelevant. The organization of the 3rd Division appears to have been non-existent: Containing roughly 20 battalion-sized units from seven different brigades haphazardly grouped together, this division was a command nightmare. Since the 3rd Division was responsible for the defense of the most important invasion routes along the Israeli border (Abu Agheila and El-Arish), it is understandable that responses to Israeli attacks by this unit were uncoordinated and ineffectual.

The typical Egyptian infantry brigade was organized into three or four rifle battalions, of approximately 700 men each, a battery of 25-pounder gun-howitzers (6 or 8 tubes), and an anti-tank company with 17-pounders mounted on modified *Valentine* tanks (called *'Archer'* by both the British and Egyptians). The rifle battalions were organized into a headquarters company, four



rifle companies, and a support company. The support company was divided into a mortar platoon with 3-inch or 81mm mortars, an anti-tank platoon with British 6-pounder or Soviet 57mm anti-tank guns, and a carrier platoon with 25 *Bren* carriers.

The only armored brigade (of the three in the Egyptian army) committed to Sinai was the 1st Armored Brigade of two tank battalions, a mechanized infantry battalion, a battalion of *SU-100* assault guns, and an anti-aircraft battery. The brigade probably was equipped with about 70 *T-34/85* tanks and 18 *SU-100* assault guns. The only other armored unit in the Sinai was the 3rd Armored Battalion, attached to the 3rd Infantry Division, with 52 *Shermans*, including 12 specially-modified versions mounting the turret of the *AMX-13* light tank.

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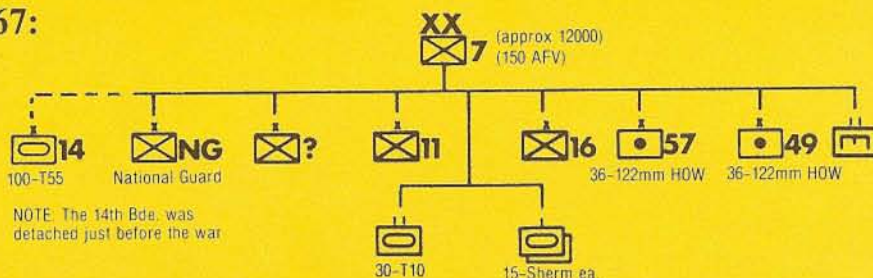
1967: Beginning in 1958, the Egyptians began to adopt Soviet organizational patterns in an extensive way, replacing the British system previously used. Virtually all Egyptian battalion and brigade organizations were copied from comparable Soviet units. This had at least one serious consequence for Egypt during the 1967 fighting: a high proportion of tanks were allocated to the infantry divisions, since every infantry brigade was assigned a tank battalion. This meant that the five armored brigades had only about half of all Egyptian tanks deployed. For this reason,

Egypt could never concentrate a large number of the available tanks, invariably allowing Israel to achieve local superiority in tanks.

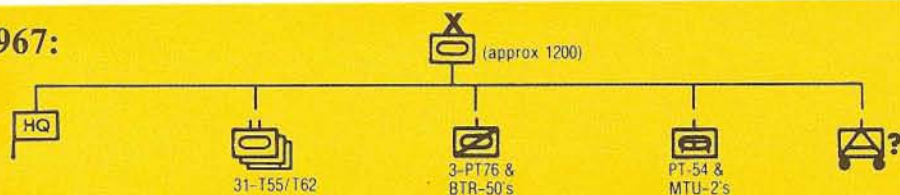
The Egyptians did not strictly follow Soviet divisional organizations. Organizational data on the Egyptian divisions is very confusing, and the only reliable data is for the 7th Infantry Division, which defended the coastal strip west of El-Arish. It is probably not completely typical of the other divisions, but since more data is available on this unit than any other, the examination of its organization is instructive. The division had three regular army brigades and a National Guard brigade. It was supported by two artillery brigades, each with 36 122mm guns. It is possible that each artillery brigade also contained a battalion of 12 multiple rocket launchers either the *BM-24* (240mm) or the *RM130* (130mm). Directly attached to the division were sixty tanks: a battalion of 30 *Stalin* tanks (probably including *T-10s* as well as *JS-III*s), and about 30 immobile, dug-in, *Shermans* used as static anti-tank guns. In addition, the 14th Tank Brigade, with 100 *T-54s* or *T-55s*, was available to support the division.

The regular army brigades were organized like Soviet regiments. Each had three battalions of infantry, a tank battalion with 30 *T-34/85* tanks, and a variety of support units. Little is actually known of the support units, but a reasoned conjecture can be made based on types of equipment captured and typical Soviet unit organizations: Each brigade probably had a

1967:



1967:



1967 Egyptian Armored Brigade: Another Soviet-style formation relying upon Soviet equipment. Theoretically potent units. Poor deployment, intensive air strikes, and inferior Soviet equipment, however, led to the complete destruction of all five of Egypt's armored brigades.

mortar battery with six 120mm mortars, an anti-tank battery with 85mm anti-tank guns, an anti-aircraft unit, a scout company, and service and support troops. Some infantry brigades also had an anti-tank missile platoon equipped with the *Schmel* (better known by its Western code-names: *AT-1*, 'Snapper'). Each of the brigade's three infantry battalions were organized into three companies, supported by an anti-tank platoon (probably with 57mm anti-tank guns or 107mm recoilless guns), a mortar platoon with 82mm mortars, and an anti-aircraft battery with heavy machineguns. Each infantry company probably had some 82mm recoilless anti-tank guns.

The Egyptians stationed two armored divisions in the Sinai. One of these, the Shazli Force (named for and commanded by the general who led all Egyptian forces in 1973), consisted of only a single armored brigade, a motorized infantry brigade, and an artillery brigade. Its total tank strength was about 120. In contrast, the other armored division, the 4th Division, possessed two tank brigades, a motorized infantry brigade, an artillery brigade, plus a full complement of support units. Among the support units was an anti-aircraft battalion equipped with the *ZSU-57-2*, a self-propelled 57mm anti-aircraft weapon. With over 200 tanks, the 4th Armored Division was the most powerful offensive unit in the Egyptian Army. The tank brigades were organized into three tank battalions along with support units. Each of the tank battalions had about 30 tanks (divided into three ten-tank companies), and the brigade had about 95 tanks (the tanks from the battalions plus a few assigned to other units).

★★★★★

1973: The few organizational changes made between 1967 and 1973 were aimed at strengthening already existing structures. The most important of these improvements was the introduction of a new command level, the Army; the Soviet-equivalent of the western corps. Egyptian ground forces were grouped into three armies: the Second and Third directed operations along the Suez Canal; the First Army was simply a group of miscellaneous units commanded directly by the General Staff. The three armies commanded Egypt's ten divisions (two armored, three mechanized, and five infantry), numerous independent brigades (including about twelve independent artillery brigades, two tank brigades with *T-62* tanks, seven mechanized infantry brigades, and other units), and a variety of independent battalions (including 25 to 27 commando battalions).

The organization of the armored divisions (the 4th and 21st) differed little from that in 1967. The only important changes were in equipment, the Soviets having provided more modern systems. With about 230 *T-55* tanks and at least 70 artillery pieces, the armored divisions were (on paper) well-organized, potent units.

The mechanized division was a new formation, added after 1967. This type of unit was similar to the armored division, differing only in the proportion of tank and mechanized brigades. Instead of two tank brigades and one mechanized

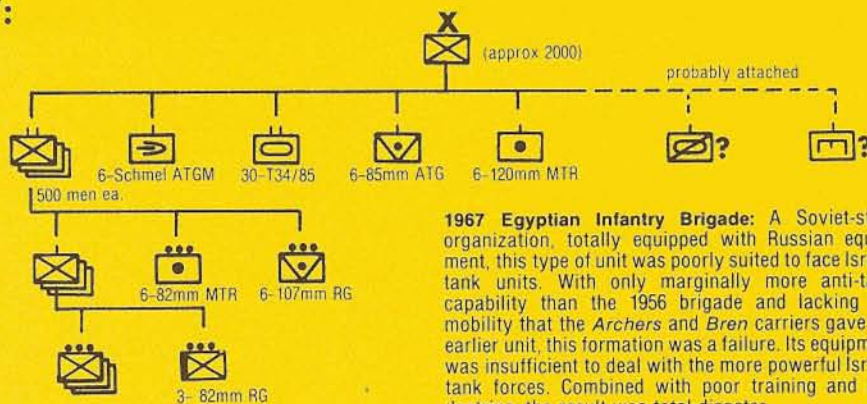
brigade, the mechanized division had two mechanized brigades and one tank brigade. The mechanized brigades were organized like the 1967 infantry brigades mounted on armored personnel carriers with more modern equipment. With about 150 tanks supported by *BRDM-1 Sagger* carriers, the mechanized divisions could operate effectively in offensive and defensive situations.

The 1973 infantry divisions were substantially different from the 1967 divisions, though organization was only slightly changed. Unlike the 1967 divisions, which had little effective anti-tank capability, the 1973 divisions were multi-arm anti-tank units equipped with every anti-tank weapon available: tanks, assault guns, anti-tank guns, anti-tank missiles, and anti-tank rocket launchers. Each division possessed tank battalions (totalling about 100 *T-55*'s) attached to the infantry brigades and an assault guns battalion of 18 *SU-100*'s attached to the division. Attached to each brigade was a battery of six 85mm anti-tank guns and to each battalion an anti-tank platoon with 107mm recoilless guns. Each infantry platoon (of which there would be about 80 in a division) is believed to have contained an anti-tank squad with about a dozen men. In addition to a three-man section with one *Sagger* anti-tank missile launcher, the anti-tank squads were equipped with *RPG-7* anti-

tank rocket launchers. Probably 82mm recoilless guns were also assigned to these units, although no firm evidence supports this belief. Finally, each rifle squad contained one or two *RPG-7* launchers, and all its riflemen could carry anti-tank grenades. The divisional engineer battalion could also support anti-tank operations by laying minefields. With at least 270 major and hundreds of smaller anti-tank weapons, the Egyptian 1973 infantry division was the most effective anti-tank formation ever deployed.

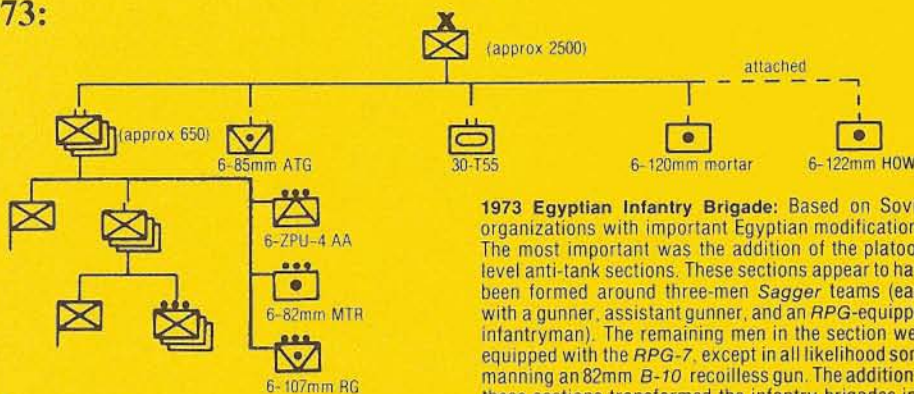
The 1973 infantry divisions represented an Egyptian solution to the threat posed by Israeli tank forces. Recognizing that their tankers could not hope to equal their Israeli counterparts, the Egyptians needed another method of effectively countering Israeli tanks. To accomplish this, the Egyptians made use of their strongest asset: the ability of their infantry to defend fortified or static positions. In every war fought against Israel, Egyptian infantry had fought effectively from fortified positions, often against overwhelming odds. The classic case was the defense of Giradi, in 1967, which had to be retaken several times by Israeli troops. The excellent performance of the Egyptian infantry in 1973 confirmed these expectations.

1967:



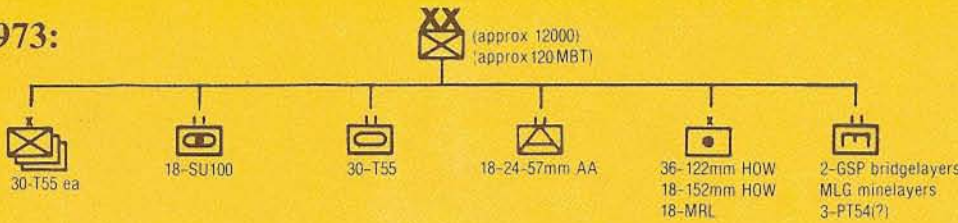
1967 Egyptian Infantry Brigade: A Soviet-style organization, totally equipped with Russian equipment, this type of unit was poorly suited to face Israeli tank units. With only marginally more anti-tank capability than the *Archers* and *Bren* carriers gave the earlier unit, this formation was a failure. Its equipment was insufficient to deal with the more powerful Israeli tank forces. Combined with poor training and bad doctrine, the result was total disaster.

1973:



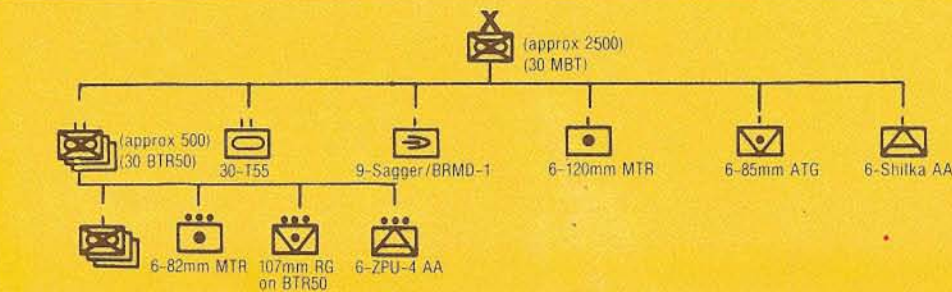
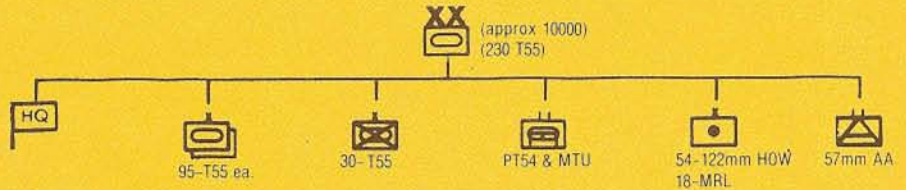
1973 Egyptian Infantry Brigade: Based on Soviet organizations with important Egyptian modifications. The most important was the addition of the platoon-level anti-tank sections. These sections appear to have been formed around three-men *Sagger* teams (each with a gunner, assistant gunner, and an *RPG*-equipped infantryman). The remaining men in the section were equipped with the *RPG-7*, except in all likelihood some manning an 82mm *B-10* recoilless gun. The addition of these sections transformed the infantry brigades into tank destroying formations, relying upon virtually every available anti-tank weapon in the Soviet arsenal.

1973:



1973 Egyptian Infantry Division: The back-bone of the Egyptian Army. In addition to the organic armored vehicles, tank brigades taken from tank or mechanized divisions were also attached. It seems likely that a separate tank battalion was attached at the division level, in addition to those in the brigades, but this is not certain. Nor is it certain how the SU-100s were attached: either in companies of 6 attached to the brigades or in a battalion of 18 attached to the division. Nothing is known of the reconnaissance battalion. It is likely that the engineer battalion contained mine-(to lay and clear) and amphibious- special purpose vehicles.

1973 Egyptian Tank Division: A large, well-organized unit. The superiority of Israeli tanks and tank units limited Egyptian tank and mechanized units to support of the infantry divisions. Attempts to use the tank division offensively ended in complete defeat, making possible the successful Israeli canal crossing. The remnants were destroyed in ferocious counterattacks against the Israeli corridor to the canal crossing site.



1973 Egyptian Mechanized Brigade: Hardly more successful than the tank division, the mechanized brigades were best used in support of the foot infantry (in fact their BRDM-1 Sagger carriers were attached to the foot infantry brigades at the start of the war). Attempts to use them offensively ended in disaster. The main problem was not equipment, training, or morale; all were of high quality. The problem began with their employment. Most Israeli forces in the Sinai were tank units. Attempts to make Soviet-style mechanized infantry attacks against the Israeli tank units were futile.

Post-1973: No substantial changes in unit organization have been made since the 1973 war. The only change of significance has been the conversion of the armored division tank brigades from the T-55 to the more modern T-62. Besides this, most units retain the same organization and equipment used in the 1973 war.

for three armored divisions (an increase of one over pre-1973 plans) and two mechanized divisions. Brigade strength now totals 16 (including an independent infantry brigade). With an estimated six tank brigades (each with about 90 Pattons or

Centurions), nine mechanized brigades (probably with no tanks, but provided with anti-tank missiles), and one infantry brigade, Jordanian ground forces are considerably stronger than during the 1967 or 1973 wars.

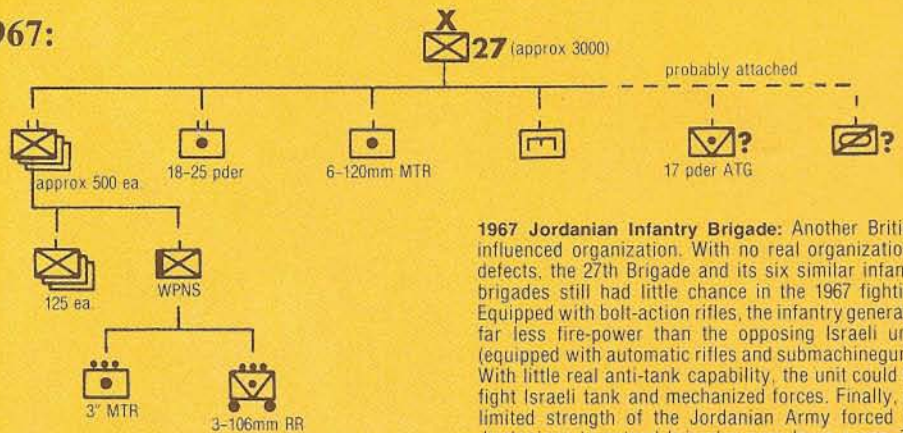
Jordan

Through 1970, the Jordanians copied British organization, although shortages of manpower and equipment often made Jordanian units smaller than their British models. The 1967 organization of the 27th Infantry Brigade (stationed in Jerusalem) was probably typical of the six other infantry brigades fielded during that war: three infantry battalions (each of about 500 men), a mortar company with 120mm mortars, and probably reconnaissance, anti-tank, and support units. The 27th also had an attached engineer company, but it seems unlikely that all the infantry brigades had engineers. A battalion of eighteen 25-pounder gun-howitzers was attached to the brigade. It is likely that all Jordanian brigades were supported by attached artillery battalions of comparable size. Each of the brigade's infantry battalions was organized into three rifle companies, supported by a weapons company equipped with 3-inch mortars and jeep-mounted 106mm recoilless rifles.

The two armored brigades deployed in 1967 (the 40th and 60th) were identically organized. Each had two tank battalions with 44 M-48 tanks, a mechanized infantry battalion mounted in M-113 armored personnel carriers, and an artillery battalion with 12 to 18 M-52 105mm self-propelled howitzers.

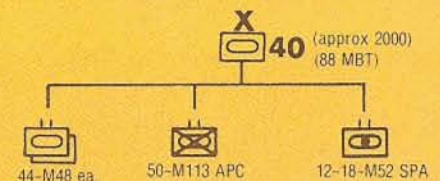
After 1967, the brigades were grouped into divisions. With the creation of a number of new brigades, it was possible to fill-out five divisions. Beginning in 1973, in the midst of the expansion program, plans were laid to mechanize all infantry units. Press reports indicate that by mid-1976 the Jordanians completed a reorganization providing

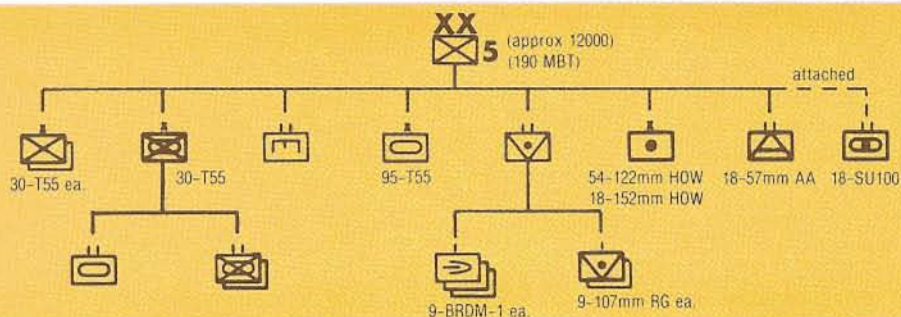
1967:



1967 Jordanian Infantry Brigade: Another British-influenced organization. With no real organizational defects, the 27th Brigade and its six similar infantry brigades still had little chance in the 1967 fighting. Equipped with bolt-action rifles, the infantry generated far less fire-power than the opposing Israeli units (equipped with automatic rifles and submachineguns). With little real anti-tank capability, the unit could not fight Israeli tank and mechanized forces. Finally, the limited strength of the Jordanian Army forced the Jordanians to extend brigades over large areas. The 27th, assigned to defend Jerusalem, was attacked by three Israeli brigades. Individually, each of the Israeli brigades was as strong as the 27th. Expected support from nearby units failed to materialize, a result of brutal airstrikes and the activity of Israeli armor. Against such odds, the 27th did as well as any unit could have, before the predictable conclusion.

Jordanian 40th Armored Brigade: A powerful unit, as strong as any opposing Israeli formation. After some successful fights, the unit was destroyed due to Israeli airstrikes and poor logistics; most of the tanks simply ran out of gas.





1973 Syrian Infantry Division: Directly derived from the Soviet Motorized Rifle Division. Weak in armored personnel carriers, the division could field only one weak mechanized brigade. This meant that the two foot infantry brigades had to be left behind during the advance into the Golan Heights in the first days of the war. In consequence, a large portion of the strength of the division never contributed to the fighting until counterattacking Israeli forces appeared.

Syria

Little information is available on the organization or the 1967 Syrian ground forces. All that is really known is that the infantry brigades contained a battalion of T-34/85 tanks. Presumably Syrian units were organized like Egyptian units (which, of course, means like Soviet units). Unfortunately, there is too little data available to permit any degree of reliability to be attached to such a guess.

In 1973, the Syrian Army was organized into units similar to those deployed by the Egyptians, but with a number of significant differences. First,

the Syrian infantry units did not have the anti-tank sections added to the infantry platoons of Egyptian units. This considerably weakened their anti-tank capabilities. The Syrian infantry divisions were similar to their Egyptian counterparts, with three major exceptions. First, the Syrian infantry divisions contained two infantry brigades, one mechanized brigade, and a tank brigade. Second, the Syrian units did not contain the extra tank battalion probably attached to Egyptian infantry divisions. Third, the organization of the Syrian mechanized brigades probably differed from Egyptian structures. Instead of containing three mechanized battalions, the Syrian mechanized brigades only had two. While

this reduced the fighting power of the units, it also made them easier to command—no small consideration for a country with few experienced senior officers. Similarly organized mechanized brigades were found in the two tank divisions.

The Syrians had one singularly unique formation. They had an anti-tank battalion, made up of three companies of BRDM Sagger carriers and two companies of 107mm recoilless guns (probably 27 BRDMs and 18 107mm guns). Such an organization makes good sense: the Saggars are effective from 500 to 3000 meters; the recoilless guns are effective from 0 to 1000 meters. Thus the "dead zone" of the Saggars is covered by the recoilless guns.



Behind Closed Doors

Of necessity, much of the information used in designing the game is not "authoritative". For *PANZERBLITZ* and *PANZERLEADER*, official material was easily available. For *ARAB-ISRAELI WARS*, much important, up-to-date material of a similar nature had to be guessed at. Hopefully, these informed guesses (based on best available information) are correct (or, at least, reasonably so), but it is possible that some of the information could be wildly erratic. For this reason, it is best to be cautious when dealing with the data presented herein. (The same is true of any material concerning the Middle East: even supposedly "authoritative official" sources can and do-sput utter nonsense on this subject). Note: some of the information presented here contradicts supposedly "authoritative" sources. In such cases the designer's data is based upon best available information. In other words, those "authoritative" sources are, quite simply, wrong. A large amount of basic research went into this game, covering several years of intensive work. During this time, all possible sources available to the designer were compared and analyzed. Through such critical analysis, it was often possible to discover much of interest which was not readily apparent. It is likely that more than a thousand hours of research, interviews, and analysis was devoted to the Arab-Israeli conflict. Not all of the information was directly useful, but it all ensured that the presentation was as factually accurate as humanly possible.

During the designer's research on the Arab-Israeli conflict, several hundred different works were consulted, ranging from newspapers and periodicals to books, hearings before Congressional committees and Department of Army publications. Most of these sources added only small bits of information that needed to be pieced together to form a relatively complete picture.

For this reason the bibliography is limited only to those items of general interest giving the gamer a broad understanding of the military side of the Arab-Israeli conflict.

The best general work on the subject is probably *THE ISRAELI ARMY* by Dan Horowitz and Edward Luttwak. It provides a broad, balanced perspective of the full period, covering many subjects ignored by other writers. It also provides concise accounts of many of the important battles. There are three works useful for the 1956 war. The first is an article by Bernard Fall in the July, 1957 issue of the *Military Review*. While this might be difficult to obtain, it is an excellent military history, written under difficult circumstances, and makes a good supplement for the second work. The second is Moshe Dayan's *DIARY OF THE SINAI CAMPAIGN*. This book is one of the best military histories ever written: concise, accurate and with little bias, it provides a compelling picture of how the conflict unfolded to the view of the man commanding the Israeli Army. A third work, less useful than the other two, but still of some value, is S.L.A. Marshall's *SINAI CAMPAIGN*.

There are few useful works on the 1967 war. The best of a poor lot is *THE THIRD ARAB-ISRAELI WAR* by Edgar O'Ballance. While generally comprehensive, the author makes a number of gross factual errors. Only two other works are worth mentioning, primarily because of the balanced perspective they give of one facet of the war. These are Abdullah Schliefer's *THE FALL OF JERUSALEM* (one of the few satisfactory military histories of the Arab-Israeli conflict written by an Arab author available in English) and Abraham Rabinovich's excellent *THE BATTLE FOR JERUSALEM*. Both contain lots of good data and complement each other in a very satisfactory way.

For the 1973 war the best single work is Chaim Herzog's *THE WAR OF ATONEMENT*. An excellent book, it is marred by a number of irritating errors. Best ignored is the mediocre, unreliable and all-too-common *THE YOM KIPPUR WAR* by the Sunday Times Insight Team.

RUSSIAN CAMPAIGN PBM KIT

In response to many requests for it, we've gone ahead and done another PBM Kit after stating numerous times: "never again". *RUSSIAN CAMPAIGN* is a good medium for postal play though and is perhaps our best game for pbm. The combination of double impulse moves and the relatively small number of turns makes it a delight to play by mail.

Each kit comes with full instructions for both pbm in general and *RUSSIAN CAMPAIGN* in particular. A kit includes 4 pads—two each for Russian and German moves, and includes everything necessary to record movement, combat, and retreats plus special functions like rail movement, sea movement, weather and replacements. A complete kit sells for \$6.00 plus postage. A half kit with only two pads costs \$3.00 plus postage. Maryland residents please add 5% sales tax.

THE GENERAL BINDERS

These binders are ruggedly constructed in attractive red leather finish vinyl, with gold embossed logos of the *THE GENERAL* and the Avalon Hill Game Company located on the front and spine. Each binder measures 9" x 12" x 1 1/4" and holds twelve (12) copies of *THE GENERAL*. Spring-steel retaining wires hold the issues firmly in place, yet your magazines are not damaged in any way, and can easily be removed from the binder at your desire. The binders are available from Avalon Hill for \$5 plus 75c postage. Maryland residents please add 5% state sales tax.

THE ARAB-ISRAELI WARS

UNIT COMPOSITION CHARTS

This chart gives the players an idea of the organization and composition of the unit counters. Most counters represent actual TO&E organization. The main exceptions are the tank units. For the Egyptian Army, a company consists of ten tanks, a platoon contains three tanks. Three is too small and ten is too large for our gaming purposes. Much the same is true of the Israeli units. For this reason, the standard *PANZERBLITZ/PANZER LEADER* tank counter size was adopted (five tanks per unit counter) which yielded great benefits from the standpoint of 'overall simulation' results.

Most of the equipment used by both sides came from outside arms suppliers (usually the Soviet Union and United States, sometimes Great Britain or France). This meant that all of the wars were fought with only those weapons available at the start. Another consequence of this dependence on outside supply was that often both sides had the same equipment. British equipment was used by Egypt, Iraq, Israel, and Jordan; American equip-

ment by Israel and Jordan. Through captures, Israeli troops often used the same equipment as Egyptians, Iraqis, and Syrians. In short, the following chart represents an overview of the weapons of the world as applied to the Middle East:

FOR UNIT DESCRIPTION

ABBREVIATIONS—

AA	Anti-aircraft
APC	Armored personnel carrier
AR	Automatic rifle
AT	Anti-tank
ATG	anti-tank gun
AVLB	Armored vehicle launched bridge
HMG	Heavy machinegun
KG	Kilogram (2.2 pounds)
KM	Kilometer (0.62 miles)
KPH	Kilometers-per-hour
LMG	Light machinegun
M	Meters
MG	Machinegun

MK	Mark
MM	Millimeters
MMG	Medium machinegun
RG	Recoilless gun
ROF	Rate-of-fire
RPM	Rounds-per-minute
RR	Recoilless rifle
SMG	Submachinegun
WWII	World War Two

COUNTRY ABBREVIATION—

CZ	Czechoslovakia
EG	Egypt
FR	France
IS	Israel
IT	Italy
JN	Jordan
PO	Poland
SU	Soviet Union
SY	Syria
UK	United Kingdom
US	United States

ISRAEL

INFANTRY AND NON-VEHICULAR UNITS

NAME	COMPOSITION	COMMENTS
Infantry	25-35 men, several LMG, 20-30 AR and SMG, 82mm <i>Metal</i> bazooka or <i>LAW</i> AT rockets.	The composition and equipment of Israeli infantry and paratroop units have changed considerably over the period 1956-1973. Initially, most infantry was equipped with rifles and SMG's. By 1967, most had a mix of SMG and AR (the exact proportions varying from unit to unit, depending on preference and need). Since 1973, all units are equipped with AR.
Machinegun	about 20 men, about 6 MG, SMG.	Attached to weapons companies in many infantry and paratroop units (it is not known if such units were ever attached to the armored infantry units). It is probable that with increasing use of ARs, these units have now been eliminated.
81mm mortar	6 81mm mortars, about 30 men.	Israeli-produced mortars with a range of over 4600 meters and a maximum ROF of 20 rounds per minute. There is another version, probably for paratroop use, with a range of only 4000 meters.
Engineer	About 30 men, with engineering and infantry weapons. About 30 men, with SMG.	Equipment probably varies considerably, but can include Israeli-produced <i>LTH</i> flamethrowers (weighing about 20 kg, with a range of 40 m), bangalores, and Israeli-produced rockets for attacking fortifications.
Pontoon Engineer	About 30 men, with SMG.	Special units put together after 1967 to use the bridging equipment to be used to cross the Suez Canal.
Cobra	About 10-15 men, 3 <i>Cobra</i> launch units, 6 <i>Cobra</i> AT missiles.	Equipment obtained from West Germany as part of some arms deals transacted in the early 1960s. The <i>Cobra</i> , with an effective range of 400 to 2000 meters can penetrate up to 500mm of armor plate. This 10 kg missile requires 23.5 seconds to reach maximum range. There is no real proof that this system has ever been used by Israel in combat, though Arab sources have claimed that Israel used some kind of AT missile in the early fighting during the 1973 war (which would mean either the <i>SS-11</i> or the <i>Cobra</i>).

VEHICULAR AND AIRCRAFT UNITS

NAME	COMPOSITION	WEIGHT (TONS)	SPEED (KPH)	RANGE (KM)	CREW	MG	ORIGIN	USE	COMMENTS
M3	3 <i>M3</i> halftracks, 3 MG, 6 crew	9.1	70	320	2/11	1	—	IS	Some also used by Egypt. A WWII-vintage vehicle still used because of its economy and availability.
M-113A1	3 <i>M-113A1</i> APCs, 6 MG, 9 crew	10.9	70	490	2/10	2	US	IS	<i>M-113A1</i> also used by Jordan (since 1973), Saudia Arabia (ordered 1975), and Kuwait (ordered 1976).

Trucks	2-6 five-ton trucks	—	—	—	—	—	—	IS	Israel uses a variety of Western & captured Soviet vehicles.
Scout Jeep	4 jeeps, 4 MG, 12 crew	1.5	90	280	3	1	—	IS	Extensively used in 1956 and 1967. Still used for security operations.
106mm RR	4 jeep-mounted 106mm RR, 12 crew	1.5	90	280	3	0	US/IS	IS	Many 106mm RR's license-built in Israel. Effective range: 1100m, ROF: 5
Armored infantry	4 <i>M-113A1</i> APCs, 20 MG, 4-2" (52mm) mortars, about 30 men	10.9	70	490	8?	5	US	IS	Each APC mounts 1-.50 cal HMG, 2-.30 cal MMG, 2-.30 cal LMG, and 1-52mm mortar.
AMX-13	5 <i>AMX-13</i> light tanks mounting 75mm guns (32 rounds each), 5 MG, 15 crew	15	60	340	3	1	FR	IS EG	This light tank mounts a 75mm high velocity gun equal in power to that mounted on the German WWII <i>Panther</i> .
120mm Mortar	6 120mm mortars mounted on <i>M-3</i> halftracks, about 40 men	9	70	320	7	—	IS	IS	Israeli-produced version of Finnish weapon. Range: 6200mm; ROF: 10.
TOW/M-113A1	4 <i>TOW</i> anti-tank missile launchers mounted on <i>M-113A1</i> APC's, about 35 <i>TOW</i> missiles, 12 crew	10.9	70	490	3	—	US	IS	Jordan, Kuwait, and Saudia Arabia also obtained <i>TOW</i> after 1973.
SS11/M3	4 <i>SS-11</i> anti-tank missile launchers mounted on <i>M3</i> halftracks, 12 crew	9	70	320	3	—	FR	IS	<i>SS-11</i> also used by Saudia Arabia.
90MM	6 90mm AT guns mounted on <i>M3</i> halftracks (50 rounds each), about 30 men	9	70	320	5	—	FR	IS	Local modification using French guns.
Sherman 50	5 <i>Sherman Mk. 50</i> tanks mounting 76mm guns (about 75 rounds each), 10-15MG, 20-25 crew.	32?	40?	160	4-5	2-3	—	IS	Israeli modification of <i>Shermans</i> obtained without effective armament. The 76mm guns were taken from <i>M-10's</i> . Introduced prior to the 1956 war.
Sherman 51	5 <i>Sherman Mk. 51</i> tanks mounting 75 mm guns (about 75 rounds each), 10 MG, 20 crew	32?	40?	160	4	2	FR/IS	IS	Also called <i>Super Sherman</i> . France supplied 100 just before the start of the 1956 war, supplemented by others made in Israel prior to 1967.
Sherman 51HV	5 <i>Sherman Mk. 51HV</i> tanks mounting 105mm guns	37	44	240	4	2	IS	IS	Uses modified French 105mm medium velocity gun. Introduced in about 1965 and used until 1975. A highly efficient modification.
M-48A5	5 <i>M-48A5 Patton</i> tanks mounting 105mm guns (about 60 rounds each), 10 MG, 20 crew	47.5	50	450	4	2	IS	IS	Obtained from West Germany, the U.S. and Jordan (captured). Modified by replacing 90mm gun with the British 105mm gun used on <i>M60A1</i> and <i>Centurion</i> . Also given a diesel engine (as used on the <i>M-60A1</i>). The U.S. began similar conversion program after 1973.

M-60A1	5 <i>M-60A1</i> tanks mounting 105mm guns (63 rounds each) 10 MG, 20 crew	48	48	500	4	2	US	IS	Obtained in 1972, 180 available in 1973. 300 more were bought after the fighting. Also used by Jordan (from 1974) and Saudi Arabia (ordered in 1975). ROF: 10 rpm; Range effective out to 3500 meters.
Centurion	5 <i>Centurion</i> tanks, mounting 105mm guns (66 rounds each), 10 MG, 20 crew	51	35	100	4	2	UK	IS	Obtained in 1959, equipped with 20 pdr. gun. 105mm guns were obtained later. While only 10 <i>Centurions</i> were lost in 1967, inferior mobility necessitated the development of <i>Patturion</i> . Of 1000 <i>Centurions</i> acquired, 180 from the Netherlands, 25 captured from Jordan, and the rest from Britain. ROF: 10 rpm.
Patturion	5 <i>Patturion</i> tanks mounting 105mm guns (66 rounds each), 10 MG, 20 men.	52	43	400	4	2	IS	IS	Converted <i>Centurions</i> with the same diesel engine and transmission as used in the <i>M-48A5</i> and the <i>M-60A1</i> . Israeli tankers call it the best tank in the Middle East, an ironic tribute to a tank replaced by the British starting in 1965 . . . ROF: 10 rpm.
TI-67	5 <i>TI-67</i> tanks mounting 105mm guns (about 40 rounds each), 10 MG, 20 men.	36?	50?	480?	4	2	IS	IS	Israeli conversion of <i>T-54</i> and <i>T-55</i> tanks. Captured in 1967 mounting same gun as in <i>Patturion</i> and <i>M-60A1</i> Some sources claim Israel replaced Russian engine with Western engine.
motorized ferry	several self-propelled ferries.	?	?	?	?	?	IS?	IS	Able to carry medium tanks. Used in 1973 to cross Suez Canal until bridges available.
M-60 AVLB	several <i>M-60 AVLB</i> bridge layers.	48	50	500	2	—	US	IS	Israel also uses similar <i>M48 AVLB</i> .
Sherman flail	several <i>Sherman</i> tanks modified to carry mine-clearing flails.	32?	40?	160	2	4	—	IS	Probably Israeli-made. Used in 1967 and 1973.
20mmAA	6 twin 20mmAA guns mounted on <i>M3</i> half-tracks, about 40 men.	9	70	320	5	—	IS	IS	Guns made in Israel. Uses optical sighting system.
TOW/M-113A1	4 <i>TOW</i> anti-tank missile launchers mounted on <i>M-113A1</i> APC's, about 35 <i>TOW</i> missiles, 12 crew.	10.9	70	490	3	—	US	IS	Jordan, Kuwait, and Saudi Arabia also obtained <i>TOW</i> after 1973.
SS11/M3	4 <i>SS-11</i> anti-tank missile launchers mounted on <i>M3</i> half-tracks, 12 crew.	9	70	320	3	—	FR	IS	<i>SS-11</i> also used by Saudi Arabia.
HueyCobra	Several <i>AH-1 Huey-Cobra</i> attack helicopters.	4	350	622	2	—	US	IS	Obtained in 1976. Can carry up to 6 <i>TOW</i> AT missiles with 4000m range.
UH-1	Several <i>UH-1</i> assault helicopters.	4	200	520	2/11	1-2	IT	IS	Italian-produced <i>AB-205A</i> version of U.S. designed <i>UH-1</i> assault transport.

ARAB

NAME	COMPOSITION	COMMENTS
Infantry	25-35 men, up to 25 AR, LMG, and SMG, several <i>RPG-7</i> AT rocket launchers possibly a <i>B-10</i> 82mm RG, <i>Sagger</i> AT missiles.	Composition varies considerably, depending upon nationality, period, and type of unit. Syrian infantry, and Egyptian mechanized infantry between 25 and 30 strong. Jordanian infantry and Egyptian 1973 infantry around 35 strong. Egyptian 1973 infantry has AT section with <i>Sagger</i> AT missile team, but capabilities are included in the <i>Sagger</i> units.

Commando	25-30 men, AR, SMG, and some <i>RPG-7</i> 's.	These units represent the special commando units that exist in all Arab armies. With less heavy equipment than regular units, they cannot generate as much firepower, a weakness compensated for by higher morale levels.
Engineer	about 50 men, with engineering and light infantry weapons including flamethrowers.	Every Syrian and Egyptian brigade includes such a unit, which provides combat engineering support.
Pontoon	about 50 men, with light infantry weapons.	Specialized engineers trained in the use of pontoon bridging equipment.
Sagger	about 12 men, 3 <i>Sagger</i> AT missile launchers, <i>Sagger</i> AT missiles.	Known as <i>PUR-64</i> ("Bumblebee") to Soviets, code names given by Western intelligence include <i>AT-3</i> and <i>Sagger</i> . Foot troops carrying so-called suitcase version of the <i>Sagger</i> AT missile (the name comes from the case in which the <i>Saggers</i> are carried). The <i>Sagger</i> with an effective range of 500 to 3000 meters, can penetrate 400mm of armor. The 11 Kg. missile takes 27 seconds to reach maximum range (compared with the 15 seconds required for the <i>TOW</i> AT missile). It is estimated that about 15 to 25% of all Israeli tanks destroyed in 1973 were knocked out by the <i>Sagger</i> . The <i>Sagger</i> is continuously controlled by the operator during its entire flight, using a joy-stick. Thus, the operator must be highly skilled, able to concentrate on the missile for up to 30 seconds. To achieve this level of skill, operators are required to make 5000 practice firings using a special simulator. Even during the fighting operators continued to practice on a daily basis on the simulator. The Egyptian troops often fired <i>Saggers</i> over Suez Canal on the first days of the 1973 war to support troops in the Sinai.
82mm Mortar	6 <i>M-37</i> 82mm mortars, about 40 men.	This Soviet weapon dating from the 1940s, has a maximum range of 4000 m. With a crew of five, the mortar can achieve a ROF of up to 25 rounds per minute. Weighs only 56 Kg. The mortar is used as a battalion weapon by the Arabs, though the Soviets have replaced it with the 120mm mortar in all but paratroop units. Range inferior to comparable Israeli 81mm mortar.
107mm RG	4-6 <i>B-11</i> 107mm RG, about 20-40 men.	This weapon has long since been removed from front-line Soviet use, replaced by better weapons. The <i>B-11</i> has a maximum effective range of 1000 m, and a ROF of 6. It requires a 5 man crew. Unlike its American counterpart, the 106mm RR, the <i>B-11</i> is not rifled.

TOWED ARTILLERY UNITS

NAME	COMPOSITION	WEIGHT	RANGE	ROF	CREW	ORIGIN	USE	COMMENTS
17 pdr	6 17-pdr (76.2mm) ATG, about 50 men.	—	—	20	—	UK	JN	WWII Surplus.
25 pdr	6 25-pdr (88mm) gun howitzers, about 80 men.	1800	12000	6	8	UK	JN EG	WWII Surplus.
85mm ATG	6 <i>SD-44</i> 85mm ATG about 70 men	2300	2000	10-15	7	SU	EG SY	Equipped with Auxiliary Propulsion Unit (APU) giving self-propelled speed of 25 kph.
122mm HOW	6 <i>M-38</i> 122mm howitzers, about 80 men.	2500	12000	5-6	8	SU	EG SY	WWII vintage. Still effective although out-ranged by modern weapons. Israelis organized several battalions of captured guns.
120mm Mort	6 <i>M-43</i> 120 mortars, about 40 men.	500	5700	15	6	SU	EG SY	WWII vintage. Very efficient weapon even though it barely outranges Israeli 81mm medium mortar.
S-60	6 <i>S-60</i> 57mm AA guns, about 60 men.	4000	6000	120	?	SU	EG SY	Highly effective optically-controlled gun.
ZPU-4	6 <i>ZPU-4</i> quad 14.5mm HMG, about 40 men.	2100	1200	4x600	?	SU	EG SY	Optically-controlled weapon, relying on large numbers for effectiveness.

VEHICULAR UNITS

NAME	COMPOSITION	WEIGHT (TONS)	SPEED (KPH)	RANGE (KM)	CREW	MG	ORIGIN	USE	COMMENTS
BTR-152	4 <i>BTR-152V</i> , MG, 8 crew.	8.6	75	650	2/14	1	SU	SY	First APC used in large numbers by Arabs, after 1967 confined to second-line use.
BTR-50	4 <i>BTR-50PK</i> , 4 MG, 12 crew.	14	44	240	3/18	1	SU	EG IS SY	Israel uses large number of captured vehicles since 1973.

BTR-60	4 <i>BTR-60PB</i> , 8 MG, 8 crew.	10	80	500	2/14	2	SU	SY	
OT-62	4 <i>OT-62</i> , 3 107mm RG, 12 crew.	13	—	440	3/18	1	CZ	EG	Czech version of <i>BTR-50</i> .
BPM	4 <i>BPM-1</i> , 4-73mm guns, 4 MG, <i>Sagger</i> AT missiles, 12 crew.	12	60	325	3/8	1	SU	EG SY	Originally, it was thought the <i>BMP</i> carried 76mm gun. The 73mm gun is automatically loaded, with 40 rounds carried.
M-113	4 <i>M-113</i> , 4 mg, 8 crew.	11	65	325	1/12	1	US	JN	With gasoline engine; see Israeli <i>M-113A1</i> .
truck	2-6 <i>SIL-151</i> trucks drivers.	4.5	60	600	1/19	—	SU	EG	Jordan uses equivalent West German and U.S. vehicles.
106mm RR	4 jeep mounted 106mm RR, 12 crew.	1.5	90	280	3	—	US	JN	Effective range: 1100m ROF: 5.
PT-76	3 <i>PT-76B</i> , 3 76mm guns, 2 <i>BTR-50PB</i> , 5mg, about 30 men.	14	45	250	3	1	SU	EG SY	Small number of captured models used by Israel.
140mm MRL	6 <i>BM-14</i> 140mm MRL, about 60 men.	8.2	60	600	7	—	SU	EG SY	A post-war development of the WWII <i>Katyusha</i> rocket launcher. Number of rounds: 16; Range: 10,600 m (exact range is controversial), time to reload: 3-4 minutes.
BRDM-1	3 <i>BRDM-1 Sagger</i> missile carriers, 1 <i>BTR-40PB</i> , 1 MG, 42 <i>Saggers</i> , about 20 crew.	6	80	500	5	—	SU	EG SY	The <i>BTR-40</i> is a command vehicle. In Egypt all <i>BRDM Sagger</i> carriers were assigned to mechanized infantry brigades but many were detached during the 1973 war to support the infantry brigades in the Sinai.
T-34/100	6-100mm AT guns mounted on modi- fied <i>T-34</i> chassis, about 70 men.	30?	50	275	?	—	—	EG	Syria uses a version mounting a 122mm gun. The <i>T34/100</i> mounts a Soviet <i>T-12</i> 100mm ATG with a range of 3000m, ROF of 7-8rpm, and crew of 7.
SU-100	6 <i>SU-100</i> assault guns, 6 MG, 24 crew.	30	57	300	4	1	SU	EG SY	WWII vintage. An effective weapon used by Egypt in 1956, 1973. Probably still in use.
T-34/85	5 <i>T-34/85</i> tanks mounting 85mm guns, 10 MG, 20 men.	32	50	275	5	2	SU	EG	WWII vintage. In 1973 only used as training vehicle. Syria used 200 as static anti-tank weapons.
T-55	5 <i>T-55</i> tanks mounting 100mm guns (42 rounds each 10 MG 20 crew.	36	50	480	4	2	SU CZ PO	EG SY	Captured models used by Israel as <i>T1-67</i> . ROF: 3-5.
T-62	5 <i>T-62</i> tanks mount- ing 115mm smooth- bore guns (40 rounds each), 5 MG, 20 crew.	36.5	48	500	4	1	SU	EG SY	<i>T-62A</i> mounts 2 MG. ROF: 4-6.
T-10M	5 <i>T-10M</i> tanks mount- ing 122mm guns (30 rounds each), 10 MG, 20 crew.	50	45	250	4	2	SU	EG SY	Improved version of <i>JS-III</i> used in WWII; some used by Israel. Powerful gun limited by small ammunition capacity.
Centurion	5 <i>Centurion</i> tanks mounting 20-pdr (83.4mm) guns (64 rounds each), 10 MG, 20 crew.	51	35	97	4	2	UK	EG JN	Limited range and inferior speed hamper an otherwise satisfactory design. Egypt received 32 in 1954 and Jordan 40 or more by 1967.

PT-54	several T-54 tanks mounting mine-clearing equipment.	36	50	400	4	3	SU	EG SY	Captured models used by Israel.
MTU-2	several T-55 tanks modified to carry and lay bridge.	36	50	400	4	3	SU	EG SY	Similar to T-55 carrying a 19m bridge; Egypt also used earlier MTU-1 based on T-54.
GSP	several GSP ferries.	18?	40?	?	2?	—	SU	EG	Pontoons mounted on M-65 carrier able to carry loads up to 52 tons. Two GSPs are combined to form one ferry.
PMP	large number of heavily modified 10-ton TATRA 813 trucks.	?	70	400	?	—	SU	EG	Egypt also used earlier Soviet bridges, the TMM and TPP, as well as bridges obtained from West Germany.
MLG	several BTR-152 APCs towing the MLG automatic minelayer.	9?	75	650	?	—	SU	EG	Possibly used by Syria.
Shilka	4 ZSU-23-4 Shilka SP AA vehicles, mounting quad 23mm guns.	15	44	250	4	—	SU	EG	The most effective AA weapon in the world. Effective ROF: 4 x 400 rpm; Range: 2500m.
Mi-8	3 Mi-8 transport helicopters.	12	250	425	2-3	—	SU	EG SY	Can carry bombs, napalm, rockets, or Saggers.

ARMIES IN CONFLICT MORALE: Key to Victory

Morale levels vary from period to period, from army to army, and from unit to unit. This section is intended for gamers interested in creating their own situations, providing the necessary data for assigning morale levels.

ISRAEL: In 1956 the typical Israeli unit had a *B* morale level. Exceptions include the 202nd Paratroop Brigade, a crack unit led by Arik Sharon (who commanded the attack on Abu Agheila in 1967 and the canal crossing in 1973), had an *A* morale level. Other units such as the 37th Armored Brigade and the 4th Infantry Brigade had *C* morale levels, a tribute to poor leadership and training in these reserve units.

The typical Israel unit in 1967 had an *A* morale level. The quality of the reserve units had increased considerably since 1956, so that there was less variation between individual units. A number of units had *B* morale levels, such as the second-line infantry battalions attached to the Jerusalem Brigade and a number of other infantry formations.

In 1973, all Israeli units had an *A* morale level, with two significant exceptions. The reservists manning the Bar-Lev line (from the 16th Jerusalem Brigade) and certain *ad-hoc* tank units formed in the course of the war had *B* morale levels. In addition, at various times certain tank units that fought continuously for extended periods of time had their morale levels temporarily reduced to *B*.

EGYPTIAN: In 1956, the typical Egyptian unit had a *C* morale level. Reserve and national guard units had *D* morale levels. The 1st Armored

Brigade may rate a *B* morale level, unless it has just been subjected to intensive air attack. It is, however, important to remember that most of the Egyptian units in the Sinai were not the better ones. All of the good units had been pulled out to protect the Suez Canal and the Nile Delta from the expected Anglo-French attack that followed the Israeli invasion.

In 1967, Egyptian units had morales of *B* and *C*. The good regular army units (of which there were only a few) had the *B* morale; the rest were *C*'s. A few units, such as the commando battalions and the paratroop brigade could have rated as *A*'s. Unfortunately, there is no way of telling how they would have fought given a fair fight (by the time such units got into action, the war was over for all intents and purposes). Another problem the Egyptians had was severe disorganization. The rapidity with which units were transferred into the Sinai from peace-time bases, coupled with an unwieldy command structure caused severe problems. So much so that by the start of the war many units were out of supply, in need of major maintenance, etc. (Many infantry units were sent out to desert positions, and then apparently abandoned by higher headquarters. By the start of the war, such units were already disintegrating. Armor units were often shuttled around so much that they were in need of major refit.)

In 1973, the general quality of the Egyptian Army had greatly improved. The average unit was a *B*. In addition, special units like the commando (*Saiga*) battalions, had *A* morale levels.

SYRIAN: The average Syrian unit in 1967 had a

morale level of *C*. The only superior units, with morale of *B*, never saw action because they remained in Damascus and North Syria protecting the regime in power from attempted coups. By 1973, the average unit was either a *B* or *C* (divided about half and half). The *B*'s included such units as the 3rd Tank Division, commanded by the brother of the Syrian President. Unlike 1967, units intended to protect the regime were committed to action. Although they suffered heavy casualties—losing up to two-thirds of their equipment, the same regime is still in power.

OTHERS: The Jordanians are *B*'s through 1967 (with the exception of the tank brigades, which would be *A*'s). In 1973, the tank brigades committed to the Syrian front were *A*'s. The Iraqis, such as they are and were, tend to be *C*'s, except when they are *D*'s. It is possible that there may now be some *B*'s in the Iraqi Army—about as likely as a Jewish Pope . . . (In the words of one critic, the Iraqi Army makes the Egyptians all look like Prussians). The Palestine Liberation Army units that fought in 1967 (in the Gaza Strip) and in 1973 (in Egypt and Syria) were *C*'s. Some might now be *B*'s.

IMPORTANT: Unless you are willing to do a lot of paperwork, all the units on one side should have the same morale level. Thus it is usually necessary to come up with an average for all the units used. Note, however, that the Jordanian counters can easily be used for units given a different morale level from the rest of the Arab counters.

BARBAROSSA REPULSED!

Expanding on The Viipuri Defense

By J. Richard Jarvinen

Defense for the Soviet player in *RUSSIAN CAMPAIGN* is not an easy task. By the first winter many Soviet commanders are reduced to tears as their paltry army is torn to shreds by the ruthless German advance. All advantages are on the German side: power, mobility, air support and even psychology. The German army appears invincible while the Russian forces are continually haunted by the specter of defeat. However, a defeatist attitude must be avoided if the Russian line is to hold. Loss of confidence at a critical time can be fatal. A river is abandoned without a fight. A fallen city that could have been liberated is left to the mercy of the invader. Or a hundred other positions that could be saved are lost, due to despair rather than to tactical or strategic considerations.

For some players, these problems are insurmountable. They would rather take command of the German forces, with their overwhelming attacks and spectacular breakthroughs, while swarms of Stukas harass the Russian defense. Despite these disadvantages, I still prefer the role of Stalin. Patience is its own reward. With careful play and proper utilization of resources, the German tide can be stemmed. Psychology can also work to the Russian's advantage. The desire for revenge, the chance of defeating an enemy who attacked without provocation, and the reclaiming of land rightfully yours can all be very satisfying and contribute to the Russian attitude.

Having presented an opening defense for the Russian player ("The Viipuri Defense," in Vol. 13, No. 6), the next logical step in a study of Russian defensive tactics is an analysis of the middle game. For purposes of this article, the middle game is defined as the period from Sept.-Oct. '41 to Nov.-Dec. '43. This critical time will determine to what extent and when (if ever) the Russian can assume the offensive. Consequently an overall policy of defense and consolidation is proposed. Offense is considered only prior to or during snow months or when necessary to regain a crucial objective. Whereas in the first few months of war, the Russian is willing to give up large areas of land, the middle game period is one where ground must be held, in some cases at all costs. In these instances, offensives are not only desirable, but mandatory. If the Russian is able to assume an overall offensive posture before the end

of 1943, well and good; but with evenly matched opponents and normal weather, this is generally not possible.

Basic Russian Strategy

As this article is primarily concerned with the tactical aspects of Russian defense, only slight consideration will be given to the overall strategic picture. However, as strategy is by necessity inextricably intertwined with tactics, some discussion is necessary. The major question of strategy is where should the Russian forces stop falling back and attempt to form a cohesive defensive line. In the opening, river lines are used to advantage, but these lines should be recognized as being only temporary, serving to delay, but not stop, the German advance while the Russian production builds up steam. Obviously the Russian cannot retreat forever, as he would soon retreat off the board and lose the game by default. The question is *where?*

In Diagram 1 two major defensive lines are shown. The yellow line is the First Line of Defense (FLD) and the red line is the Main Line of Defense (MLD). This is the basic position that the Russian would like to present to the German when the weather clears in 1942. While local exceptions to the defense presented are unavoidable, an attempt should be made to recreate this line as faithfully as possible.

The FLD should be held whenever possible, but not at the cost of committing a large amount of resources and/or reserves. Once broken, an orderly withdrawal should be made to the MLD. This is the line that should be held if the Russian hopes to retain any chance of winning the game. If it can't be held, an effort should be made to make the breach so costly to the Germans that it will be fatal to his cause. The MLD is also the line where reserves should be committed in order to regain key rivers and major cities. Only in the most dire circumstances should this line be abandoned. Only when all hope of a win has been lost should the Russian retreat to the final line of defense, which consists basically of the line from Gorki to Astrakhan (which will remain the subject of a future article). *Don't* give up hope too easily. You (and the Russian production) may surprise yourself.

As mentioned before, local exceptions may exist in the Russian position of the FLD. In most cases, however, lost river lines or key hexes may be regained with a winter offensive. Winter is when the German is most vulnerable, and therefore more cautious. Attack with abandon in Nov-Dec '41. Snow is assured for the next turn, and most German commanders will undoubtedly retreat far out of range of potential Russian attacks. January and February should not be used to attack retreating Germans, but rather to consolidate your position along the FLD. Care must be taken not to stray too far from the FLD when attacking the Germans, because if the weather suddenly turns, you may find yourself exposed and vulnerable on the open Russian steppes.

The Russian Dream Defense

Presented in Diagram 1 is what I have termed the "dream defense." Ambitious is a nicer word, but unfortunately dream is more accurate. Shown on the map are some 159 combat factors out of a possible 227 factors available (not counting Guards, workers, paratroopers, Stalin or Stavka). It is unlikely that the Russian will have this many units in his command when March rolls around. Also the German will be trying quite hard to penetrate further than the lines indicated by the first winter. However, the following assumptions are made: The German has failed to take Leningrad, Moscow, Kharkov and Rostov; the bulk of his army is wintering in or near Bryansk; the Finns have failed to break out of Finland; and 159 factors are available. In the event that there are less than the required number of factors, units in hexes marked with an asterisk can be released. The total number of factors would then be 116, certainly a reasonable figure. However, weaknesses are created wherever units are released. If given a choice, units in less threatened areas (such as in or near Rostov) should be given preference over those around Moscow.

No guards are shown on the map. Rather they would be placed on the hexes marked with a star, as reserve forces to counter any German breakthrough. Specific disposition is left to the player's discretion, dependent upon German threats. By March, 38 factors of Guards will be available, with

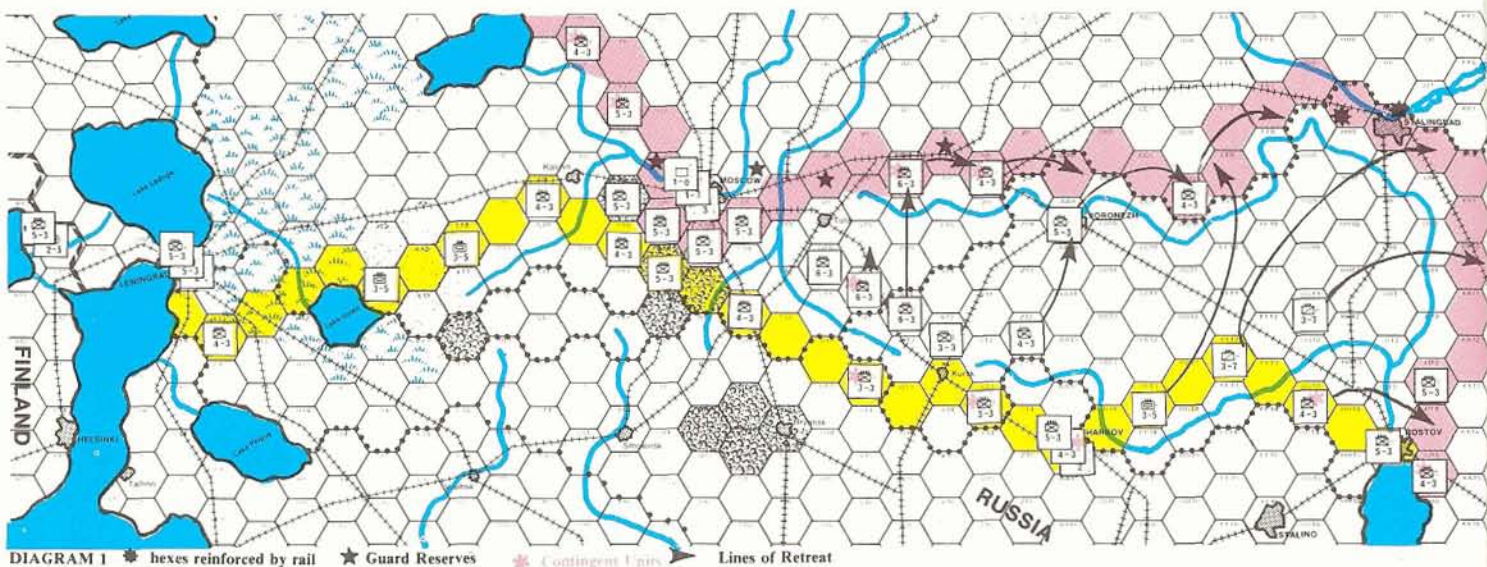


DIAGRAM 1 ★ hexes reinforced by rail ★ Guard Reserves ★ Contingent Units — Lines of Retreat

risk must be taken, but the rewards are well worth the effort. The situation is nowhere near hopeless, as suggested by Diagram 3.

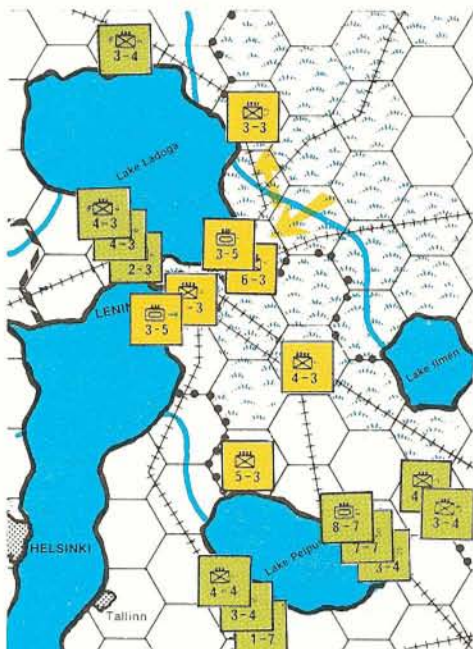


DIAGRAM 4 "The Fight for Leningrad" (Sep '41) *Hall Movement*

Soakoffs

Soakoffs are an integral part of most wargames, and are particularly important in *RUSSIAN CAMPAIGN*. Faulty execution can have disastrous results. Therefore some analysis is required of this important concept. In Diagram 5 is presented a rather simple problem concerning placement and soakoffs. Assume it is clear weather, no other units are available, you may not enter the Q or the Z row, and your orders are to drive the Germans from Tula and occupy it if possible. Not too difficult, but there is one fatal trap. Finished? All right, how many of you placed your two guard units on V-9? (Nobody, I hope!) This could be a calamity. Assume you came up with the attack shown in Diagram 6. True, you have a 5-1 against the 7th Inf. which assures you of victory, at the cost of a 1-6 soak-off against the units on V-10 and X-10. But if this is what you did, you didn't study the consequences of such a move. *Regardless* of the result against the 7th and the soakoff, the two guard units are committed to a 1-2 attack against the 8th and 12th Inf. on V-10. No other units are available to flank the Germans, and you face the loss of the cream of your troops. How,

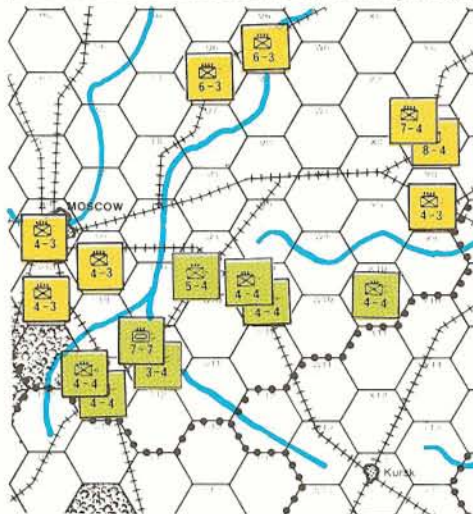


DIAGRAM 5 "It's Never Tula(te)"

much simpler it would have been to place the guards on U-8 and the infantry on V-9. After the successful attack on the 7th, the guards can advance into Tula and assist the 39th and 59th for a 3-1 against the 7th. Not a sure thing, but it beats the hell out of a 1-2!

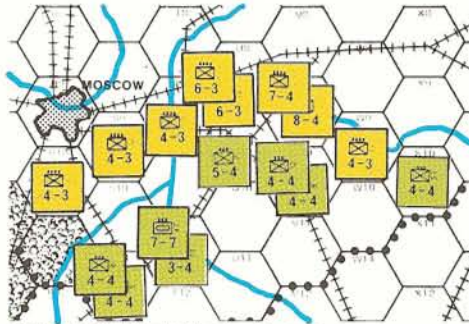


DIAGRAM 6 "Potential Russian Disaster"

Invariably this type of situation occurs when a Contact result is obtained in a primary attack that is in conjunction with a soakoff. There are several solutions to this problem. The first thing is to recognize the possibility of its occurrence. Then, assuming that enough units are available, to execute the attack in one of the following ways:

- 1) Position the less mobile infantry in hexes where they can attack both forces in question, allowing the armored or guards to swing around and flank the defending units (as in the above example).
- 2) Position an extra armored (or possibly guard) unit where it can advance and soakoff in the second impulse should the original soakoff unit be eliminated or unable to advance.
- 3) Place an extra unit in the primary attack that is not necessary to achieve the desired odds in a hex where it can attack both forces. Should the primary attack be a Contact and the original soakoff unit be eliminated, this extra unit can now provide the required soakoff. Note that this unit need not be an armored or guard unit.

Russian Offensive Tactics

Many Russian commanders often curse their slow moving troops. The small movement allowance and lack of ability to move in the second impulse for most of his units preclude the sweeping, enveloping attacks that the German uses so effectively. However, the observant Russian does have some techniques available that can concentrate his forces very quickly in a threatened area, perhaps not as dramatically as the German but still effective enough to stage rather strong attacks. For example, consider the situation in Diagram 7. The time is November, 1941, and the 1st GD had just arrived in Moscow. The weather, fortunately for the Germans, has remained clear. The German, however, has dispersed much of his force in assaults against Leningrad and the southern production centers. But still the Russian seems to be greatly outnumbered by the powerful and more mobile German forces. Assuming you have production facilities totalling eight combat strength points (counting the arrival in November), all types of units are available in the dead pile, and the newly arriving reinforcements are not needed elsewhere, how would you handle the situation? (Assume you may not enter hex row U.)

All those who assumed a defensive posture go to the back of the class. *Now* is the time to attack! With snow next month, the German will be forced to retreat his starving troops, especially when faced with potential Russian attacks. For those who attempted a 4-1 on the 5th and 20th Infantry on 0-12 with a soakoff against the 13th, give yourself half

credit. At least you tried. My solution is to launch a massive attack against the German left flank, driving the Germans back and opening a route for a second impulse attack against the 6th and 8th on 0-13. Massive, you question? How can that be possible? Well, just examine the position in Diagram 8. The placement of the new worker unit in Kalinin is essential in order to create a 4-3 unit that can attack the 13th Inf. from N-11, robbing the defender of the river's advantage, as well as giving us a 5-1, which assures us of victory. By creating another replacement in Moscow we are able to get a 4-1 on the units on 0-12. By placing the newly arriving guards on Q-11, a 4-1 attack on the 6th and 8th Inf. can be attained in the second impulse. Other units secure the river line in front of Moscow. The worst result that can occur against the 5th and 20th is a Contact, but that virtually seals their doom. The 7th Armored could then advance to N-12, surrounding the German force on 0-12. My computations conclude a 9.03 (!) expected loss of German combat factors against a Russian loss of only 1.97. This return plus the overwhelming strength in the area will force the German far from Moscow in the oncoming snow months. And there is always the chance that the attacks will result in the loss of all 18 German factors (9.3%). These losses will certainly hurt the German badly, and if his losses have already been considerable, may amount to a major disaster.

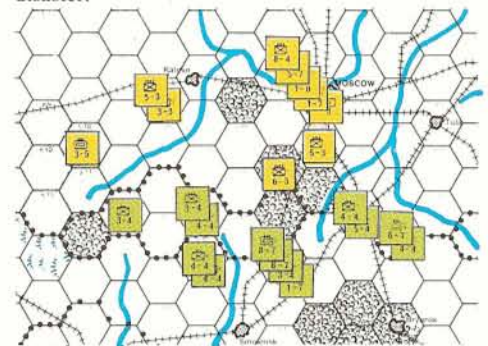


DIAGRAM 7 "Moscow Threatened?" (Nov '41)

Comparing Diagram 7 with Diagram 8, we can see a difference in Russian strength of 47 combat factors! Despite the movement restrictions on the Russian forces, it can be demonstrated that, given the right conditions, a lightning strike can be quickly generated, throwing the Germans off balance or possibly hurting him critically.

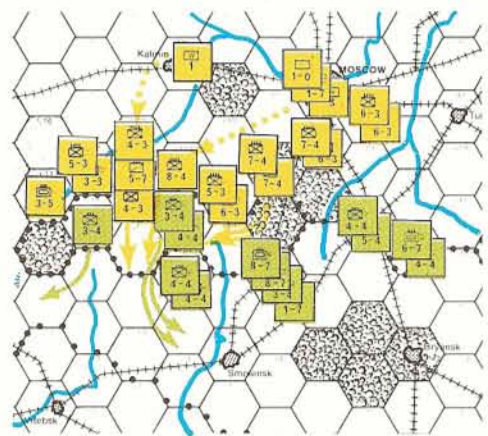


DIAGRAM 8 "AGC Stung!" (Dec '41)

●●●●● Path of replacements (13th & 27th Inf)
 — Russian 2nd Impulse Movement
 — German Paths of Retreat

Note carefully the retreat paths for the Germans. The 13th is retreated such as to allow the 7th Armored access to N-12 should it be necessary. The 5th and 20th are retreated to non-rail hexes, almost always a good idea.

And while some may criticize the soundness of placing a worker unit so near the front as well as on a minor city, this particular situation certainly merits such a tactic. While we're on the subject of worker units, I might add that I generally place the large "2" workers in Archangel and Astrakhan. Both cities are remote enough to be out of harm's way, and thus provide the maximum possible production before being destroyed. The small "1" units I place in other major cities in the rear, such as Gorki and Saratov. Only in the most unusual circumstances (such as in the above example) will I consider placing workers near the front line or in surrounded cities.

Harassment Techniques

Partisans are the primary force that the Russian has available to harass the German army. Despite their obvious limitations, they should not be taken lightly by either the German or the Russian. They have three major functions:

- 1) Delaying reinforcements
- 2) Cutting German supply lines
- 3) Preventing an easy shift of German forces from one front to another

The third function is particularly important when mounting an offensive against a German position. The availability of German reserves may spell the difference between victory and defeat in an area.

Never assume that you have no place to put your partisans. There is almost always some hex the German has overlooked or where you may gain an advantage, however slight. If the German has garrisoned entire rail lines to secure a front, then the partisans have already done their job before even being placed, having tied up numerous units in "partisan duty."

Partisans are not the only means by which to harass German supply and movement. Raids deep into German occupied territory can severely hamper German logistics, and coupled with partisans or paratroopers, may prove crippling. Not uncommon is the situation presented in Diagram 9. Army Group South has had good success and threatens both Kharkov and the key rail junction of Kursk.

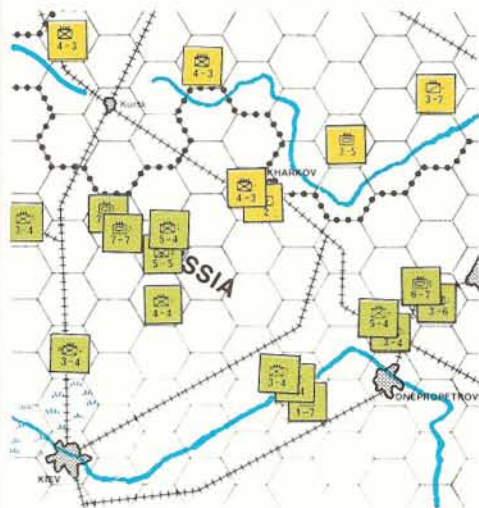


DIAGRAM 9 "German Weakness?"

Partisans are not the only means by which to harass German supply and movement. Raids deep into German occupied territory can severely hamper German logistics, and coupled with partisans or paratroopers, may prove crippling. Not uncommon is the situation presented in Diagram 9. Army Group South has had good success and threatens both Kharkov and the key rail junction of Kursk. With only minimum forces in the area, the Russian

must fall back. However, a popular German trick can be used against him in order to stall his offensive. Assuming the weather is clear, the 11th Armored on CC-11 should move down to Z-17 and attack the 30th Inf. Hopefully you can get an AR result, allowing you to retreat to Y-18, and thus move into Kiev during the second impulse. The German will be forced to attack this minor unit, as Kiev controls the supply lines into southern Russia. If you can spare the unit, the 18th Inf. in Kharkov can be added to your attack to raise it to 1-1. On an A1 result, the infantry unit is eliminated and the armored unit is retreated as before. If a DR is the result, the 11th Armored can now move down to X-18 and attack the Rumanian 4th at 1-1, again hoping for an AR which would enable it to "retreat" into Kiev. Counting occupation of Kiev and EX as good results, the chance for a favorable mission is 75.0%! Even if the mission is a failure, this strategem will certainly keep the German commander on his toes, and will undoubtedly force him to garrison such places as Kiev or form a stronger, but more dispersed front line.

Paratroopers are another weapon at the Russian's disposal that can cause the German grievous headaches. While not strong enough to create an offensive threat by themselves, in conjunction with other forces they can prove to be an effective weapon. I prefer not to use them freely, but to reserve their use for a particularly important offensive phase or when there is a chance to trap some German armored units. In wargames, as in chess, the threat is often greater than the execution.

As they may not move and may not be dropped in an enemy ZOC, it is rare when you would want to drop more than one paratrooper unit in the same hex. Their purpose is not to secure strong points but to block enemy paths of retreat. Once dropped, they are gone forever, so be stingy with their utilization. As long as the Stavka unit lives, there should be no reason to bring them on as ordinary reinforcements.

Another effective trick is a pre-winter invasion of Rumania. If the German has not garrisoned Rumania, a 3-5 armored unit should invade the Rumanian coast at EE-27 in September, advancing to DD-28 in October (see Diagram 10). Note that this trick will not work in November as the Bulgarian garrison will be able to successfully defend Bucharest in January. If the German has also been careless with his units on "partisan duty" it may be possible to place a partisan on W25, which virtually assures the armored unit of reaching Bucharest in November, causing the surrender of all Rumanians. Recapturing Bucharest in the winter is practically impossible, and even during non-snow months will require considerable effort on the German's part.

Even if the German is able to reach BB-27 by rail movement, valuable units are still drawn from the front lines as well as use up two or three of the five rail allocations which the German has available. If snow does fall in November, this relief force will at best get a 3-1 on the invader.

Regardless of the number of ports controlled by the Russian, I still recommend an invasion against an ungarrisoned Bucharest. The rewards involved far exceed the cost of replacing one small armored unit.

The possibilities involved in this maneuver are interesting enough to make it a "mini-game" for study, with the race for Bucharest slightly in favor of the Russian player.

Someone once said, "a little knowledge is a dangerous thing." In *RUSSIAN CAMPAIGN*, this maxim can visibly be demonstrated. While it is conceivable that none of the above tactics will be used in any given game, just knowledge of these tactics will place an additional burden on the



DIAGRAM 10 "Waltzing Up the Danube" (Sep '41)

★ Invasion Hex Russian Move German Rail Move
German commander's shoulders as he is forced to garrison such remote places as Kiev and Bucharest, keep rail lines open, protect front lines from paratrooper assault and numerous other little irritants, all of which can add up to a giant plus for the Russian cause.



AREA TOP TWENTY

Rank	Name	Times On List	Rating	Previous Rank
1.	W. Dobson	2	KFH2366	1
2.	R. Chiang	8	FGN2156	2
3.	J. Zajicek	3	DGJ1992	4
4.	P. Huffman	3	DCC1882	5
5.	T. Oleson	9	MMT1860	3
6.	J. Angiolillo	2	CEH1842	8
7.	D. Cornell	2	KEE1823	7
8.	S. Packwood	7	EFE1803	9
9.	T. Dobson	1	LEB1794	—
10.	D. Barker	7	EFJ1786	13
11.	R. Wood	6	FFM1761	6
12.	S. Heinowski	7	DFJ1746	11
13.	G. Kilbride	6	DEI1744	12
14.	D. Greenwood	1	CCD1742	—
15.	R. Leach	2	CEI1734	10
16.	K. MacDonald	1	CDF1717	—
17.	J. Sunde	1	DED1686	—
18.	K. Blanch	2	CDD1677	15
19.	B. Haden	1	CEF1671	—
20.	D. Agosta	2	ECE1639	16

The above players represent the 20 highest verified (11+ rated games) of the 3,000 member AREA pool. Players with an opponent qualifier less than C were not calculated among the top player ratings.

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

06109-01	45208-01	70601-04	93063-01
11214-01	46556-01	73139-01	Canad-02
14037-01	58102-01	91789-01	OVERS-07
28301-02	60641-01	93555-01	

THIRD REICH: THE EARLY YEARS

by David Bottger

Introduction

In its three years, *THIRD REICH* has attracted relatively few articles on tactics and strategy. Aside from a Series Replay in Vol. 11, No. 6 of the *GENERAL*, the article on Russian play and a few pathetic (to be frank) efforts in other magazines, writers have shied away from in-depth analysis of play, while lesser simulations have spawned pages of print.

Strange, yet understandable, that a game of *THIRD REICH*'S rich tactical and strategic variety would receive such treatment. Strange, because *THIRD REICH* strikes a fine balance between the usual wargame, which deposits players in a situation not of their own making with victory conditions not of their own choosing, and the current flood of "monster" games, most notably G.D.W.'s *Drang Nach Osten/Unentschieden* and S.P.I.'s *War in the East, West and Pacific*, where broad strategy lies buried under the avalanche of counters and mapsheets. *THIRD REICH* stands out as a true strategic-level wargame, allowing its players to conduct the war as they choose, working only under the broad limitation of their nations' economic abilities. So it is strange that so few would explore the myriad options of the game.

But understandable, too, that players would be hesitant to advise on a game where all plans are good and bad, depending on how the rest of the "world" responds. *THIRD REICH* defies the perfect plan. Perhaps for that reason, it discourages articles from players who only write when they have "cracked" a game-system.

This article is written, then, not to exhaust discussion but to stimulate it. I trust many will disagree with my opinions and advice. I hope that some of them will be sufficiently outraged to reply in these pages.

The scope of the game and the limits of my experience require that this article cover only the early years of the campaign game, from Fall 1939 to Winter 1940. Among poor players, the game can end by then. Among better players, these early turns can put one side at a disadvantage it may never overcome. The early campaigns, from blitzkrieg in Poland to preparation for Barbarossa, illustrate many of the tactics which will help determine the outcome in Russia, North Africa and on the drive to Rome and Berlin.

1939

The Conquest of Poland

In *THIRD REICH* (hereafter *3R*), as historically, the German player must conquer Poland quickly. Failure to occupy Warsaw in Fall 1939 will not only cost 15 BRP's for an offensive option next turn, it will delay the Axis timetable for the conquest of the Low Countries and France. Not surprisingly, then, the Allied goal is to delay the fall of Poland as long as possible.



Figure 1 AH Defense

Allied strategy in Poland essentially consists of the deployment of Polish units. This problem has already been the subject of some discussion, notably the contest solution appearing in Vol. 12, No. 5 of the *GENERAL* and the more sophisticated analysis by Robert Beyma in Vol. 13, No. 4. As Beyma demonstrated, the set-up suggested as best by AH will inflict, on the average, 7.59 BRP casualties on Germany (figure 1).

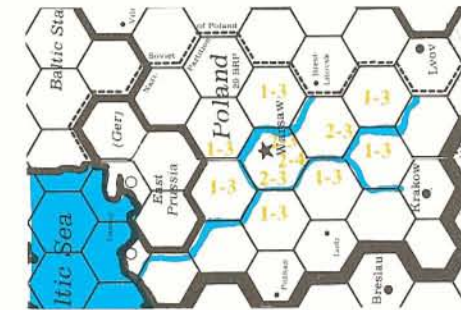


Figure 2 Alternate Defense

However, Beyma's article is subject to criticism in two respects. First, I believe he errs in directing his attacks against the alternative Polish defense he analyzes. In this defense (figure 2), he moves the 1-3 from Brest-Litovsk to the hex northeast of Warsaw, preventing a direct attack on the city. He then correctly notes that the best German assault on this set-up is to attack the 2-3 southeast of Warsaw at 2:1, followed by a 3:1 exploitation against Warsaw itself. But I do not agree that the 2:1 should be performed by a 4-6 armor and 4 air factors, as he suggests. In the event of any kind of exchange, this attack forces the German to lose expensive air factors so that the armor can occupy the breakthrough hex.

I prefer to make this 2:1 attack with a 3-3 infantry, a 4-6 armor and 1 air factor. With these units, a full exchange will cost only 6 BRP's (infantry and the air factor) and a CA exchange will eliminate only the infantry. Using Beyma's equation, my 2:1 followed by the same 3:1 attack will cost:

$$\begin{aligned} \text{Expected losses} &= .1875 (6+3) + .03125 (14) + \\ &\quad .96875 [.1714 (16) + .1143 (8)] \\ &= 6.67 \text{ BRP's.} \end{aligned}$$



Figure 3 Standard Defense

The second criticism of Beyma's analysis is that he uses an obviously inferior Polish defense (figure 2) for comparison to AH's defense. What I call the standard defense (figure 3) provides a much better comparison. The proper attack on this defense is a 2:1 across the river on the 2-3 southeast of Warsaw, then a 3:1 on the capital. These attacks require, respectively, a 3-3 infantry, 4-6 armor and 5 air factors, plus 3 armor units and 12 air factors. Average losses here are:

$$\begin{aligned} \text{E.L.} &= .1875 (12+3) + .03125 (26) + \\ &\quad .96875 [.1714 (16) + .1143 (8)] \\ &= 7.17 \text{ BRP's.} \end{aligned}$$

As Beyma notes in closing, BRP losses are not the only consideration in picking a Polish defense. After all, the difference between 7.59 and 6.67 BRP's is not likely to decide the game. The defense which requires the greatest commitment of German units, particularly air and armor, to Poland provides the best insurance against a first-turn attack elsewhere. The following table shows this comparison.

	Inf.	Armor	Air*	Total
AH defense	6	0	20	26
Beyma's comparison	3	16	15	34
Standard defense	3	16	19	38

*Includes 2 factors to counterair Polish air.

As this table shows, AH's defense finishes dead last in diverting forces from other areas. Note especially that it requires *no* armor, while the other defenses demand all 4 armored units. And the standard defense uses only 1 air factor fewer. The AH defense thus exacts a high price from the Allied player in return for an average gain of .42 BRP's.

German Options

Even without all of that armor freed by the AH defense, Germany in Fall 1939 has enough units to go looking elsewhere for combat. Basically, the German player has four options.

1) Do nothing. Not very appealing to an aggressive (or wise) German.

2) Attack Russia. I do not advise it. Russia starts with 68 combat factors and 90 BRP's, for a total strength of 158 combat factors (assuming the BRP's are used exclusively to build infantry). Given a sloppy Russian deployment, Germany may be able to take Leningrad in Fall 1939, costing Russia 15 BRP's and her fleet, if docked there, because it will have no other port as a refuge. This leaves the equivalent of 116 combat factors for Russia. Another 42 must be destroyed before Spring 1940 to bring Russia below 75 and force surrender. Given Germany's weak initial forces, most of which will be attacking Poland on the first turn, and France and Britain pounding on the western border, destruction of 42 factors in two turns is most unlikely. Once 1940 begins, Russia gets 75 more BRP's (60 if Moscow has fallen), and German success becomes even more remote.

3) Invade the Low Countries and/or Denmark. This is the course I suppose many players adopt. It has the advantage of posing an early threat to France. It also has its disadvantages.

Against almost any Polish defense, the uncommitted German forces may be able to conquer Luxembourg and Belgium, Netherlands or Denmark, but no more. Thus for the price of an offensive option and two declarations of war, Germany gains up to 20 BRP's and threatens France from 3 more hexes. Worth it? Hardly.

To digress a bit, the importance of the yearly cycle in *3R* can scarcely be overstated. The fate of nations, especially France and Russia, often hinges on surviving until the year-start sequence and receiving a fresh BRP allotment. For this reason, Germany benefits little from attacking France in 1939. Absent idiotic play, France cannot be felled in two turns. And knowing that 85 BRP's are due in the spring, the French player can counterattack with

abandon. So Germany should attack in Spring 1940, forcing France to stretch her BRP's over 4 turns instead of 2.

Since the French campaign will not begin until 1940, those 3 Belgian hexes provide little advantage in Fall 1939. Incidentally, if Germany moves into unoccupied Luxembourg in Fall 1939, units there could be attritioned out immediately, since Luxembourg has no capital. But if Germany waits until France occupies Luxembourg, units there can be attacked across the river, thus allowing Germany to place a bridgehead marker in Luxembourg. The bridgehead prevents the Allies from taking Luxembourg by attrition and permits German units to overstack in preparation for the drive on Paris.

The better course, therefore, is to wait until Winter 1939, then take Belgium, Netherlands, Luxembourg and, if desired, Denmark, in one offensive option. The 15 BRP's saved can buy 5 air factors, a sizeable dividend. And by 1940, Germany will be in position to invade France.

4) Declare war on Yugoslavia. I favor this course.

Most German players will prefer to get Italy into the war as soon as possible, particularly now that the rules prohibit German units in neutral Italy. But if Italy declares war in Fall 1939 for 35 BRP's, she can spend only 2 more that turn, not enough for an offensive option against France or British troops in North Africa.



Figure 4 Yugoslavian Defense

A German declaration of war on Yugoslavia permits Italian units to take an attrition option there as well as in North Africa. Unfortunately for the Axis, Italian initial ground strength totals only 14 factors. Even if all 14 participated in the attrition option against Yugoslavia, a 1/6 chance that no Yugoslavs would be eliminated remains. And a full-strength Yugoslav army can prevent a 2:1 attack on Belgrade by the deployment shown in figure 4. Because of stacking limits, Italy can cram only 14 ground factors into the hexes across the river from Belgrade. Counterair of Yugoslavia's 2 air factors leaves 8 Italian air factors as ground support, for an optimum attack of 22:12 = 1:1. Roll a 5 and Italy is in trouble.

Remove any one Yugoslavian unit in Fall 1939, though, and the defense breaks down, allowing a 2:1 against Belgrade in Winter 1939. To guarantee that the attrition option in Fall 1939 bags at least 1 unit, the German player should send enough units there, probably excess infantry, to reach the 21-30 column on the attrition resolution table. This move virtually assures the fall of Yugoslavia in Winter 1939, makes for a happy Italian ally and gives Germany 10 BRP's for a cooperative conquest. Not bad for an investment of 10 BRP's and a few infantry units.

Incidentally, since Italy has only 2 BRP's to spend on unit construction in Fall 1939, Germany is well advised to build a few replacement units for strategic redeployment to Italy. An Allied amphibious assault or attack across the Alps and exploitation to Rome in Fall 1939 bodes ill for the Axis.

The rest of the German builds should emphasize the weapons of offense; air, armor and airborne. As the German player, I always build the airborne unit in Fall 1939 and base it at Bremen, where it can reach London and Paris. This forces both the British and French to garrison their capitals. From here the para unit can also be dropped on Copenhagen to aid infantry attacking across the crossing arrow. From Copenhagen, the para unit can either be strategically redeployed back to Bremen or, in conjunction with an air unit, assault Oslo. More on Norway later.

A Two-Front War

For the real craphooter, or simply to liven up the game, the German player may consider a simultaneous attack on Poland and France in Fall 1939. This option promises either a stunning Axis success or an early end to the war. Most of all, it requires good to excellent German die rolls. To illustrate this strategy, I will use the standard Polish defense (figure 3) and the French set-up suggested by AH in its contest solution in Vol. 12, No. 1 of the GENERAL (figure 5).

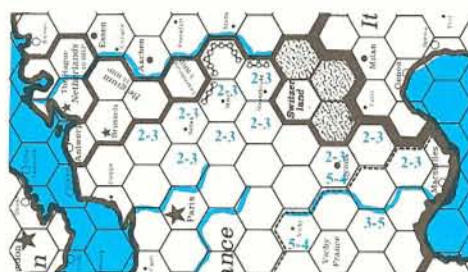


Figure 5 French Defense

Germany begins the war with 8 infantry units, 4 armored units, 20 air points and 2 fleets. One infantry unit must be placed in Finland to prevent a Russian attack. The other 7 start in East Prussia or eastern Germany, poised to attack Poland. Deploy the 4 armored units in western Germany in position to attack through Luxembourg. As for the air force, one unit must start in the east to counterair the Polish air force and provide ground support for one infantry attack. Place an airbase counter on the hex east of Strassbourg with an air unit there to counterair the French air unit at Lyons. The other 2 air units base in western Germany, in range of the hex east of Paris. Dock the fleet in Kiev or further west to threaten interception of British transport missions to France.

Italy deploys strongly in North Africa in an attempt to divert British reinforcements from France. Place two 1-3's on the French border, two 1-3's on Rome and one in Albania. One air unit should be based where it can reach the units guarding the French border, Rome and both northern beach hexes. The fleet starts at Taranto, and everything else goes to North Africa.

At the start of Fall 1939, Germany declares war on Luxembourg and takes offensive options in the east (free) and west, at a total cost of 25 BRP's. Italy declares war on the Allies for 35 BRP's.

In Poland, the infantry and 3 air factors make 3:1 attacks on the four 1-3's north and west of Warsaw, while the other two air factors counterair the Polish air force, neither side taking losses. At least 1 infantry unit must advance into the hex vacated by each eliminated Polish unit. All 4 hexes will be needed next turn for a 2:1 on Warsaw.

In the west, the air unit on Lyons is counterairred (no losses), while another German air unit stands ready to intercept the other French air unit. Two armored units move into Luxembourg and, with 4 factors of ground support, attack the French infantry unit on Sedan at 3:1. Exchange losses must, unfortunately, be taken from the air factors. One armored unit advances into Sedan. The remaining 2 armor units exploit to Sedan and attack the infantry unit east of Paris at 2:1 (figure 6). Meanwhile, the Italians take an attrition option in the Mediterranean and make threatening gestures toward Suez.



Figure 6 (German units in black; Allied in blue) Note that infantry northwest of Sedan may not trace supply from Dieppe to hex southwest of Dieppe, and so cannot move.

Germany uses the 50 BRP's left for builds as follows: in the east, up to 3 infantry units, making total forces there 8 infantry; in the west, 1 air unit, the airborne unit, 2 armored units and whatever infantry is left over from the east; 1 replacement unit must also be built and SR'd to Rumania.

Italy's builds are limited to two BRP's. Use them to build replacement units on the unguarded beach hexes.

If Axis luck has been good, France will be in difficult straits. Because of the German armor adjacent to Paris, no French units may be built on or SR'd to Paris. The only unit which can reach Paris will be the French armor. Note that the infantry northwest of Sedan is out of supply and cannot move. As a result, the hex northeast of Paris will remain vacant.

In general, French units will move north, toward Paris. Replacement units can be built on the Italian border, freeing the infantry there. Any surviving air factors stage to bases out of range of German counterair, such as Lorient and La Rochelle.

Rather than waste BRP's on a low-odds, risky counterattack, France should take an attrition option, hoping to regain the hex next to Paris. Germany, on the other hand, must keep that hex free of French units. If necessary, the German armor there should be removed as attrition losses to prevent a French advance. This will, however, permit SR to and builds on Paris and the hex northeast of Paris.

With a full 42 BRP's to spend, France can build its entire force pool. As mentioned above, 3 replacement units should be placed on the Italian border. The fourth appears in the vacant Maginot Line hex. One armored unit probably should backstop the Italian front defense to prevent breakthrough there. The other armor and all infantry appear around Paris, in anticipation of the coming attacks.

Germany again takes offensive options in the east and west in Winter 1939. In Poland, the 8 infantry units attack Warsaw across the river at 2:1 (Polish air force counterairred again). In France, two armored units occupy each of the following hexes: hex east of Paris, Sedan and Luxembourg. With 10 air factors ready to intercept the French air force, the armor on Sedan and 4 ground support factors attack the adjacent infantry at 3:1. The other 4 armored units exploit, two reoccupying the hex east

of Paris and 2 taking the hex northeast of Paris. With the para unit, they attack Paris at 3:1, two victorious armored units advancing. (figure 7).



Figure 7 (German units in black; French in blue)
Position after German Winter 1939 combat phase. France can get only 17 ground factors adjacent to Paris for counterattack.

After combat, Germany builds her air force to full strength and spends the rest of her BRP's on a few armored units, more infantry and/or replacement units to help defend Italy. The fleet is SR'd east while the victorious infantry in Poland is SR'd west.

If all has gone well for Germany, France can attack Paris from only 4 hexes at 18:22 = 1:2, with little chance of success. Before trying this strategy, remember that I have assumed near-perfect die rolls for Germany and no British forces in France. The two German fleets cannot stop all transport of British units to France and cannot prevent SR of British units at all. In addition, the British air units do not need naval help to intervene in France. The Italian deployment in North Africa should divert some British units but perhaps not enough to guarantee success in France.

If you, as the German player, want a quick game of 3R or if you see a faulty French deployment, consider this strategy. But be prepared to take your lumps.

The Allies in 1939

As the foregoing suggests, Allied strategy in 1939 and for as long as the Axis stays on the offensive depends on Axis strategy. This is especially true of France, whose goal is nothing more than survival. France must deploy carefully, build her entire force pool in Fall 1939, and wait for the inevitable. Unless Italy deploys miserably on the border, France should be content to stay on the defensive. The AH French set-up (figure 5) seems best, although I would like a unit on Marseilles. That port provides the only link between France and her colonies.

Britain, however, is another matter. The British need have little fear of a "Sealion" in 3R. Germany starts the war with only 2 fleets and will usually build air and ground units rather than expensive fleets. The main threat to British survival is an air assault on London. But this threat may be defused by keeping 7 ground factors on London. Given the restrictions on ground support imposed by 3R's second edition rules, Germany can muster only 12 factors against the British capital (para plus 9 air factors). Seven factors on London, doubled on defense, assure that Germany can do no better than 1:2 odds.

Relatively secure on their island, the British can consider sending troops overseas. Depending on Italian and German commitment to North Africa, much of Britain's armed forces may be required there. Whatever can be spared should, in my view, be sent to France. Allied victory demands that Germany not conquer Russia. And as long as France stays alive, Russia cannot receive the full Axis attention. So far from being altruistic, a British presence in France works to the benefit of Britain and the Allies generally.

How should British troops in France be used? The rules dictate that British units cannot occupy Paris or Maginot Line hexes. Beyond these

restrictions, the British can deploy on the front lines for defense or lay back as an offensive reserve.

If Britain decides to use its French contingent defensively, the units should be placed in the expected path of the German advance on Paris. Likely hexes are directly east and southeast of Paris. The former represents the most direct route from Luxembourg; the latter, the only approach which avoids river defense lines.

The Anglo-French cooperation rule makes the placement of British units especially critical. That rule prohibits stacking of British and French units. AH has ruled that "stacking" includes British air units flying defensive air support for French ground units and vice-versa, because DAS requires that the air units be placed on top of the defenders. As a result, if British ground units are deployed away from the German advance, then British air units will be unable to fly DAS at all.

British units may also be held in reserve for the eventual counterattack on Paris. British armor assumes particular importance here, as they allow 8 factors to be crammed into a single hex, rather than the French maximum of 6. Those 2 extra factors may spell the difference between a desperation 1:2 and a usually successful 1:1. Remember that British units cannot advance into Paris; make sure that at least one French infantry piece survives even a full exchange. This may force the Allies to take exchange losses in British units, but this may be the best course. With only French units left, next turn's attack to re-retake Paris will require only a French offensive option. And it saves the British player the trouble of staging his own Dunkirk withdrawal. To rescue British units from France in one turn will require an offensive option. The British fleets must change to a French port, transport the ground forces back home, and be SR'd home themselves. Better to be lost in combat and leave the French army intact for another turn.

Russia

In the early turns of a typical game, the Russian player must be ready for anything and do nothing. Russia should deploy with at least 3 possibilities in mind: (1) attack on an ungarrisoned Finland; (2) attack on an ungarrisoned Rumania; (3) early German declaration of war and invasion. The first requires strength in the north; the second, strength in the south; the third, strength in the center. Consequently, the Russian army finds itself spread along the border. But that is necessary anyway, to occupy all of the pact cities in one turn.

Clearly, a premature Barbarossa should be welcomed rather than feared. War in Russia while France remains in the game guarantees victory for all but the most inept Allies. But there is no point in making Germany's task any easier. The approaches to Leningrad and Moscow should be guarded well enough to prevent a one-turn conquest of these cities. And whenever the German airborne unit gets in range, a ground unit should be placed on Parno. Otherwise, the para unit can drop on Parno and open the port to German naval transport or SR. Even without the airborne unit, Parno and Tulum, as the pact cities least accessible to Germany, should be well defended.

No discussion of Russian options in 3R would be complete without exploring the question of war with Turkey. In his comments to the 3R Series Replay in Vol. 11, No. 6 of the *GENERAL*, Don Greenwood hypothesizes a two-turn conquest of Turkey, costing 40 BRP's plus losses. Since Turkey is worth only 30 BRP's, Greenwood concludes that this strategy will result in a net loss of at least 10 BRP's by the time Barbarossa begins.

The flaw in Greenwood's analysis lies in valuing BRP's spent in 1939 and 1940 at face value, instead

of their 1941 value. Since Barbarossa will occur mainly in 1941, every Russian decision should be evaluated on how it will affect Russia's readiness in 1941.

The following chart traces the usual course of Russian BRP spending and growth from Fall 1939 to Spring 1941. It assumes that German garrisons prevent attacks on Finland and Rumania and that Turkey is left alone. As the chart shows, by Spring 1941 Russia will have built her entire available force pool totalling 61 BRP's and will have available 149 BRP's, with a base of 124.

NO WAR WITH TURKEY

	1939	1940	1941
Old base	—	90	90
Surplus x .3	—	+ 1	+34
New base	90	—	124
Conquests	—	+25	+25
Year-start BRP's	90	116	149
Declarations of war	10		
Offensive options	15		
Builds	+61		
Total spent	-86	- 0	
Surplus	4	116	

The chart below assumes that Russia declares war on Turkey in Winter 1939 and conducts an offensive option that turn. It allows for 2 more offensive options plus 10 BRP's of casualties before Turkey is subdued sometime in 1940. By Spring 1941, Russia has conquered Turkey, occupied the pact area and built to the limits of her force pool. Surprisingly, even after spending 65 BRP's battling Turkey, Russia starts 1941 with 161 BRP's, 12 more than would be available if Turkey were not attacked. The new base BRP figure is 106, 18 below the base achieved by not attacking Turkey.

WAR WITH TURKEY

	1939	1940	1941
Old base	—	90	90
Surplus x .3	—	+ 0	+16
New base	90	90	106
Conquests	—	+25	+55
Year-start BRP's	90	115	161
Declarations of war	20	0	
Offensive options	30	30	
Builds	+40	+31	
Total spent	-90	-61	
Surplus	0	54	

As this analysis illustrates, the 25 BRP's spent in 1939 and the 40 spent in 1940 are actually worth less to Russia in 1941 than the 30 gained by conquering Turkey. This is so because the 25 spent in 1939 are the equivalent of only 2 BRP's (25 x .3 x .3) in 1941, and the 40 spent in 1940 are equal to only 12 (40 x .3) 1941 BRP's, disregarding the base increase.

All this does not make invading Turkey a fool-proof strategy. As seen in the analysis of Polish defenses, BRP's alone should not dictate decisions. If, for example, Germany defeats France rapidly, Barbarossa may begin while Russia is entangled in Turkey. Furthermore, German conquest of Turkey as a preliminary to invading Russia both costs Russia an immediate 30 BRP's and opens up her southern front. At least, the Turkish conquest will require diversion of precious units southward to defend the conquered territory. In short, I tend to accept Greenwood's advice against attacking Turkey, but I do not accept his BRP calculations.

Ironically, a Turkish campaign in 1940, even if unsuccessful, may blunt a potentially devastating German tactic. More on the problem of the "unwanted initiative" later.

1940

The foregoing comments on strategy in 1939 substantially cover strategy in 1940. This is as it should be—decisions in 1939 must be made with an eye to the coming year and beyond. But 1940 also presents unique problems, a few of which are considered here.

Norway

If 3R is won or lost in Russia, then Russia may be won or lost in Norway. Germany needs Norway as a base for interdiction of Murmansk convoys, potentially Russia's lifeline. Conversely, the Allies need Norway to prevent interference with aid to Russia.

For Germany, Norway must be conquered in 1 turn or not at all. If Norway survives the initial attack, Britain may and should intervene with substantial ground and air forces, landing at Bergen. This, in turn, will force Germany to either send more strength to Norway or concede Britain 10 BRP's and unmolested convoys to Russia.

Germany can effect a one-turn conquest of Norway only through the air. As mentioned earlier, the German airborne unit may be dropped on Copenhagen, untripling the Danish defense. From there, Oslo lies in range of another drop. Preparatory to this assault, the German player should build an airbase in northern Denmark and stage an air unit there. Even if both Norwegian 1-3's occupy Oslo, the ensuing attack at 2:1 odds almost assures that Norway will fall. One German fleet SR'd to Bergen makes Norway invulnerable to Allied invasion. The Allies have no air bases within range of Bergen to reduce the fleet there below 9 factors, making amphibious assault possible.

Britain must take Norway in 1 turn for the same reason. German air units staged to Oslo or German ground forces landed southeast of Oslo can make things tough for the British. But Britain too has the capability to complete a one-turn conquest, by sea.

Britain requires both 4-5 armor units, the 2-5 armor and 36 naval factors to take Oslo. One 4-5 plus 6 naval factors (2 combat points) attack the 1-3 on the western beach at 2:1, losses extracted from the fleet. The other 4-5 and 2-5 exploit to Oslo, attacking the remaining 1-3 at 3:1. If both 1-3's garrison Oslo, the 2-5 occupies the beach (breakthrough) hex and both 4-5's exploit and attack at 2:1. Either way, Oslo should fall.

For Germany and Britain, then, Norwegian strategy is to attack first and decisively.

North Africa

North Africa is the battleground of the tactician. Because of the relatively few units usually sent there, each small mistake is magnified and each large mistake is disastrous. The unnecessary loss of one unit, insignificant in Russia, can tip the balance of power in North Africa. Although strategy there varies greatly, depending on what units can be spared from other theaters, tactics remain constant enough to merit a few remarks.

As it did historically, supply plays a crucial role in North Africa. Egyptian and Libyan ports act as supply sources for Allied and Axis units, respectively. Conquered ports and beachhead markers may also function as supply sources, but this requires a nine-factor fleet per 9 units supplied. With naval strength at a premium in the Mediterranean, players are well advised to guard their Egyptian or Libyan ports well.

Supply considerations also increase the importance of two other game concepts; zones of control and controlled hexes. Units cannot trace supply through enemy ZOC, even if the hex is occupied by a friendly unit. Nor can supply be traced through enemy-controlled but unoccupied hexes (3.4). As a

result, armored units, with their ZOC and high movement rate, assume added importance in North Africa.

As noted earlier, the African front often receives the left-over units of both sides. Similarly, players may be reluctant to spend many BRP's on offensive options there. Thus both sides increasingly resort to attrition combat.

Normal combat (i.e., the offensive option) demands that the strongest units defend the most important hexes. Attrition combat encourages deployment of weak units on critical hexes. The sequence of attrition combat creates this anomaly. When the attrition table requires both elimination of counters and enemy occupation of hexes, the counters are eliminated first. Not surprisingly, players prefer to eliminate weak, easily replaced units. But this leaves the important hexes, occupied by strong units, subject to enemy occupation. On the other hand, elimination of these strong units preserves the hexes but at a high price. The solution is to place weak units on critical hexes. Their elimination saves the big units and the now-vacant hexes.

This tactic works well enough during enemy attrition options. But what if the enemy takes an offensive option instead? Much to his delight, the very hexes he wants are the most poorly defended. To protect these units and hexes during offensive combat, the defender needs superior air power. Without it, he must guess which option his opponent will select each turn and deploy accordingly.

One strategic question does recur in North Africa. After France falls, the die determines whether Lebanon-Syria and Algeria-Morocco-Tunisia become Vichy or Free French. Put simply, Britain cannot permit a Vichy Lebanon-Syria at the back door to the Suez Canal. Rather than depend on the die, Britain must plan ahead.

The turn before France's fall is anticipated, the British player should station one or two units at Lebanon's border. On the turn that Germany enters Paris, these British units move through Beirut to occupy the beach hex. Even if Lebanon-Syria turns Vichy, the British units there control the sole port, occupy the sole beach hex and are positioned to conquer the entire colony. Obviously, the presence of a French-turned-Vichy unit would complicate things. For that reason, the infantry unit starting in Lebanon-Syria must either return to mainland France or be eliminated in North African combat.

Russia

The notes on Russian strategy in 1939 also cover most of 1940. One additional problem, alluded to earlier, may arise in 1940, to the great displeasure of the Soviet player. This is the problem of the unwanted initiative.

The initiative rule, unique to 3R, provides that the alliance with the most BRP's at the start of a turn moves first that turn. This rule makes it possible for an alliance to move twice before the enemy can respond. For example, if Germany and Italy spend BRP's heavily in Fall 1939, Britain and France, by judicious spending, may gain the initiative in Winter 1939. An unsuspecting Italy may fall as a result of this double turn. Of course, the Axis will regain the initiative in Spring 1940, giving it a double turn during which France will likely fall. But what Allied team would not trade France for Italy in Spring 1940?

So viewed, the initiative rule presents extra strategic options. It can also place Russia in an unrealistic dilemma. Assume Russia declines to invade Turkey. Instead the Russian player occupies the pact area and builds his entire force pool in 1939. He starts 1940 with 116 BRP's and nowhere to spend them. As a result, he ends 1940 with the same 116 BRP's.

Germany, on the other hand, spends BRP's easily in 1940. Assume that France falls by Fall 1940, allowing Germany's full attention to turn east. Even with the 42 BRP's gained from the French victory, Germany can and probably will spend herself below Russia's 116 BRP level by Winter 1940, in preparation for the invasion of Russia.

Russian will therefore "gain" the initiative in Winter 1940. After Russia's turn, Germany launches Barbarossa. With a fresh infusion of BRP's in the 1941 Year-Start sequence, the Axis regains the initiative for Spring 1941. Germany moves again and attacks again, driving deep into Russia, possibly taking Leningrad and/or Moscow and surely placing much of the Russian army out of supply.

In my view, this tactic is both unrealistic and unfair. Perhaps AH intended this use of the initiative rule to reproduce the shock effect of the initial German attack. If so, it overdoes it. Surely the shock effect was not equivalent to giving Germany a three-month headstart, as 3R does. Even worse from the players' point of view, Russia can do almost nothing to defend herself. Almost nothing, because Russia could spend some BRP's in a Turkish invasion. But 3R surely perverts history if it forces Russia to attack Turkey in order to avoid giving Germany an unwarranted advantage.

Perhaps for this reason AH has advised that players may opt to ignore the initiative rule if they agree beforehand. Even this solution has its problems. It prevents the two-turn Allied conquest of Italy discussed earlier. It also locks the Axis into the initiative for the game's duration, an historically inaccurate situation. Better, in my opinion, to amend the initiative rule to permit Russia to waive the initiative until actively at war with Germany. Once Barbarossa begins, Russia will have ample opportunity to keep its BRP level below the Axis level.

CONCLUSION

As any 3R player knows, this article barely scratches the surface of the game's strategy and tactics. Unlike some of the AH "classics," 3R may never foster a "perfect plan." And if this means that 3R will be played and replayed, discussed and debated, then 3R will surely take its rightful place as one of the best wargames ever published, and easily the finest true strategic-level game developed—pending release of *THE RISING SUN*, that is.

I would be remiss if I failed to acknowledge Ron Magazu, whose fine PBM system (yes, we play 3R by mail) and skilled opposition have helped give me the experience and motivation to write this article.



AVALON HILL GIFT SERVICE

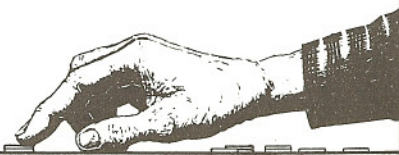
With Christmas fast approaching readers may well want to take advantage of our special GIFT SERVICE—be it for Christmas, birthdays, or Get Well occasions (commemorating your most successful attack ever against a PBM turkey . . . err, opponent). Even if you don't love your opponent enough to buy him a game in order to get him to play you again, it's still a good way to drop a few hints to mom, wife or other gift bearing, well meaning, but unimaginative relatives.

It's simple. Just have them place an order for an AH game or subscription to either the *GENERAL* or *REPLAY* and request the Avalon Hill Gift Service. An attractive all purpose card will be included with the item and mailed to either the recipient direct or back to the purchaser. Be sure to specify who the gift is for and who is doing the giving. Remember: to play an Avalon Hill game is a challenge; to give one, a subtle compliment.



STALINGRAD

RUSSIAN: Tom Baruth
GERMAN: Joe Angiolillo
COMMENTARY: Paul Bakulski



Joe Angiolillo is among the most veteran of wargamers having been active postally since the very beginning of the hobby. A native of Hartford, CT which is itself a renown hotbed of wargaming, Joe was a highly visible personality in the mid-60's through his polished articles in the first amateur wargaming "zines of that day. Along with such other local Hartford stalwarts as the Bakulski brothers, Dave Roberts, Paul Siragusa, Ray Clark, etc. Joe fast gained a reputation for invincibility in the classic games of the day. Even now the venerable old warhorse STALINGRAD holds great fascination for many gamers—if only because they've mastered most of her secrets. Joe is among those who can do with STALINGRAD what a concert pianist does with the ivories.

Tom Baruth is unknown to your editor but his play in the game which follows will serve best to introduce him. Paul Bakulski has roots very similar to those of Joe upon which we've just dwelled. The biggest difference is that Paul won the AH Classic 500 at ORIGINS II over 140 other entrants while Joe has never finished higher than this year's 4th. Paul's neutral comments are printed in italics.

This will be our first Series Replay to be serialized into two parts. The concluding part of this article will appear in the December issue.

STALINGRAD is regarded by many of the highest rated AREA players as the best tournament game for play at conventions. It is balanced, well-known, depends almost exclusively on skill, and has been studied and written about in the GENERAL since the "Dark Ages" of Avalon Hill history.

Avalon Hill, unfortunately, chose AFRIKA KORPS over STALINGRAD as "the tie-breaker" at tournaments. Logically AK was the number one game played at the last Origins (45 games).

However, STALINGRAD was a close second with 36 games played and it was chosen by both the finalists and semi-finalists for play in those rounds. AFRIKA KORPS was hardly even played in the last three rounds.

Avalon Hill again dealt a death blow to STALINGRAD by putting it in their mail order line only. Taking its place is RUSSIAN CAMPAIGN, a move which will surely place STALINGRAD further into obscurity.

It is unfortunate that both of these games lack the rules to make them as good a tournament game at a convention as STALINGRAD is. AFRIKA KORPS can be won by one die roll, a "one" by the Germans attacking Tobrukh at 1-1. RUSSIAN CAMPAIGN is too long and still draw prone despite the revisions in the rules. Possibly the finest tournament PBM game ever developed will die an unnatural death at the hand of its own creator.

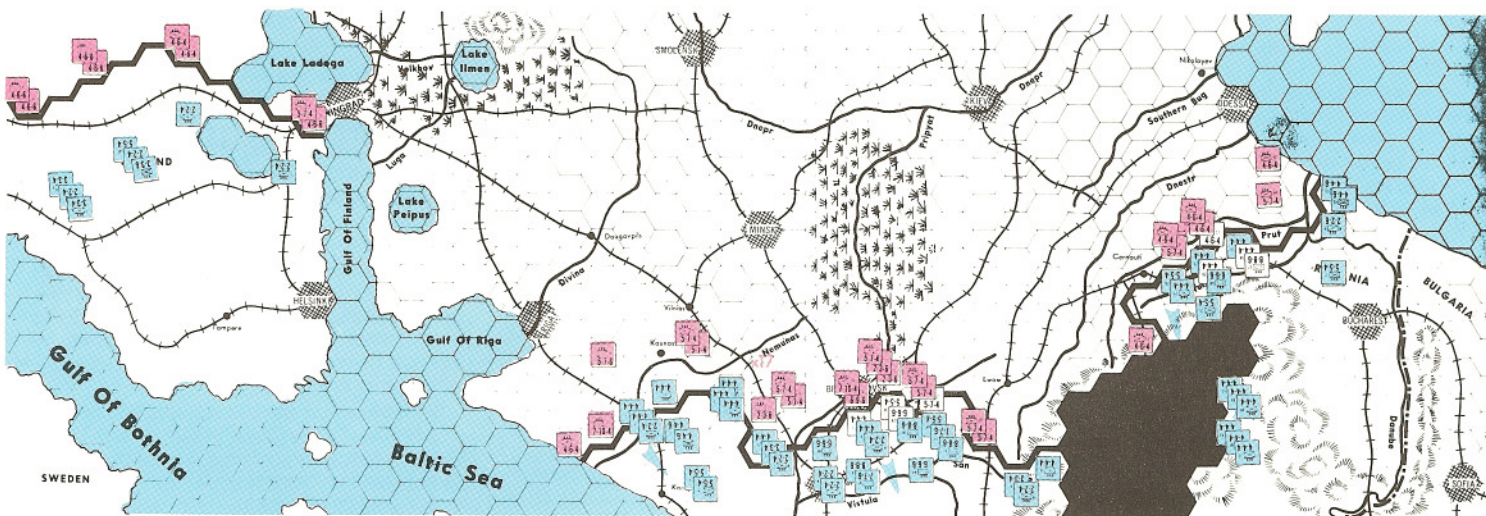
This SERIES REPLAY, played using the old PBM CRT but with the latest rules, is an illustration of the high level of play that STALINGRAD has achieved. It will either become a rallying standard for the "old guard" wargamers to barrage Avalon Hill with letters to keep this classic on their retail list, or possibly a eulogy for one of the finest games ever designed.

Initial Russian Comment (after his set-up): This is a fairly standard type of setup, except that I like to avoid giving up more than one 2-3-6 to automatic victory attacks on the first turn. Every unit saved will be very important later, and a 2-3-6 saved now actually turns into a 4-6-4 which would have to be sacrificed on the July or August turn before the replacement rate begins.

German June Move: The Russian set-up has no tactical weaknesses except along the Prut. A concentrated German effort here would be strategic suicide (lessening the alternatives available for future turns); therefore, a series of tactical "risks" in one specific area—along the Brest-Nemunas defense line seems to be the best prospect. Of the proposed 1-2 attacks, the 1-2 against S18 and the 1-2 against the two 2-3-6's on BB15 would be the most spectacular if they succeed. On the PBM table there are 4 chances in 10 of success with only 3 chances in 10 of an AELIM.

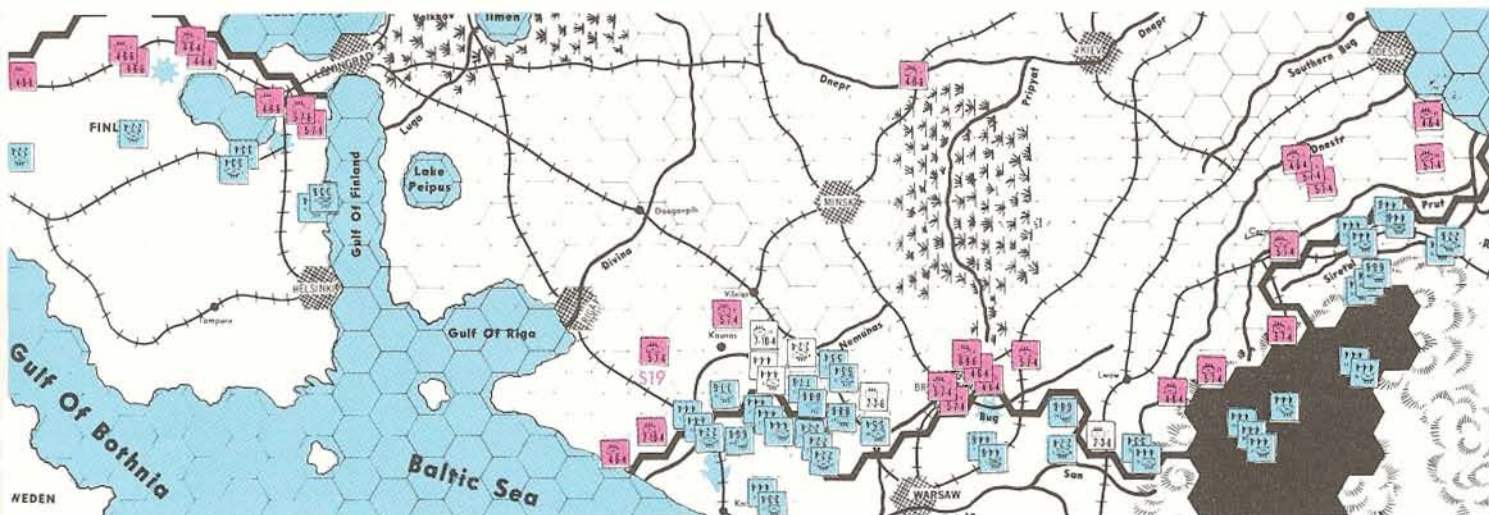
Neutral Comment: *The Russian set-up is good. I like the 8 units on the Finnish border. Not placing a 2-3-6 at U18 leaves S18 vulnerable and X17 cannot be held next turn. I would have attacked S18 at 2-1 since a lone 7-10-4 there on turn one is no less tempting than a single 7-10-4 in Brest Litovsk. I've seldom found sticking my nose into BB14 to be successful. It is better to attack CC14 from CC13 only (one big-1, three little 1-2's, and a 2-1 and soak-off, etc.)*

It looks like a good game shaping up—the Russian is apparently competent and the German is playing with intelligent aggressiveness. The big change in STALINGRAD play over the last few years is this: as the Russian play has improved to the point where very few units are poorly positioned, the German has been forced to take intelligent risks. Correctly anticipating Russian moves and properly positioning his own units in order to make 7-1's, 3-1's and soak-offs is still the mainstay of German play. But making ten or so low odds attacks in the course of a game, at the right places and at the right times, is now necessary in order to create those high odds attacks. If the German catches a break on, say 40% of those 1-2, 1-1, and 2-1's, it's a good game.



GERMAN JUNE '41: The 28 & 29 Infantry soak-off across the Siretul at 1-2 but are repulsed to MM12. The main attack, a 1-1 by the 57th Armored and 20th Infantry vs 22 & 24 is dealt an A ELIM. The remaining 3-1 by 6R, 23, 54, and 55 vs 27 earns only an exchange but succeeds in staying across the Siretul. The assault on the Bug is bloodier. The German 24th Armored is lost in a 1-2 vs the Russian lightweights, as is 3R in its 1-6 soak-off vs 36, 13, and 14th Infantry. The remaining German might

eliminates the Russian 12th at 4-1. But incompleting the necessary soak-offs the 7th is lost in a 1-5 vs Brest-Litovsk. The 8th and R11th do survive their 1-3 on the same city. To the north the German 1-2 gamble vs the Russian 3rd across the Nemunas hurts neither side as they retreat to U16. The German has paid 31 factors to destroy 16 Russian factors, break the Siretul, and grab a perilous bridgehead across the Bug.



GERMAN JULY '41: The Russian compounds the German headaches by destroying another 12 Axis factors with AV's vs the Finnish 2nd and 6th, and a successful 3-1 against the German 14th SW of Brest. Now down 43 factors, the German settles for AV's vs the 2-3-6 delaying units and a pair of 1-2's

against the Nemunas—one of which eliminates a 7-10-4 in an exchange. The Germans have traded 10 factors for 16 Russians—still a rate of attrition they can't long afford.

Russian June Move: I've never played against Joe before, so I don't know what to expect from him, other than that he is recognized as a good player. I am learning rapidly after seeing his first move, however! Joe plays aggressively apparently, and doesn't wait around for 3-1 attacks and soak offs, which is usually slow suicide in this game against a competent Russian. I was very surprised by the audacity of a potentially expensive attack in the Brest-Litovsk area. I can't sit here and give up that city on turn 1, hence my counterattack there. I just kept my fingers crossed and hoped to avoid the exchange, which I did in grand style.

German July Move: Losses are starting to mount and the Russian position is still as solid as a rock. Again, a series of tactical "risks" seems the best prospect. 1-2's on S18 and V19 look good. What a difficult position for Tom if they both work! Even one German victory here will pose quite a problem. The rest of the move is standard although I regret taking the 1-1 in the south last turn with the 57th panzer. It was a dumb attack and a waste of a unit.

Neutral Comment: Not placing two 5-7-4's at S19 allows that favorite 1-2 of Joe's. I like a Russian who can defend well on the main front and still push the Finns around. Soaking off against BB15 again would be throwing good money after bad. Nothing to be gained by taking risks in the south. You've gotta like that 1-2 against V19.

Russian July Move: Joe is really determined to get across the Nemunas early. As much as I would like to get an AElim on some of these 10-factor 1-2 attacks, at least I'm avoiding disasterous D Back 2 results. The exchange of my 28th Infantry at this early stage could be serious, however, because it will be more difficult to make river lines secure against 3-1 attacks. As much as I would like to continue the offensive in Finland at an unabated rate, the situation at the main front requires the withdrawal of units.

German August Move: Well, the Nemunas is assaultable, but what a soak-off. Maybe I should just kill the 17, 29, and 65? But with the losses I've taken I'll need to continue the gamble. Besides, if the Nemunas falls it will pave the way for a northern offensive in the early fall, a switch to the south in the late fall, and an attack in the south in the winter. This is the best strategy to win the game (I feel anyway)—constant pressure in the south so that the Russian does not hold up in Stalingrad on the last few turns of the game.

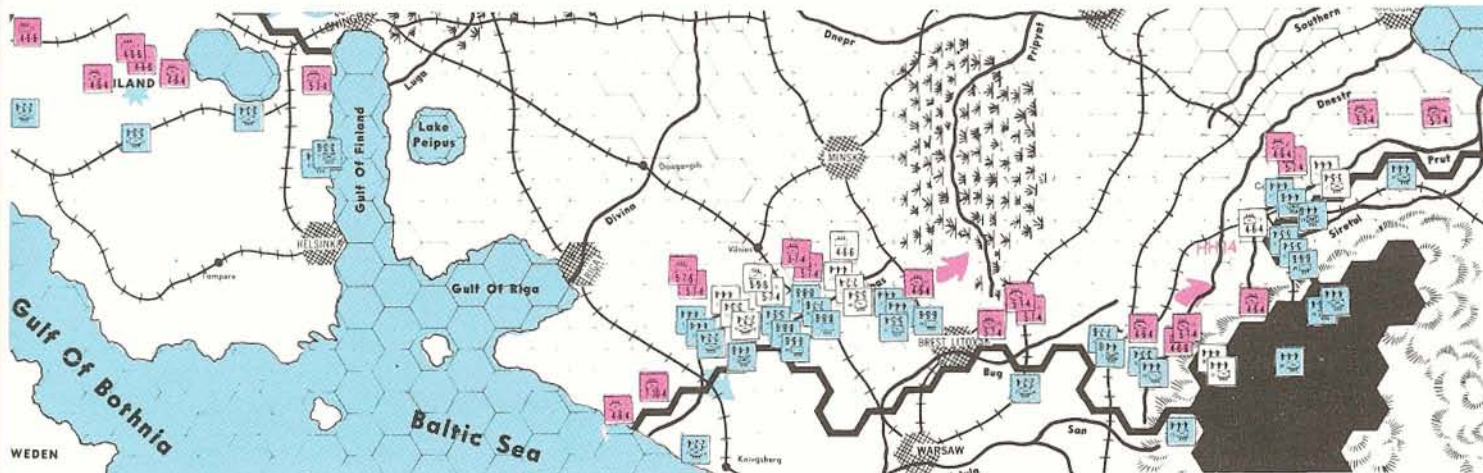
Neutral Comment: V19 is in trouble. Tom's going to make it expensive. The 1st Armored at X19 is weak; just ask the 9th and 10th Infantry Corps. Placing only one unit at BB15 is smart. I usually pull back to the Dnepr (and HH14) on the second turn.

Joe made the classic attack on the Nemunas. Too bad 18 factors can't reach EE13, avoiding a soak-off. Attacking III4 is a good move.

Russian August Move: I didn't expect Joe to attack across the Nemunas this turn with such abandoned disregard for the health and welfare of his troops after the substantial losses he suffered in the first two turns. It certainly paid off, though, as he got across with no greater losses than I suffered. My northern half of the main front is in bad shape and the 3rd Infantry is the only unit of the big three remaining to defend crucial spots in the river lines. It looks like a rough winter.

German September Move: What a blood bath! It's time to coast and rebuild my army. Taking V19 with an exchange against the 4th cavalry was quite a lucky break. But with the PBM table it is much more beneficial to attack than the regular FTF table. I can continue my northern feint, southern punch strategy.

Neutral Comment: The Russian seems to have panicked a little and given up next turn's positions. How about holding HH14, FF14, FF16, and DD18 in the south and W20 and T20 in the north? There is an extra exposed unit but Z18 isn't surrounded and may live. I would have another unit in Finland.



GERMAN AUGUST '41: The Russian July move eliminates only the FI at 7-1 and August sees the German continuing his drive across the Nemunas—and with considerable success. 4, 6, and R1 continue their luck of surviving 1-3's. 8, 11, and R4 do even better—snaring a 1-2 Exchange vs the 4th Cav which enables the German main armor thrust to advance across the river following their 3-1 D ELIM vs the 8th Inf. 4R is eliminated in the resulting 1-6 soak-off vs 9, 10 but 17 and R5 again cost the Russian a unit by

earning an Exchange in their 1-2 vs the 1st Armor. The German enjoys less luck to the south... only pushing back the 65th and 17th to AA17 and HH13 in their respective 3-1's. The Russian 24th is eliminated in a 4-1 but all the German soak-offs are eliminated; 38 vs 2 at 1-3, 35 vs 35 at 1-4, and 2,55 vs 13,42 at 1-3.

Knocking off those Finns and getting the Russian units to the main front in three turns is the Russian ace in the hole.

There are no worthwhile risks available to the German so he does what he has to. If earlier losses hadn't been so high, the Russian units beginning their retreat along the DD hexrow may have sweated out a 1-1.

Russian September Move: At least there were no unexpected surprises this turn. The anticipated loss of the three 4-6's was bad enough. Even though my Finnish offensive has been prematurely curtailed, what I do have going there has been going well in the combat results.

German October Move: My losses are considerable but so are Tom's, especially his losses in big units. With my meager army I will have to use the indirect approach and automatic elimination as much as possible. Soak-offs and low-odds attacks must be selective. In the south I must look for any opportunity to hurt the Russian position. The German forces must rest and rebuild. This is definitely not a typical game.

Neutral Comment: The Russian is playing well. Maybe FF18 (not surrounded) and DD20 (no DB2 into the swamp) would be better. Riga looks safe.

As he did last turn the German takes what the Russian gives him. It is not as expensive as last turn so the German felt he could now afford an attack on those DD units—an "intelligent risk." The Russian is about to be winkled out of Minsk.

Speaking of taking what the Russian gives, I think that this is really the essence of German strategy. He has to be strategically flexible (translation: opportunistic). Thoughts early in the game of "heading for Moscow" or "taking Leningrad first" serve mainly to limit German flexibility.

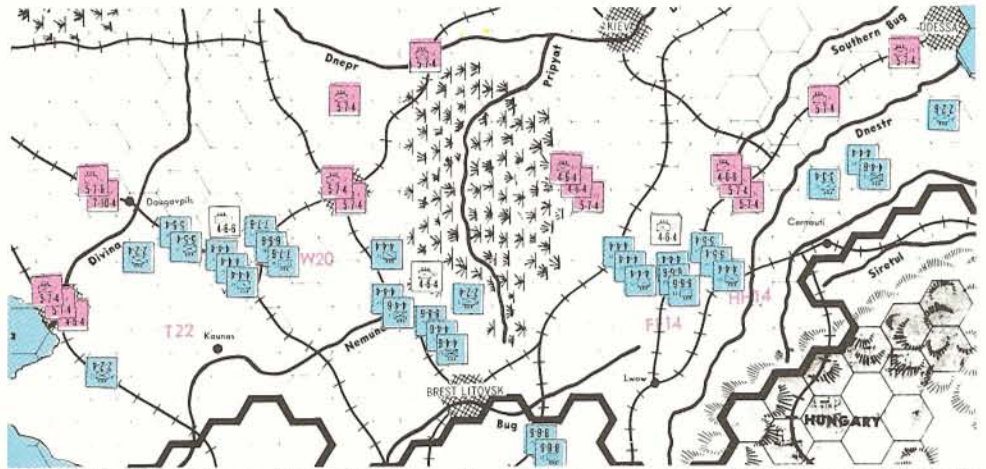
Russian October Move: Ouch! The exchange against my units on DD19 hurt. I can see that I will be short on units for holding the Dnepr this winter, so that river will probably fall early. I really regret the suspension of attacks in Finland, as it ties down several units just to keep those Finns contained. I hope to resume the offensive there as early as possible.

German November Move: The first winter is the most important phase of STALINGRAD. With a reduced German army I must employ the indirect approach to the utmost forcing the Russian to defend the way I want him to. The south is the key and GG22 is the critical hex. By defending along the Dnestr one more turn, Tom has limited his retreat and I must take advantage of the situation.

Neutral Comment: Pulling guard duty in Finland may hurt Tom later on. Those three 5-7-4's should be back to the Bug in case of bad weather (which happened). But as with previous moves, any criticism on my part has been primarily concerned with nitpicking helped by 20-20 hindsight. The only criticisms approaching a serious level involve the hasty retreat (shown in German Sept. '41 move) and the slackening of pressure in Finland. And, arguably, Tom's right and I'm wrong even there. The Russian is playing well; the German will have to play well and catch a couple more breaks (not many) in order to win. At this point getting A Backs (vs. A Elims) on soak-offs becomes important.

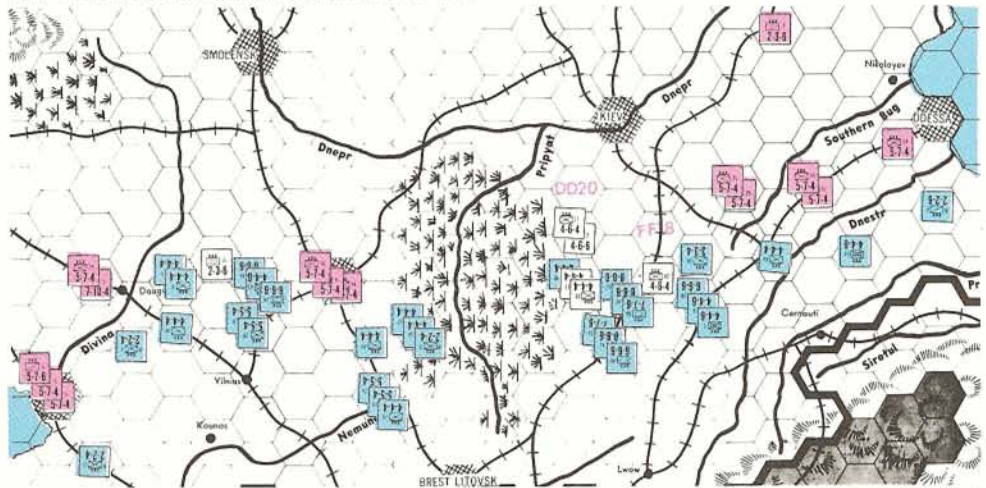
The German has obviously positioned himself well for his next move.

Russian November Move: I want to delay one more turn before giving Joe a good chance at the Dnepr, but that river is sure to fall in January due to the shortage of Russian units in the middle. Joe certainly knows how to get the most mileage out of his armored units by maintaining them in strategic locations until needed on the front. Hopefully I can



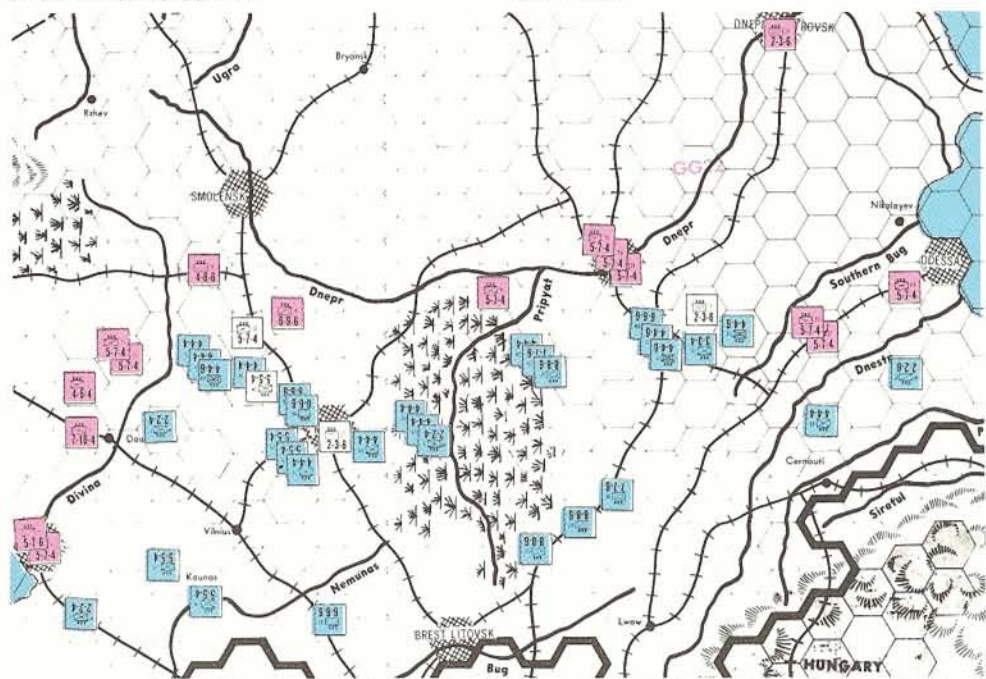
GERMAN SEPTEMBER '41: The Russian withdrawal is a bit overgenerous. Even so, more Russian units have been withdrawn from Finland leaving only four Red units in Finland to face five Axis units—one of which (F7) is eliminated at 4-1. As a result of the

Russian large scale withdrawal the battered German army rests and gratefully accepts the three AV's against the Russian delaying units (3,65,22).



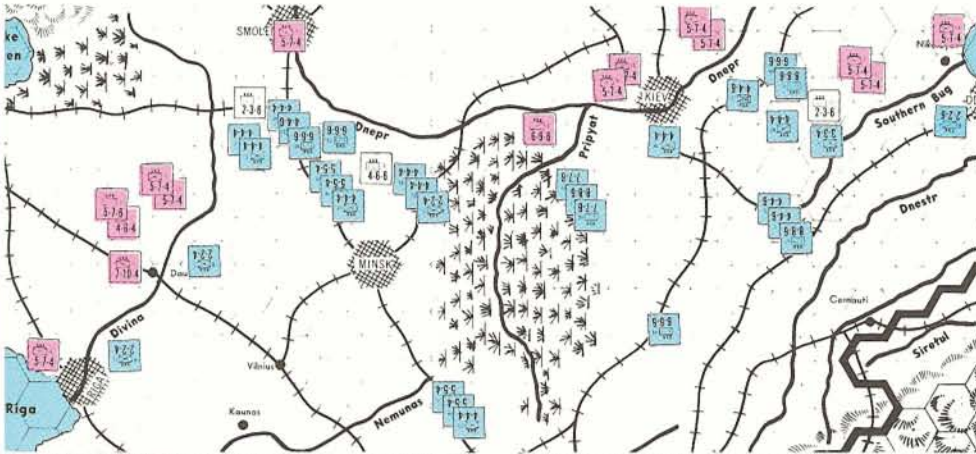
GERMAN OCTOBER '41: The Russians have dipped into their strength along the Divina to return the 2nd Infantry to Finland where it takes part in a successful 5-1 vs FGO—reducing Axis strength there to three units and 11 factors. The first Russian replacements appear (7,15) to take up delaying positions.

With Mud as the weather the German takes the two AV's offered by the Russian (15,42), and tries a prudent gamble vs the Russian 2nd and 17th at 1-1 and is rewarded with an exchange. For the first time the German has extracted a favorable rate of attrition: 8 German to 21 Russian factors.



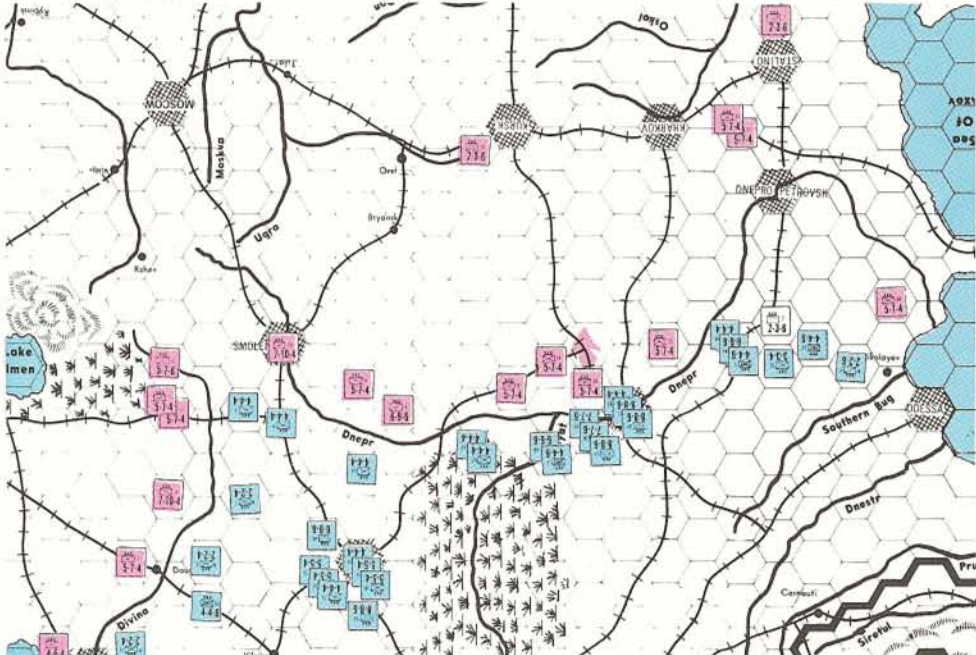
GERMAN NOVEMBER '41: Despite the arrival of the 2nd and 15th Armor and 4th Cav as replacements the Russian is feeling the piece shortage and bares the Finnish front to a garrison of just three units to contain the three remaining Axis units. The German settles

for attacks vs the Russian delaying units but his armies' weakness is demonstrated and further advanced by the 3-1 exchange vs the 10th infantry. The 2nd and 7th fall to AV's.



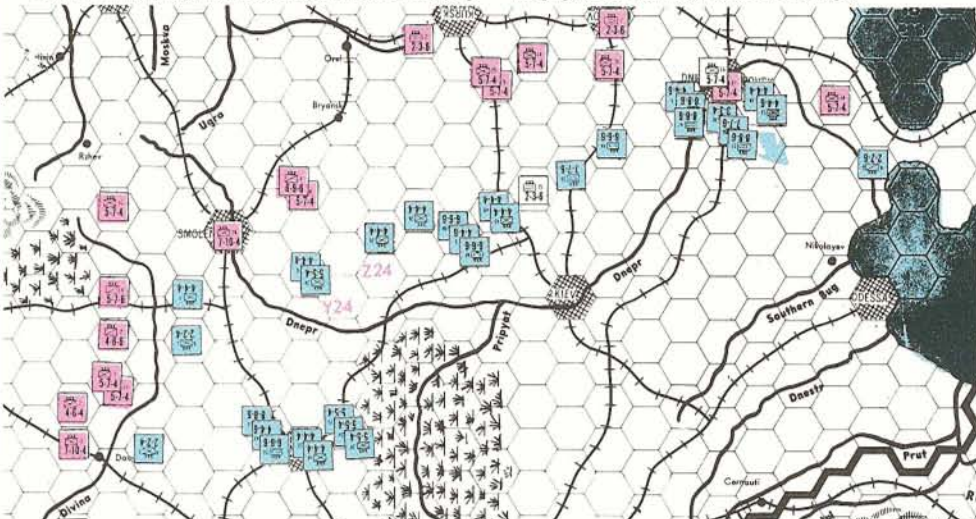
GERMAN DECEMBER '41: The Russian winter reduces the bloodshed and slows the arrival of red reinforcements—only the 7th Armored getting into position. The 2nd and 8th Infantry take up

position for next turn's use. The German attacks are limited to 3 AV's vs delaying units 7, 4, & 15 Armor.



GERMAN JANUARY '42: Snow brings a resumption of action in Finland as the Russians mass their garrison for a 4-1 across the ice on the 10th PG and maintain their perfect record of D Elims. The German, unable to reach undefended Leningrad due to snow, retreats to Helsinki and sends FX4 on a run into the hinterlands. On the main front the Russian offers only one sacrificial delaying

unit—the 2nd Armor—which the German dutifully AV's. However, the German does cross the Dniepr with a 3-1 DB2 vs the 29th. The bulk of German force is based at Minsk for maximum maneuverability on the next turn. The Russian reinforcements are beginning to tell (28, 15, 7) and more than counterbalance the reappearance of the 14th bringing the German armor back to full strength.



GERMAN FEBRUARY '42: Strengthened by the arrival of replacements in the form of the 10th Inf, 2nd Cav, and 2nd Armor the Russian nonetheless falls away from the Dniepr—giving away several potential doubled positions. The German follows as best he can given

the weather, AVing the 15th Armor and taking Dnepropetrovsk with a 3-1 D Elim vs the 36th. The German 48th Infantry survives the 1-4 soak-off, thus allowing the German to take no losses while eliminating 10 Russian factors and gaining much valuable ground.

keep the breakthrough to one point on turn one and hold segments of the river for another turn before facing the problem of wide-open central Russia.

German December Move: I have decided after much deliberation not to assault FF22 with two 1-2's because of the weakened condition of the German army. This may be the most critical turn of the game. I hope my choice to play conservative for a while does not blow the game.

Neutral Comment: There is one Russian unit too many along the Divina, especially since the Dniepr will be in trouble next turn.

Given his somewhat higher than normal losses to this point and given the 3-1 opportunity along the Dniepr next turn, the German takes the (correct in my mind) conservative approach this turn.

Russian December Move: Well, kiss the Dniepr goodbye this turn; it was nice for the short time it lasted. My amazing luck in Finland continues, thank goodness! I could use some of those units on the main front.

German January Move: I should have made the two 1-2's. Resistance in the south is stiffening. I can breach the Dniepr but I will need a DELim to be close to catching the Russian replacement rate.

Neutral Comment: There is not much to be said. Sacrificing only three factors is always nice. The German concentration at Minsk (threatening both the Divina and the Dniepr) is a good move.

The Opening Game ends and the Middle Game (covering the period from the Dniepr to the Don) will begin a turn or two earlier than most games.

Russian January Move: I would sure like an exchange or two on these doubled 3-1 attacks to reduce the German army further, but I can't complain about the D Back 2. I could hang on to more of the Dniepr this turn, but defenders at Y24 and Z24 would be in trouble next turn trying to get out of there safely. In addition I believe that delaying out in the open would get me no advantage in the long run, and I would be pushed back to the same place by April, but at a greater loss in units. I'll definitely need every unit I can scrounge up to defend the ever-lengthening front against the summer offensive, so I'll continue to fall back to the Kursk-Kharkov line giving up only one 2-3-6 and building strength for the summer.

German February Move: What is this? The Soviets run away! Maybe it's a good idea giving up space for an increased army but I have never seen it done to this extent before. I have gained quite a few turns by this move, but my army is scrawny and I will need some DELims to keep the momentum going. Exchanges or DBack2's won't help. The north is oversolidified with Russian hordes. Let's keep it that way with the indirect approach so that progress will continue in the south.

Neutral Comment: Rather than contain the German bridgehead at Kiev with a couple of units and hold the rest of the Dniepr, Tom decided to pull back—shades of August '41! The German looks a little thin on the ground until the Hungarians and Italians arrive, but he's gobbled up a lot of territory. I would give Joe the edge at this point to win the game. That is, the game can now be won without low odds attacks and should not be thrown away.

But will it be? That question and much more will be answered next time when we continue with a study of the Middle and End Game in concluding the STALINGRAD Series Replay.

WAR AT SEA & The French Navy

by Dr. Joseph Connolly

France went under on June 17, 1940. With her went the hopes of a short war in the West. But also with her collapse went the fear that the French Fleet would become a part of the German war machine.

Article 8 of the French Armistice simply stated that the French Fleet, except that part left free for safeguarding French Colonial interests, "shall be collected into ports to be specified and there demobilized and disarmed under German and Italian control." This apparently meant that French warships would pass into AXIS control fully armed and operational.

The collapse of France had been sudden, but Admiralty Staff studies had foreseen such a possibility. The studies had pointed out the grave consequences to England should the might of the French Fleet be wielded against British commerce around the world. The Allies would be over the proverbial barrel, for the British Fleet would not be stronger than both AXIS Fleets plus the French.

The studies had concluded that should France fall out of the alliance, the French Fleet must be neutralized, either by the terms of the Armistice, through voluntary internment, or by destruction at the hands of the Royal Navy.

Thus the Admiralty prepared to strike following the surrender of France. But the strike was to be complicated for a great part of the French Fleet was in locations where the British could not bring effective naval pressure. On the 1st of July, the French capital ships were disposed as follows: In Portsmouth & Plymouth—2 BBs; In Alexandria—1 BB, 3 CA; At Oran—2 BBs, 2 BCs; At Algiers—4 CAs; At Casablanca, Dakar, and the French West Indies, the *JEAN BART*, *RICHELIEU* and the *BEARN*. The rest of the Fleet was in Toulon.

On the dawn of July 3rd, the British seized the ships in Portsmouth, Plymouth, and Alexandria. Also at dawn Force H sailed from Gibraltar under Adm. Somerville, arriving off Oran at 9:30. Following a day of misunderstandings and much frantic signalling, Adm. Somerville followed his direct orders and attacked the French at 5:54.

In the short engagement, the *BRETAGNE* was blown up, the *PROVENCE* was beached, and the *DUNKERQUE* ran aground. Only the *STRASBOURG* escaped, although she was hit by torpedo planes before reaching Toulon.

With this sour note the final chapter was written on the major part of the French Fleet. Only the *COURBERT*, *LORRAINE*, and *RICHELIEU* saw extensive Allied active service out of the 7 capital ships in the French Navy. Despite possession of many of the others, the Germans never manned any of the ships against the Allies.

Were the British right in their assessment of the situation, and the subsequent attack on Oran? Could more time have persuaded the French Adm. Darlan to join the Allies and bring the French Fleet? These and many other questions concerning the French Navy have been source for controversy since July of 1940.

THE FRENCH NAVY

That the French had such a strong navy in 1939 was a product of the naval arms race that began following WWI. Escalation became so expensive that an armaments conference was called. On November 12, 1921, the participants of the naval armaments conference met for the first time in Washington. Through her ability to outbuild the

other nations, the USA was able to outline restrictions and coerce the other nations into agreement.

A relative ratio of strength among the naval powers was laid down as follows: United Kingdom: USA: Japan: France: Italy as 5:5:3:1:75:1.75. Other restrictions, such as max gun size and max weight set at 35,000 tons, were written into the documents.

After three months of negotiations, the delegates signed the agreement in Feb. 1922. It turned out to be one of the few successful international agreements since it slowed the arms race, but even it was violated by all the signees.

The immediate consequence of the treaty was the surrendering of Britain's century-old position as the world's strongest naval power. Also, through the treaty, France came to be the world's 4th most powerful naval presence.

By September 1939, the four European powers had built themselves to strengths shown in the chart. The French Fleet was the second largest and control of the Mediterranean was based on equal force application by both the British and the French.

The French Fleet was based on a combination of modifications to WWI ships and a strong building program which had matured earlier than the Italian program. In all, the Fleet contained 7 capital ships, 2 modern Battlecruisers, an aircraft carrier based on a converted battleship, and 7 new 8" cruisers built from 1925—32.

The old battleships were of two classes. Three of the ships were of the *COURBERT* class. These were the *COURBERT*, *PARIS*, and *OCEAN* (although the latter was a training ship and not seaworthy). Mounting 12-12" guns and displacing 23,000 tons, these ships were modernized in the 30's, but still represented holdovers awaiting scrapping when the treaties would allow new construction. The other class, the *PROVENCE*, consisted of three ships, the *PROVENCE*, *BRETAGNE*, & *LORRAINE*. Designed and built in the period 1912-20, they were refitted in the 30's and were representative of ships throughout the world. With 10-13" guns on 23,000 tons, they were the French equivalent of the British *QUEEN ELIZABETH* Class, although slightly slower (more so after the refit). Nonetheless, they remained an effective fighting force.

France laid down her first two new ships in '32 and '34. These were the Battle Cruisers *DUNKERQUE* and *STRASBOURG*, of 26,500 tons and mounting 8-13" guns in two turrets forward. Both had been designed in 30/32 and were built solely for political reasons, allegedly as a "reply" to the German 10,000 ton armored ships, but no doubt also with an eye to the upcoming Italian Battleships. The proportion of armor relative to the design displacement reached 36.8% which was the highest value recorded until then, although all thicknesses were such that they should be described as just at the lower limit of acceptable. The arrangement of armor relative to the bow was unsatisfactory in that hits forward of the main turrets would have resulted in the ingress of water with a resulting reduction in speed. In any case they were superior to the *DEUTSCHLAND* Class of pocket battleships.

The next class of ships laid down by the French Government was the *RICHELIEU* Class, begun in 1935 and planned for 4 ships. This class was to be armed with 8-15" guns in two forward turrets akin to the arrangement of the *DUNKERQUE*. They were also to carry 15-6" guns, later reduced to 9.

With a weight of 43,000 tons (announced as 35,000, later revised to 38,500) the first ship, the *RICHELIEU*, had 16,500 tons of armor—37% of the ships displacement. The second ship was started in 1936, and was planned for somewhat more weight, 46,500 tons. The *JEAN BART* was only about 75% complete when the Germans overran France, but was sailed from France, finally reaching Casablanca. The third ship, the *CLEMENCEAU*, was only about 10% completed and was declared German war booty. The fourth ship of the class was to have been the *GASCOGNE*. However, in 1938 the design for this ship was completely changed with a different layout planned for the 15" and 6" guns. The war postponed the laying down of this ship, and at the time of the French collapse only 6% of the materials had been allocated.

Last in the list of French capital ships was the *BEARN*, a *NORMANDIE* Class BB converted in 1927 to the first French Aircraft Carrier. With a 600' flight deck, design called for two hangar decks providing capacity for 40 aircraft.

The French also built 7 modern 8" gun Cruisers between 1925 and 32. Not much can be said about them other than they were generally comparable to the normal interwar CAs built by Italy, U.K., and the U.S. However, they were not in the same class as the *BLUCHERS* or the Japanese *MYOKOS*.

With this navy the French entered the war in 1939. It was obvious that they were more than a match for the Italians, and along with the available British forces, the Allies opened the war with control of the seas.

WAR AT SEA VARIANT

WAR AT SEA is a strategic simulation of the naval war in the west in WWII. This variant is intended to put the French Fleet in the game, and to allow it to continue through 1940 with the Fleet allocation based on the relative strengths of the ALLIES and the AXIS at the beginning of turn 2. It does not add balance to the game, nor was it intended to. What it does add is the influence that the French Fleet could exert in this theater.

A. Changes to the Mapboard

Add Gibraltar as a port in Southern Europe at the eastern end of the Mediterranean. Movement from Gibraltar can be either into the Mediterranean or the South Atlantic, and disabled Allied ships can return there from either sea area. Gibraltar has 1 point of repair facility and cannot be bombed. It is always an Allied port.

B. Changes to the Navies

1. *The German Navy*—Two of the pre-WWI *DEUTSCHLAND* class BBs were refitted in 1935-36 and took part in WWII. At 13,000 tons and fitted with 11" guns they were slightly more powerful than modern cruisers. Due to their fire control and gun systems they do not receive the German bonus. New Units: *SCHLESSEN* (1-1-3); *SCHLESWIG-HOLSTEIN* (1-1-3)

2. *The French Navy*—For the variant the French Navy consists of 7 completed BBs, 1 A/C, the 7 modern 8" cruisers, and the *JEAN BART*. New Units: *RICHELIEU* (5-6-7); *JEAN BART* (3-6-7); *COURBERT* (2-3-3); *OCEAN* (2-3-3); *PARIS* (2-3-3); *BEARN* (0-1-6(1)); *PROVENCE* (3-3-3); *BRETAGNE* (3-3-3); *LORRAINE* (3-3-3); *DUNKERQUE* (4-3-7); *STRASBOURG* (4-3-7); *ALGERIE*, *COLBERT*, *DUPELIX*, *DUQUESNE*, *FOCH*, *SUFFREN*, *TOURVILLE* (1-1-7).

C. Rules Changes

1. Disposition of the French Fleet:

The French Fleet is always controlled by the Allies during turn 1. French ships begin the game in *Malta* which represents the French home ports of Oran and Toulon. The exception is the *JEAN BART* which comes in as a replacement on turn 2 in *France*.

After turn 1, dice are thrown for control of the individual ships of the fleet, with control as follows: If the AXIS is ahead 2 or more POC then:

2,3,4,5 = AXIS control

6,7,8 = scuttled

9,10,11,12 = ALLIED control

If the AXIS is even or ahead 1 POC:

2,3,4 = AXIS control

5,6,7,8 = scuttled

9,10,11,12 = ALLIED control

Otherwise:

2,3 = AXIS control

4,5,6,7,8 = scuttled

9,10,11,12 = ALLIED control

Once control is established, the ships under AXIS control then go to the AXIS port in the sea area where the ship was located at the end of turn 1. ALLIED controlled ships do not move.

2. French ship movements:

On turn 2 no French ship may sail. This reflects the internal French struggle and required ship refitting.

At the start of turn 8 all French ships in AXIS control are scuttled. This is the reaction of the French to get on the winning side, as the European landings are taking place.

3. ALLIED air strikes:

The ALLIES lacked sufficient land based air in the Mediterranean at the start of the war. No ALLIED land-based air strikes allowed in the Mediterranean on turn 1.

4. German commerce raiders:

The Germans knew when the war would start, and were able to put the commerce raiders on station. On turn 1 the German "pocket battleships" may start in any sea area.

5. ALLIED ship reallocation:

With the Japanese attack in the Pacific, the ALLIES had to send the *PRINCE OF WALES* and the *REPULSE* to help. They weren't much help.

The ALLIED player must remove these two ships from the board at the start of turn 4. If they are sunk, then he must remove two capital ships (other than carriers).

D. Changes in Points of Control

The Mediterranean was a vital focal point for the ALLIES during the war. Only in the Mediter-


anean could they bring pressure against the German ground forces early in the war. This pressure led to the AXIS defeat in North Africa, and the eventual fall of Italy.

... *MEDITERRANEAN*: 3 points for AXIS control... ALLIED Fleet presence in the Mediterranean helped keep the neutrals quiet and kept the Italians from an aggressive naval policy. For this reason, it was imperative that some ALLIED ships remain in the Med regardless of who controlled the sea. If at the end of a turn the ALLIES do not have at least one ship in Malta, award the AXIS 1 POC.

Perspective

Given the above variant and the outlined probabilities of control of the individual ships, *WAS* can be extended to include the effects of the French Fleet. It must be granted that the selection of the criteria for division of the ships is somewhat arbitrary. No important French ships fought for the AXIS. However, there existed some doubt as to whether they would. Certainly the Admiralty would not have risked the action off Oran had there been no chance of the Germans obtaining parts of the French Fleet.

The advantage of a strategic simulation is that if you do not agree with the method of ship allocation, you are free to change it.

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TABLE OF NAVAL STRENGTH as of Sept., 1939

	British Fleet		German Fleet		Italian Fleet		French Fleet	
	built	building & projected	built	building & projected	built	building & projected	built	building & projected
Battleships	12	7(a)		4(b)	4	4	7	3(e)
Battle Cruisers	3		2				2	
"Pocket Battleships"			3					
Aircraft Carriers	7	6		2(c)			1	1(f)
Heavy Cruisers*	15		2	3(d)	7		7	3(g)

*Modern or refitted Heavy Cruisers

(a) two never built

(b) two never built

(c) none built

(d) two never built

(e) *Jean Bart* launched, other two never built

(f) never built

(g) never built

ARAB TANK TACTICS IN AIW

Or Methods of Maneuvering Mighty Masses of Mobile Metal

By Jim Stahler

"Forty of us, and eight of you . . . but we're not afraid," shout the brave Arab tankers as they advance to meet their doom. Actually, the Arabs have plenty to fear, for the Israelis have much more power at their command than their numbers indicate. This is as true on the mapboards of *ARAB-ISRAELI WARS* as it is on the battlefields of the Middle East.

This article is about Arab tank tactics in AH's *AIW*. A novice might say, why does the Arab need subtle tactics? He just takes his overwhelming strength and rolls over his opponent. That poor fellow is in for a rude awakening as the dunes and ridges become littered with the remains of his once mighty armored force. In situation after situation, Tel Maschara, Botzer, Abu Agheila, Ras Sudar, and especially Kuneitra, we have a horde of Arab armor against a handful of Israeli tanks, yet the Arabs have anything but an automatic win; it is an uphill struggle all the way.

Let us examine the reasons for this. A glance at the counters shows that an Arab tank unit is no match for an Israeli tank unit, even though both represent 5 tanks. The Israeli tanks outrange the Arabs, have superior firepower, and better armor. For example, in 1956, the main Arab tank is the T-34/85, which is up against AMX-13's and Sher-mans. The Israelis have a 2 or 4 hex range advantage, 13 to 16 attack factors versus 7 for the T34/85, and 9 or 10 defense factors compared with 7 for the T34/85. Thus, an Israeli unit will fire at an Arab tank unit at 2-1, in most cases. A single Arab unit fires back at 1-2.

To take a more modern example, consider the Israeli's best—M60A1—against the Arabs best—T-62. The M60A1 outranges the T-62 by 6 hexes, enabling it to blast the enemy without receiving fire in return. It has 25 attack factors versus 14 for the T-62, and is worth 16 in defense, while the T-62 has a defense of only 10 factors. Thus, the M60A1 shoots at the Arab's best at 2-1, and receives fire at 1-2 odds. Things haven't changed much since 1956, have they?

But the Israeli advantages don't stop here. Split move and fire, representing superior Israeli tank handling, allow the Israelis to advance while still firing at the enemy, or to withdraw from a hot spot after rallying from a dispersal. Superior morale allows the Israeli tanks to recover more quickly from said dispersal than the Arabs.

Even worse for the Arabs, careful inspection of the WEC reveals that in most situations the Israeli tanks have doubled attack strength at ranges of 3 to 6 hexes. Also note that in a hull down position, most Israeli tanks have 2 added to the die roll, while the Arab tanks gain only a +1 benefit from crests, ridges, and dunes.

By now you may be tempted to abandon all hope of an Arab victory; but don't give up yet. Bravely say, "But we're not afraid . . ." and be aware that there is more to Arab tank tactics than "Hey diddle diddle, straight up the middle." There are many ways to apply superior numbers to neutralize some, if not all, of the Israeli advantages.

The Arabs can reduce their enemy's range advantage by carefully choosing the range at which they engage the Israelis. At 7 or 8 hexes away, *both* Arab and Israeli gunnery is at half effectiveness. This is a good range to engage the Israelis. Another good range is 1 or 2 hexes away, at which *all* gunnery is doubled. Also, close range tanks quickly become

wrecks, which is generally to the Arabs favor, since they can usually absorb losses much more easily than the Israelis. The challenge is in approaching the enemy without being blown away. A tricky player can often utilize dunes, ridges, and hills to make his approach. For example, the Arab units in Fig. 1 can approach to within one or two hexes of the Israeli tanks without suffering opportunity fire.

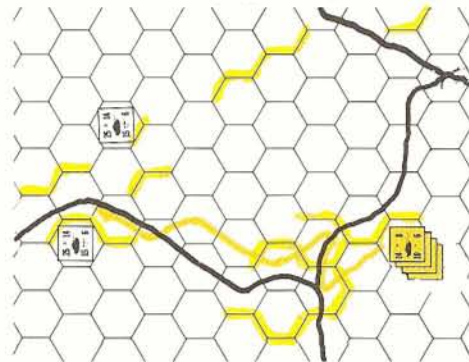


Figure 1

Often the Israeli player doesn't leave any approaches uncovered. A useful tactic to employ is to stand off at a 7 or 8 hex range and get 2-1 or 3-1 attacks on enemy units in an attempt to disperse enough of them to open up relatively safe avenues of approach. Even though the Israeli tanks will most likely rally on their next turn, they will lose their opportunity fire long enough for Arab armor to creep up on them.

You can use your numbers to deny the Israelis a similar tactic. In many cases the Israeli units can make 2-1 attacks on stacks of Arab tank units, pinning down much of the Arab strength. By avoiding stacking—not always possible, because of lack of firing positions—the Israelis can fire on only one unit with each of his units, leaving most of the Arab units untouched.

Dispersal also leads us to another expensive but effective maneuver, especially useful when the Israeli is short of units, and you are not. One unit can shoot at one hex, at most. When you are close to the enemy, within overrun range, and there are more hexes to overrun from than he has units to opportunity fire with, you can spread out, overrun his positions, and be assured that some of your units will survive to carry the attack home. See Fig. 2 for an example of this "metal wave" assault. Each of the ten Arab tank units is attacking from a different hex. Thus the three Israeli units can fire at only three Arab units. Even though the Arabs expect to lose three units, they can, in return, expect to heavily damage the Israelis with their overrun attacks.

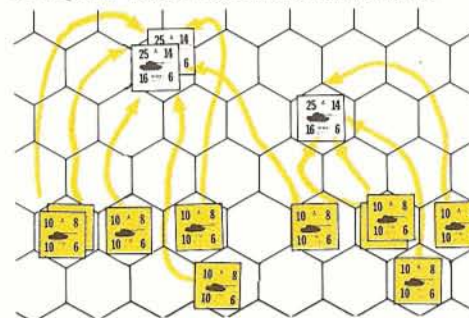


Figure 2

Another tactic involves the threat of overrun, but usually doesn't actually result in an overrun. Maneuver a force to within overrun range of an enemy unit defending an avenue of approach. On your next turn, maintain the threat while you maneuver other units closer and closer to the enemy. If he fires at your advancing tanks, he leaves himself vulnerable to an overrun attack. If he holds his fire you advance to better positions for the next turn. Often, you can maneuver the Israelis out of strong positions without a shot being fired, nor a die being rolled.

The overrun threat is especially useful when the Arab arsenal includes BMP's. Even though they have short range, they are as strong, offensively, as a T-55; and since their movement rate is 8 hexes per turn, they are an overrun threat from up to 6 hexes away. In a situation such as Fig. 3, the Israelis are in trouble. The Israeli tanks must hold their fire as the Arab tanks boldly take good positions. If the Israelis do fire, they expose themselves to destruction at the hands (and guns) of the BMP's lurking behind the dunes. This enables the Arabs to get around the Israeli defensive positions, robbing the Israelis of their +2 hull down bonus, their range advantage, and also split move and fire capability. Although they can still split move and fire, there is no favorable place to retreat to, since the Arabs are all over the Israeli rear. Those quick little BMP's that you find at Botzer and Marjyou are good for much more than hauling infantry.

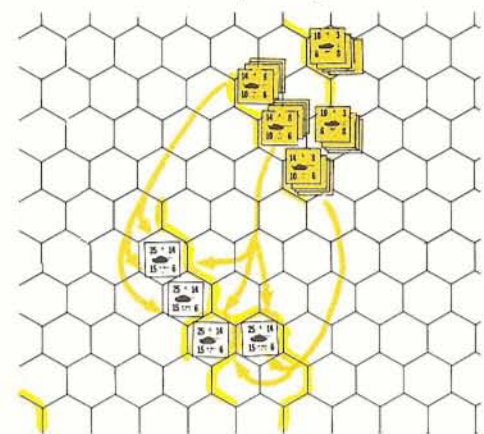


Figure 3

Note that while most units, including Israeli tanks, get a +2 hull down bonus, your Russian-made tanks get only a +1, since their guns cannot depress very far. How depressing! Therefore, you want to avoid the situation in which both sides are firing from a hull down position. The Israeli needs his +2 much more than you need your +1. Swapping shots with everyone hull down only gives the Israeli one more advantage. This situation can be avoided by using the tactics discussed above: sneaking through the terrain to get close to the Israeli units; using superior numbers to overrun a part of the enemy forces; and using the threat of overrun to move most of your forces on top of the Israelis, to maneuver them out of their good, hull down, positions.

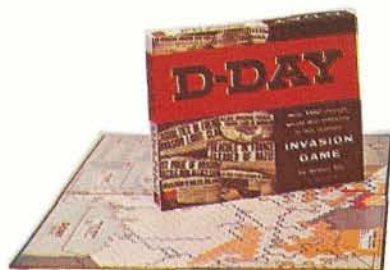
One last tactic is applicable to any game in which a more numerous attacker is up against a stretched defender. Spread out your forces to threaten every possible avenue of advance, forcing your enemy to

defend everywhere at once. Meanwhile, maintain a flexible reserve to overwhelm your enemy at one point. He will have great difficulty covering everything, let alone rushing reinforcements to a danger point. It will be only a matter of time before he runs out of troops and his line breaks. This tactic is most useful in a situation such as Kuneitra. The Arabs have overwhelming numbers here, if they do anywhere, and the Israelis are stretched very thin indeed. By threatening every Israeli position, it is possible to mass against one spot and break through. Units threatening the other positions pin the Israelis in place, leaving the victims to fend for themselves.

While the Arabs in *AIW* are outclassed tank for tank, their numbers often make up for qualitative inferiority; but they must use tactics that take the best advantage of their numbers. In the contest of the many against the few, the many certainly have a chance.



D-DAY '77



James Stahler, a local gamer of considerable repute, has authored the third edition *D-DAY* rules with co-development by Richard Hamblen and Don Greenwood. The *D-DAY* revision was originally intended as just a clean up of a poorly done, outdated set of rules which had been passed up by the state of the art. *D-DAY* has been one of our biggest sources of nut mail due to the incomplete and poorly done rules of the 1965 edition. The current revision not only does away with the problem in presenting ambiguity-free rules, but also addresses play balance problems and incorporates design innovations which have been developed in the past decade; without going into complicated phase systems which would ruin the game's excellent postal characteristics.

Among the changes are revised, more realistic supply rules which make South France a viable invasion site, strategic movement, tactical airpower, carpet bombing, river interdiction, and strategic fortresses whose capture affects the Allied replacement rate. But above all, these rules are ambiguity-free—a competitive postal player's dream—and a 100% improvement to the old classic.

The revised *D-DAY* rules sell for \$2.00 plus postage costs, and are available only by mail from Avalon Hill. Due to overstock and the slowness with which retail supplies are moved, these rules will not be found in *D-DAY* games on the retail shelves for several years. If you order a *D-DAY* game by mail, be sure to request the new rules. They will be provided free to mail order purchasers of the game if you request them with your purchase. Maryland residents add 5% state sales tax.

A.H. Philosophy . . . Continued from Pg. 2, Col. 3

Game turns are leisurely until trouble breaks out—and then time is measured in seconds. Hidden movement, ambushes, observation and creaking floor boards all play their part up until shotguns, carbines, Buffalo rifles, and revolvers open up—or until the players are suddenly locked in desperate hand to hand combat. *TOTOW* will be a fast, fun game for two or more players specifically designed so that many people can play at once, recreating the interplay of the old west.

Fast on the heels of his *AIR ASSAULT ON CRETE* development chores, Randall Reed has blocked out his next design project. *NORMANDY BEACHHEAD* will be a tactical/operational level game of the Normandy landings and the subsequent counter-attacks and eventual breakout. Tentatively, the scale looks to be battalion/regiment level with 2 kilometer hexes and one-day turns. Emphasis will be on the functional differentiation between armored, infantry, and artillery units on a tactical level. The game will include a range of pre-set scenarios as well as the capability for a monster campaign game of the entire breakout period. Rules will include supply, air bombardment and interdiction, naval fire support, parachute assault, step-loss combat results system (flip-counters and substitute 'remnant' counters), impulse movement, and multiple combat capabilities. Although it will use a very large mapboard and an impressive number of unit counters, the designer stresses that this will *not* be an unplayable "monster" game. Elegance and efficiency of the basic game mechanisms will ensure a rapid and action-oriented design.

The premiere issue of *ALL-STAR REPLAY* due out shortly will introduce the longawaited updated team charts for the Sports Illustrated Football Game, *PAYDIRT!* All 28 NFL teams will be included in the chart package, which will reflect the 1976 team ratings. As a bonus, the \$7.00 chart set will also include a completely revised set of rules for *PAYDIRT!*, which takes into account recent NFL rules changes (such as kickoffs from the 35 yard line), and contain a whole set of advanced rules, covering such areas as: razzle-dazzle plays, two-minute offenses, runbacks of fumbles and missed field goals, quick kicks, coffin corner punts, fake kicks, and even a unique "point-spread" system that allows even the weakest team in the game set to win (relatively speaking) against a team like the mighty Oakland Raiders.

There's both good news and bad news for postal game players. The good news is that we will offer the *RUSSIAN CAMPAIGN* PBM kits you've been asking us for. The bad news is that it will cost \$6.00 (\$3.00 for a half kit) plus postage charges. Furthermore, all PBM kits will go up in price correspondingly. We hadn't realized how much of a loss we were taking on these kits until we investigated the costs of doing a new one. Postal enthusiasts should also note that the *GETTYSBURG* PBM kit is for the '64 square grid version and not the '77 hex edition.

Owners of Battleline's *SUBMARINE* game can earn themselves a free copy of our revised version (*U-BOAT*) by volunteering their services as playtesters/proof readers. The game is too far along the publication process to be subjected to one of our full by-mail playtest programs but we do have roughly two weeks of final proof-reading and invite experienced players of the

game to volunteer for the task. Those selected will have approximately two weeks to read copies of our typed manuscript—the purpose being not to playtest the game but to subject the rules themselves to a closer prepublication scrutiny by as many eyes as possible. Participants will be asked to respond almost immediately with written comments pertaining to clarity and completeness of the rules. Those who make significant contributions in terms of spotting omissions, ambiguities, or just plain poor grammar will be rewarded with a free copy of the finished product. Time is short however so volunteer for this project only if you can give it your immediate attention and are at least 16 years of age.

The initial response to *SQUAD LEADER* has been so overwhelmingly favorable that publication of the promised expansion kits seems assured. Developer Don Greenwood is now accepting applications for by-mail playtest volunteers for the expansion kits. Those interested in applying should have a firm background in all aspects of *SQUAD LEADER*, have access to several other local *SQUAD LEADER* enthusiasts, and be willing to respond with in depth criticisms of the playtest kits.

Vol. 14, No. 2 proved to be a love-hate affair among the readers. There was little middle ground between the rave 1 and 2 ratings of *KINGMAKER* enthusiasts and the equally ravenous but definitely less friendly 9 and 10's of the more conventional WWII battle game fans. When all was said and done our 200 random raters had decided on a 3.27 for the issue—the best rating of the year to date. There were, however, a growing number of complaints about the lack of diversity in the specialized *GENERALS* of recent vintage. While we can understand the plight of those subscribers not having the game which is featured we do feel that the concentration of theme for each issue is a definite necessity in our overall production picture. The special theme of each issue makes the magazine more relevant to hobby store sales where we are picking up a great deal of volume and also allows us to backlog issues of special interest to the many who request in depth coverage of particular games. Yet, we will endeavor to avoid "overkill" in the future and limit the features to less than half of the magazine. The new 4 page insert in effect increases the *GENERAL* to a 40 page magazine—an effect which was neutralized last time by the inclusion of 6 pages of advertising for the new '77 games. In short, we're going to attempt to have our cake and eat it too and aim for both a continuation of the feature presentations and more diversity in the same issue. The article rankings on our 1200 point maximum scoring system were as follows:

Playing Your Hand in <i>KINGMAKER</i>	389
Series Replay <i>ALEXANDER</i>	187
In Praise of <i>KINGMAKER</i>	154
A Squad Leader Preview	142
More <i>KINGMAKER</i> Surprises	118
Avalon Hill Philosophy	70
<i>KINGMAKER</i> By Mail	43
Design Analysis: <i>KINGMAKER</i> Rules Explanation	34
And Still More <i>KINGMAKER</i> Surprises	32
Postal <i>KINGMAKER</i> Mechanics	31



Dear Mr. Greenwood:

I wish to thank the Avalon Hill graphics team for their generally excellent job on the *PANZERBLITZ* Series Replay in Vol. 13, No. 6. The notational system of illustration of individual units' moves is easier for me to follow than in previous series replays involving this game.

As with any undertaking of this size, there are inevitably graphical reproduction mistakes. Several of my hard core PBM *PANZERBLITZ* opponents have informed me of various ambiguities and errors in the replay. So I would like to straighten out some of these gremlins in the graphic reproduction of that game, and ease some of the frustration of those who tried to replay the game. On Soviet turn one 954(142) should be on the hex labeled "b". 821(184) is on hex "A". German unit 424 should be on 214, not 217—the latter hex should be unoccupied on the defender's opening turn. The hex labeled "J" on Soviet turn two should be labeled instead as "C". And on German turn three, one might clarify that both 850 and 631 go to 3Q6, with 621(41) on 3W8. Soviet units 421 and 434 on turn four are carrying 86 and 85 respectively. In German turn four, the Wespe is, carrying the 88, so the Wespe alone fires on 956. The editor's explanation above the illustrated turn five move is incorrect: German units 441, 621, and 41 should be on 3X3, 3CC6 and 3DD5 respectively. At that time, only 631 was on board one. Finally on Soviet turn seven, there should be no "D" label on 3V11—that hex is vacant. The "D" label on 3R6 is correct, however. On Soviet turn three, infantry units 183, 184 and 145 on hexes 213, 212, and 2E2 respectively are all mistakenly illustrated as being loaded. They should be unloaded! And on the same turn, the truck on 2H10 should be 432, not 423. In the editor's turn four description above the illustration, Soviet unit 426 on stack "O" should be carrying 32. Stacks "V" and "W" on the Soviet fifth turn are nonexistent—those two hexes (2D4 and 2D5) should be unoccupied. 434(85) goes on 2C3, 424(13) goes on 2A3, 431(12) goes on 3B9, and 421(86) goes on 2B3. Lastly, there were two errors of my own in the commentary. On page 22, second column, line 9, the last word should be "1A8", not "1A3". And on page 23, first column, line 12, the second word should be "821", not "822" (latter deceased!).

Hopefully no more of those gremlins have escaped my notice.

Robert Chiang
Berkeley, CA

★★★★★

Dear Sir:

It was with considerable interest that I read Dwight Hamner's recent criticism on my article "Game Theory and 1776" and on probability articles in general. His primary objection was that the choosing of the Tactical cards prior to each battle was not subject to analysis by game theory. He rationalizes this by stating that each separate selection of Tactical cards for different attacks are not independent events, but a function of various parameters. He says "the geographic location of the battle, the relative time of the battle, as well as the composition and strength of the forces will all have impact on the choice of tactical cards." This statement is true, but only in the sense that these factors have some bearing on which strategy to use, which in turn changes the odds concerning the selection of the various Tactical cards. However, to state that each selection is not an independent event is erroneous. (Game theory can be a complex subject, and it is easy to misconstrue certain concepts or fall into fallacious arguments. J.D. Williams' book, *The Complete Strategist*, is an excellent introduction to game theory, and I heartily recommend it to all novices.) Mr. Hamner's argument is akin to the classic example of flipping a coin one-hundred times, the result every time being heads. The first hundred results, however, have absolutely no bearing on the one-hundred and first toss. The chance for heads coming up is still fifty percent. Similarly, just because my opponent picked Enfilade Left last attack doesn't mean he won't (or will) pick Enfilade Left again.

The one complication to the above analysis is that in many cases the defender may attempt to break off the battle rather than indulge in a war of attrition. In these cases, an appropriate bias must be assigned to a successful Withdrawal result. This is discussed in some detail in my article, but I should add that even biasing the Tactical Results Matrix does not preclude it from being successfully analyzed by game theory. All of Mr. Hamner's

Letters to the Editor . . .

"mitigating factors" (odds, terrain, supply, etc.) do have a direct bearing on, which overall strategic policy should be assumed for each attack, and this policy can easily change from one attack to the next. But the *only*, and I emphasize *only*, effect that the selection of the tactical cards had is an adjustment to the die roll. Once I have chosen the appropriate strategy, the unit composition, odds, terrain, whatever, are all completely irrelevant. As attacker, I still want to maximize my chances of increasing the die roll adjustment, regardless of whether I have a force of all British regulars or all Tory militia.

Mr. Hamner also claims that "a defensive player can anticipate and choose appropriate counter action" if an "attacker consistently uses Recon in Force as dictated by the Game Theory Analysis." This statement is 100% wrong. In fact, the whole point of game theory is to prevent such predictability. I assume that Mr. Hamner means by anticipation of my strategy that he will always pick Stand and Defend or Frontal Assault when confronted with my optimum approach (these two defenses give the best result for the defender against a Recon in Force, which should be selected more often than any other single Tactical card when using the optimum strategy). If one bothers to compute the value of the game given the above situation, he will find that it is equal to zero, which is no improvement. As stated in my article, no possible strategy can be better, while many in fact are worse. If Mr. Hamner can find a strategy which consistently betters mine, I would be more than interested in knowing of it.

Another statement Mr. Hamner makes is that "these articles (have a) negative impact in achieving market growth for AH." This is clearly a personal prejudice, and possibly even irresponsible. Certainly we all have our different likes and dislikes concerning the various topics presented. My opinion is that only by providing a wide selection of subjects can we sustain and promote growth in the field. As to his specific objection that these articles cannot attract and hold younger audiences, I can only say that it was exactly these types of articles that whetted my interest both in playing and writing.

And finally, Mr. Hamner states that he is "a little sick of . . . articles . . . which contain such superficial analysis." Here I am almost in complete agreement with Mr. Hamner. I, too, am somewhat weary of superficial analyses.

J. Richard Jarvinen
Stuttgart, Germany

★★★★★

Dear Don,

This spring I sold about two dozen out of print games to about 75 people who responded to various ads in Hobby magazines. The single highest price for a game was over *TRAFALGAR*. I sold it for \$140 in cash to a person about 80 miles from where I live.

TRAFALGAR has an interesting story. Approximately 125 copies of this game were put out in 1969 by Roger Cormier, who then lived in Bloomington, Indiana. (By the way, if anyone knows where Roger is, please send me his address). It sold then for \$11 and was the highest priced game of that period. It used handmade plastic range finders, a very large vinyl mapboard, many counters (including 1" long 1/2" wide ship counters), plastic compartment tray, and rules. An early *STRATEGY & TACTICS* (vol. II no. 5) rated it excellent and outstanding in every department, though it is a long tactical game taking 12 hours to play. By state of the art standards it is still almost up to the standards of *WOODEN SHIPS & IRON MEN*.

At Origins I an auctioned copy sold for \$50. Then, in the late winter of 1975-6, an ad was submitted to the *GENERAL* offering to sell *TRAFALGAR* and *VIETNAM* (I sold my copy this spring for \$30. It was produced in 1965 by Gamescience). Tom Shaw and Don Greenwood wrote back to the seller and told him he could get a better price than what he was asking for it, but the seller said that was O.K. and sold both the games to Avalon Hill. Another *TRAFALGAR* was auctioned off at Origins II for \$90.

I had my copy in very good condition plus I had the counters from Dana Lombardy's copy, though the rest of his copy was lost. I offered it for the highest bid over \$125. I received two bids by

my deadline, one for \$141.13 and the other for \$140. The former bid was accepted but I did not receive his check in time. I had to take the latter bid of \$140. Two additional bids were made on *TRAFALGAR* but were less than \$125. If someone has a copy of *TRAFALGAR* the \$141.13 bid would probably still be good. If anyone wants to contact me on that or knows where Roger Cormier lives, please write me c/o 670 Darrell Road, Hillsborough, California 94010.

After *TRAFALGAR* the two most sought after games were *1914* by Avalon Hill and its companion game *TANNENBURG* an early long out of print game by SPI. Of my games, Avalon Hill ones, on the average, had more offers than ones from other companies. *GUADACANAL* and the Hexagon version of *GETTYSBURG* were both sought after items. The best non Avalon Hill seller, other than ones mentioned was *DUNKERQUE—1940* by SDC.

I placed 9 ads in various magazines. The most responses came from *CAMPAIGN* (formerly Don Greenwood's *PANZERFAUST*), the *GENERAL*, and *WARSHIP'S INTERNATIONAL*. I was selling a great many books as well. I noticed that most gamers bought games and no books and vice versa. Two young men who bought 186 dollars worth of games bought no books for example. The two men who spent the \$186 not only have been playing all that they bought, but bought several titles made about the time they were born!

All in all, the market for the collector and the seller is there. I think that in the years to come out of print wargames will continue to climb in price. Many games are like an investment in art. However, the quality game will be the game that will be most valuable.

Jack Greene
Hillsborough, CA

The collector's market is not only still there it appears to be growing by leaps and bounds. At the recent ORIGINS '77 auction prices for collector's items were higher than ever before and another *TRAFALGAR* was turned up and auctioned off for prices not much less than what you quote above. Wargames, as collector's items, are indeed viable purchases.

★★★★★

Gentlemen:

I am writing this letter with regards to the availability of PBM materials to players of some of your games. The best PBM kits that you now offer are the *PANZERBLITZ/ANZIO* types where the map is reproduced in a reduced fashion. Thus, players merely plot the positions of their various units on the map. The beauty of this system lies in the fact that it is frequently not even necessary to set-up the board and all the units (quite time-consuming). It is eminently possible to play the game just from the map, and for those dedicated PBMs like myself with so many games going at one time, it frees more time for other activities. I know this from personal experience—in the last several years I may have set up my *PANZERBLITZ* once or twice for a PBM game. As a sidelight, it is also a little bit more realistic for a tactical commander to plot the situation by map; he does not have the time of the strategic commander for considering and experimenting with numerous strategies.

Now there are some AH games where no PBM kit is available. In fact, for these games, it is quite difficult to rule on a "best" method for PBM, since they contain so many variables that make application of any set standard inconceivable. It is best left up to the individual players to decide upon a system that they like the best. Guidelines can be provided, and options presented to be implemented or rejected, but a standard system that satisfies all players is the veritable carrot at the end of a stick.

Games that fill this category include *THIRD REICH* and *PANZERLEADER*, among others. They both are PBMable—numerous gamers including myself can attest to this—but the players themselves must decide how best to handle it, given the options available.

What, you may ask, is the role of the providing company, in this case, Avalon Hill, in such a matter? The role of Avalon Hill is to

provide the materials necessary to PBM the games that are not otherwise universally available. Number one, of course, is the game itself. Secondly, would be the availability of reduced maps, such as is the case with *PANZERBLITZ*. I have played *THIRD REICH* by mail, and some of my opponents have come by such reduced maps themselves. Believe me, it aids play greatly. I realize that in the case of *THIRD REICH*, it would take both sides of the sheet to include the whole mapboard. Yet, I feel that that is all that is necessary. If you give the players who are motivated enough to play these games at all, the basics, they will supply the rest. They are generally experienced or ingenious enough to put the pieces together.

As manager of the Conflict Simulation Society's *THIRD REICH* PBM league, I feel such equipment would be well received and could only promote better PBM competition and better well-being for the industry as a whole. I only wish I could forward to you the deluge of mail that assaulted me when I announced in an ad in *THE GENERAL* the opening of this league. I am sure that these gamers wholeheartedly support this idea. I do hope that you will consider this.

Mark G. Matuschak
Uniontown, PA

Editor's note—PBM enthusiasts are constantly requesting PBM kits for the latest games. However, we have found that due to increased paper and postage costs that a PBM kit is no longer a profitable item to produce and sell on a mail order basis. In fact, we come close to losing money on each play-by-mail kit sold. We will continue to sell kits for the old favorites due to the beneficial service it provides new PBM enthusiasts in breaking into this particular branch of the hobby. However, as you've noted yourself in the body of your letter, postal players are quick to improvise and once exposed to the basic combat results and postal techniques, hardly need a PBM kit to play the games postally.

★★★★★

Dear Sirs:

Often a wargame designer will sacrifice play balance for realism in an effort to create a "you are there" atmosphere. At times, however, this quest for realism results in an unstable situation, where only brilliant play by the underdog and mediocre play by the favorite will result in a viable contest. Still, this is not the case with *THIRD REICH*. Its secret lies in the fact that while realism is responsible for the boundaries and the relative strengths of the nations involved, the outcome of each game depends entirely upon the players' personalities.

However, it appears that the fighting abilities of several unit types within the nations' force pools have been underrated. It is well documented that the German Panzer division and Himmler's SS division were among the finest units to enter combat during WWII; their tanks (particularly the Panther, Jagdpanther, and King Tiger) were in most ways superior to anything in the Anglo-American arsenal. Additionally 3R fails to properly portray the Soviet tanks that so greatly alarmed the Germans in 1941, that the latter developed the Panther as a counter.

To overcome these deficiencies, I propose the following: (1) Increase the fighting ability of the two SS Panzer corps to 6-6 and that of the SS infantry divisions to 4-4; (2) Beginning in Spring, 1941, and continuing through Spring, 1943, allow the German player to upgun the attack factor (AF) of 9 Panzer Corps (a maximum of 3 Panzer Corps per year) to 5 at a cost of 2 BRP's per counter; (3) Reduce the AF of the U.S. tank corps to 4, but increase their number by 3 to 8; (4) In Spring, 1942, allow the Russians to increase their tanks' AF to 4 (also at a cost of 2 BRP's per counter).

These changes result in a net gain of 1 AF by Germany. More importantly the German changes somewhat neutralize the vastly superior naval and air forces of the Western Allies, which make a successful Anglo-American invasion of France possible in early 1943. The Anglo-American player must now either concentrate his invasion forces in England while awaiting the Russian offensive which will weaken the German forces in France, or start an offensive in the Mediterranean. These changes, I believe, do not transform 3R into a "you are there" simulation game, but rather more realistically reflect the war-making capabilities of each nation as the war progressed.

Jeffrey Staniszewski
Sayreville, NJ

READER BUYER'S GUIDE

TITLE ARAB-ISRAELI WARS **PRICE** \$10
SUBJECT Tactical Game of Armor Combat in the Mideast

ARAB ISRAELI WARS is the 33rd game to undergo analysis in the RBG and fared relatively well, placing 14th in the overall list with a cumulative score of 2.68. The game was paced by a near record setting performance for Components which placed second only to the 1.85 of FRANCE, 1940. The jazzy armor and aircraft silhouettes of the PANZERBLITZ family counters seem always destined for good rankings and those provided in AIW proved no exception. Other strong points were in the Realism category (7th best), physical quality (11th), Excitement Level (11th) and Overall Value (12th).

On the negative side AIW posted two sub average scores for their respective categories. The Ease of Understanding rating was only the 26th best performance to date and far below the average rating of 2.79.—although this was not unexpected for a game as complicated as AIW. The PANZERBLITZ system games have become increasingly complicated with the publication of each new sister game and AIW has not shirked its role in this regard while introducing such new factors as morale, guided missile technology, split move and fire, improved artillery mechanics, and more closely defined terrain efforts (hull down, etc). The other sub par ranking was in Play Balance where the game's innate design bias forces the Arabs to win with superior numbers in the face of far better Israeli technology, morale and weapons.

As is the case with all scenario games, the playing time will vary greatly from one scenario to the next and the listed time of 2½ hours can only be taken as an average figure for the 24 different scenarios.

WHAT THE NUMBERS MEAN: Put simply, the results can be considered like this: Anything under 2.00 is pretty darn fantastic. Scores ranging from 2.3 are excellent while 3's must be considered good. 4 through 4.5 would be considered fair, with the upper half of the 4.5 combination considered poor. Anything rated higher than a 6 indicates a dire deficiency and should merit either immediate attempts at redesign or dropping from the line.

1. Physical Quality 2.34
2. Mapboard 3.03
3. Components 1.86
4. Ease of Understanding 3.31
5. Completeness of Rules 2.70
6. Play Balance 3.57
7. Realism 2.31
8. Excitement Level 2.51
9. Overall Value 2.52
10. Game Length 2 hr., 15 min.

THE QUESTION BOX

ARAB ISRAELI WARS

Q. Can you double or triple your attack strength (using the SUPPLY optional rule) when making Overrun or CAT attacks?

A. No! Overrun and CAT attacks rely on technique for success (and their combat bonuses), and more ammunition does not result in more technique. In Overruns and CAT attacks each attack must use only one supply.

Q. Why does the game include units (such as the Arab MLG minelayer) and rules (such as the cut-building and bridge building rules that require 40 or 60 turns) that can not be used in any of the situations?

A. Not all of the weaponry and techniques that were important in the Middle East fighting could be included in the limited number of situations provided. Rather than simply ignore these factors, we decided to include them in the game even if they weren't in any particular situation. Many players of AIW-style games (PANZERBLITZ PANZER LEADER) enjoy making up their own situations—so we made sure such players would have all the important Middle East terminology to work with.

Q. When a unit expends movement points to move from one hex to another, in which hex is the movement point(s) expended? This can be important during Opportunity Fire.

A. The movement points are expended when the unit enters the new hex, i.e. they are considered to be expended in the new hex entered. Special Note: Interdiction fire attacks (Adv. III. D) take place when a unit tries to expend movement points, in its old hex before it moves.

Q. How are wrecks removed?

A. A battle tank unit that starts the turn adjacent to the wreck expends its whole movement allowance to move one hex into the hex with the wreck. As the tank enters the hex it removes one stacking point's worth of wreck.

Q. If a unit is HULL DOWN and in an I. P. (or fort), does it get credit for both—so 4 is added to the die roll (for non-Soviet tank units)?

A. Yes. Additions to the die roll are cumulative.

Q. Can a unit be attacked by Opportunity Fire as it makes a CAT attack?

A. No—making a CAT attack does not count as an expenditure of MF.

Q. Can blocks be built in hexes that contain crest hex sides (but not ridge hex sides)?

A. Yes, as indicated on the Neutral Counters Chart.

Q. The rules say that the T1-67 gets +1 to the die roll for being HULL DOWN, but the UFT says +2. Which is right?

A. The rules are right—the T1-67 (captured Soviet equipment) gets a HULL DOWN bonus of +1.

Q. Can a unit "bail out" (Adv. II. B) when its carrier is destroyed?

A. No, only if the carrier is dispersed.

Q. Can Off-Board Artillery do Destructive Fire attacks? (Adv. III. C.2.a)

A. Yes

Q. When an infantry unit makes an Opportunity Fire attack as it is being overrun, it uses the CAT section of the WEC to calculate its attack strength. Does this mean that the opportunity fire attack is -2 on the die roll, like CAT attacks? (Standard. II.E.5.g)

A. No! The CAT section is used to modify the effective attack strength—not the die roll.

Q. Can a helicopter move and then attack the same turn?

A. Yes if it is face up. A helicopter unit that is face up is *not* inverted when it moves during the AIR PHASE, unless a "DOWN" counter is placed on it at the end of the move.

Q. Can an artillery unit pre-record a "DEST" or "NEUT" attack while it is still making an INT attack (that will end at the end of that turn)?

A. Yes

Q. Can AVLB units "pick up" bridges from other, destroyed or dispersed AVLB units?

A. No! AVLB bridges must have been unloaded in trenches to be picked up.

Q. What happens when a bridge or a trench on land (i.e. *not* on the Suez Canal is "dispersed" by combat (DD or D result)?

A. It is treated like a "dispersed" pontoon bridge (Adv. VI. E.5); a "dispersed" counter is placed on it, it must roll for MORALE, units may move off it but not onto it, etc.

Q. Can pontoon bridges (Suez) ever be attacked?
A. Only when they are being transported overland.

Q. When an Israeli tank moves one hex to tow a bridge (Adv. V.D.2), does this count as its whole movement factor (for Opportunity Fire, SMF, etc.)?

A. Yes

Q. Can Cobra units switch reloads like Sagers (Adv. II. F.9.C)?

A. Yes

Q. Are all of the situations correct?

A. No, the following changes should be made:

S-6 The "North" arrow should be pointing down.
 S-9 The Egyptians should have 7 trench/cuts instead of 2.

S-11 The "North" arrow should be pointing down.
 S-12 The Israeli 7th Bde should have 7 M60A1 and 9 Patturion, instead of the other way around. The Israeli NATKE should have 3 M113A1 units instead of 3 M-3s.

A-4 Board A should be turned 180°. The proper setup is $\infty > \infty \text{ N}$.
 A-5 Egyptian Group B should have one bridge placed on a cut on the canal, instead of the MTU-2.

A-6 The Israeli bridge should be set up on a cut on the Canal; Israeli Group B should be set up on board A. Group A should have 1 construction engineer, not 2. Group C should have one construction engineer.

Q. When using the SMOKE and SUPPLY optional rules, does creating smoke count as one of a unit's 12 attacks?

A. No! Each unit is assumed to have smoke shells in addition to its 12 attacks' worth of ammunition.

Q. Does a CAT attack count as a SUPPLY attack (one of the 12)?

A. Yes

Q. Can indirect fire attacks be made against "DOWN" helicopters (Opt. I.C.3.c)?

A. Yes! On the WEC, note "I0" applies to indirect fire attacks (except "INT" attacks).

AVALON HILL RBG RATING CHART

The games are ranked by their cumulative scores which is an average of the 9 categories for each game. While it may be fairly argued that each category should not weigh equally against the others, we use it only as a generalization of overall rank. By breaking down a game's ratings into individual categories the gamer is able to discern for himself where the game is strong or weak in the qualities he values the most. Readers are reminded that the Game Length category is measured in multiples of ten minutes and that a rating of 18 would equal 3 hours.

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. RUSSIAN CAMPAIGN	2.24	1.98	1.85	2.02	2.24	3.07	2.78	2.41	1.78	2.07	28.5
2. W.S. & I. M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
3. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
4. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
5. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
6. CAESAR—ALESIA	2.53	2.92	2.71	2.78	1.71	1.85	3.36	2.64	2.71	2.07	27.9
7. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
8. 3rd REICH	2.57	2.12	2.47	2.34	4.15	3.22	2.59	2.24	1.95	2.05	34.9
9. PANZERBLITZ	2.58	2.00	3.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
10. KINGMAKER	2.60	2.26	2.84	2.34	2.83	3.07	1.86	3.65	2.14	2.41	20.2
11. DIPLOMACY	2.60	2.35	2.26	3.13	1.87	2.39	2.09	4.57	2.30	2.43	32.6
12. CAESAR'S LEGIONS	2.64	2.32	2.36	2.31	2.14	2.23	3.73	3.05	2.86	2.73	13.5
13. STARSHIP TROOPERS	2.67	2.27	3.11	2.07	2.43	2.70	3.57	3.39	2.20	2.32	17.3
14. ARAB ISRAELI WARS	2.68	2.34	3.03	1.86	3.31	2.70	3.57	2.31	2.51	2.52	13.5
15. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
16. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
17. JUTLAND	2.83	2.84	—	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
18. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
19. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
20. AFRIKA KORPS	2.90	3.04	3.10	2.92	2.12	2.29	3.39	3.57	2.91	2.77	13.5
21. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
22. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.00	2.22	4.00	4.06	3.11	3.40	9.6
23. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
24. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.2
25. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	2.27	4.32	3.21	3.01	16.6
26. WAR AT SEA	3.21	3.18	3.96	2.74	1.74	2.35	3.73	5.12	2.93	3.15	6.9
27. BULGE	3.21	2.93	2.80	3.31	3.08	3.40	3.53	4.11	2.81	2.95	20.0
28. D-DAY	3.43	3.72	4.54	3.69	2.56	3.09	4.38	4.50	3.60	3.56	17.8
29. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
30. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
31. 1914	3.87	3.18	3.40	3.26	5.46	4.32	3.86	1.95	5.48	3.86	55.0
32. GETTYSBURG	3.88	3.59	3.84	3.54	2.68	3.39	5.08	4.51	4.34	3.98	12.5
33. KRIEGSPIEL	4.04	3.77	4.20	3.85	2.13	2.94	2.93	6.09	5.20	5.29	9.8
AVERAGE	2.92	2.73	3.02	2.70	2.79	2.82	3.24	3.38	2.90	2.84	19.6

COMING UP NEXT TIME



IN DECEMBER

A final word on contest No. 77: it turns out that there are a few alternative solutions to the contest, based on the "rolling supply" phenomenon where a supply unit moves along, supplying attacks as it goes. Specifically, it is possible to "peel" the British position from west to east—instead of the other way around—by executing attacks as the supply unit moves west to east. So don't worry if your solution was not the same as the one that was printed in the last issue—ALL entries were examined, and the winners listed below were drawn (randomly) from among all the entries that gave a legal solution to the puzzle.

The most common errors in the entries we received: 1) AV attacks may not be "self-justifying", i.e. each attack must be supplied at the moment it is executed and the supply line for that attack may not pass through the ZOC of the unit being AV'd; 2) once a supply unit has supplied an AV attack the supply unit must continue to supply that attack for the rest of that turn—it cannot move farther than 5 hexes (out of enemy ZOC) away from the attacking units; 3) enemy units may never stop directly on AV'd units—they can move over the AV'd units but may NOT stop on them; 4) in each attack, every attacker must be adjacent to EACH defender—so if an attacker is not adjacent to a defender, they cannot be involved in the same attack.

The ten winners were: J. West, Seattle, WA; R. Wharton, Blackwood, NJ; R. Reynolds, Houston, TX; R. White, Cambridge, MA; A. Lumbis, Carlisle, PA; T. Kuik, Grand Rapids, MI; J. Munger, Crystal Lake, IL; A. Redlack, Waterloo, ONT; L. Morrison, Arvada, CO; and R. Goldbaum, Plaistow, NH.

Warcon IV will be held January 27-29 at Texas A&M University in College Station, TX. Among the Avalon Hill events planned are tournaments in *PANZER LEADER*, *THIRD REICH*, and *KINGMAKER*. Interested parties should write Jerry Ruhland at his P.O. Box 6816, College Station, TX 77844 address for further information.

James Myers informs us of "The Return of ORCCON" to be held at California State University in Fullerton on January 13-15, 1978. Among the many planned events are several tournaments utilizing AH games. Cost is \$2.00 preregistration or \$3.00 at the door. More information can be had by writing Mr. Meyers at his 13718 Norbeck Dr., La Mirada, CA 90638.

Lately, we've decided to accept books pertaining to Wargaming for review. We make no guarantees but if our reviewer feels the subject matter is appropriate for the wargamer, a listing and objective review will appear in print in due course.

DIPLOMACY's first book, *AN INTRODUCTION TO THE STRATEGY AND TACTICS OF POSTAL DIPLOMACY* has been published by the Institute for Diplomatic Studies, Box 8416, San Diego, CA 92102 (\$16.00 ppd). Written by 11 year Diplomacy veteran Larry Peery, *S&TPD* is to date the largest and most complete collection of material available on country openings. The 376 pp., offset printed, bound volume is designed as an introduction to basic Diplomacy strategy and tactics for novice players. Included are chapters on each of the 7 great powers, an introduction, and a map folio. *S&TPD* is highly recommended to anyone seriously interested in postal *DIPLOMACY*.

Infiltrator's Report



Brian Blume (right) of TSR presents Tom Shaw with the STRATEGISTS CLUB AWARD for CREATIVITY IN GAMING won by the AH edition of *KINGMAKER*.

Avalon Hill garnered two new awards at the recent GEN CON X convention held at the lush Playboy Club in Lake Geneva, WI. The Avalon Hill 2nd edition of *KINGMAKER* took the "Creativity in Gaming" award presented by the STRATEGISTS CLUB. A similar plaque was presented by Don Lowry to Avalon Hill for *THIRD REICH* which won the "Best Game Of All Times" accolade as voted upon by readers of *CAMPAIGN* Magazine.



Don Lowry (right) of *CAMPAIGN* magazine presents Don Greenwood with a plaque symbolizing the BEST GAME OF ALL TIMES for *THIRD REICH* as voted on by the readers of that journal.

Northwestern University's Conflict Simulation Boardgame Club extends an invitation to all college age and adult wargamers to attend its meetings every Friday and Saturday. Contact Fred Meccia for more details (312-679-4917).

To guarantee capturing 3 Royal heirs in Contest No. 78, you also had to guarantee that two things happen:

1. You move first. Not knowing what the other players hold or what Event Cards are drawn, you may not be able to capture three Royal heirs if you don't move first.

2. You set up your faction so that no matter what Event card you draw during the Event phase; your nobles will be in position to capture 3 Royal heirs, one of which must be Lancastrian.

There are several possible solutions to the contest. They fall within two basic frameworks with slight variations.

All solutions must contain the following move: The Marshal must be sent to Chancery. If a noble awarded the Marshal is sent to Bodwin, the other three nobles must each capture one Royal heir and no one noble can be made strong enough to capture a Lancastrian by himself. The Chancellor cannot be sent to Chancery because only with the Chancellor are you guaranteed to move first.

It is suggested that to test these two solutions against your solution, remove all 23 "Raid and Revolt" cards and draw all cards with each set-up. You will note that no matter what Event card is drawn for the two solutions, the captures can be made. Note: Because of the Archbishop of York, the city of York, is friendly. Hence Richard of York can be captured by any noble able to reach the city. George of Clarence is in the open town of Cardigan and can be captured by any noble able to reach that square.

Solution #1

	Neville	Mowbray	Grey	Herbert
Title			Earl of Essex	
Office	Chancellor of England; or Treasurer of England	Chancellor of England, or Treasurer of England	Chancellor of Lancaster	
Mercenary			Burgundian crossbowman or Flemish crossbowman	
Castle	Raby or Richmond	Castle Rising or Framlingham	Rockingham	
	Archbishop of York to anyone			
	One mercenary to anyone.			

1. Neville always captures Richard of York.
2. Herbert always captures George of Clarence.
3. Grey and Mowbray capture either Margaret or Edward of Lancaster depending upon the Event Card drawn.

Solution #2

	Neville	Mowbray	Grey	Herbert
			Earl of Essex	Earl of Essex
	Chancellor of England or Treasurer of England	Chancellor of Lancaster	Chancellor of England or Treasurer of England	Chancellor of England or Treasurer of England
	Archbishop of York			
	Warwick	Denbigh	Rockingham	

Either Grey or Herbert is awarded Earl of Essex and one of the two England offices. It is preferred to award them to Herbert as it leaves Grey free to capture Richard of York, who is more powerful than George of Clarence.

One mercenary must go to either Neville or Grey or Herbert (whoever gets the title). The other mercenary may go to anyone.

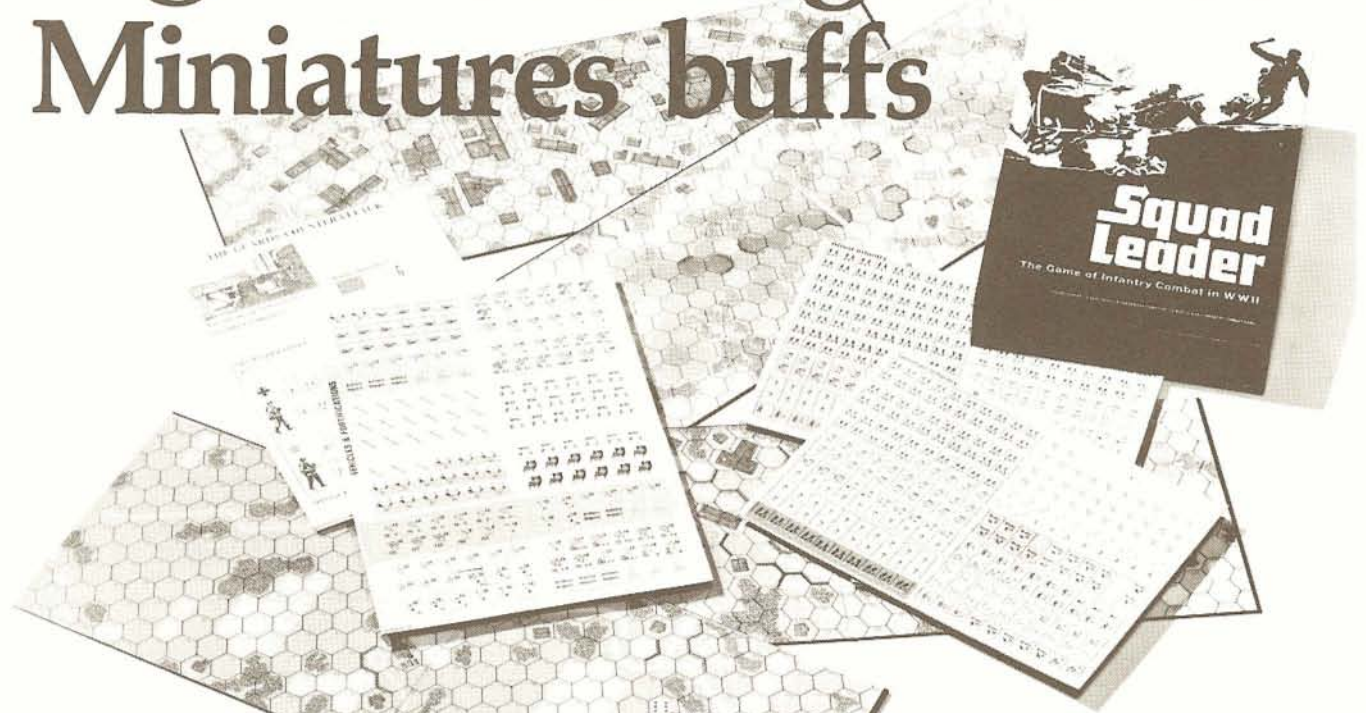
1. Grey always captures Richard of York or Herbert always captures George of Clarence depending upon who is not given the title.

2. If the Earl of Essex is moved by Event card to Colchester, he combines with Neville to capture Margaret at Fotheringhay, and Mowbray captures Edward of March.

3. If Mowbray is moved by Event Card, he combines with Neville to capture either Edward of Lancaster or Margaret of Anjou depending upon his destination. Grey captures Richard of York and Herbert captures George of Clarence.

4. If Neville is summoned to Raby, as Archbishop of York he goes to York instead, and combines with Mowbray to capture Edward of Lancaster. Grey and Herbert capture Richard and George, respectively.

A great board game for Miniatures buffs



Squad Leader—Avalon Hill's best seller at both Origins 77 and GENCON X—allows you to refight virtually any battalion-level action of WWII in Europe.

Borrowing heavily from miniatures rules, an ingenious new game system approaches the effects of simultaneous movement, streamlined for the utmost in playability.

SQUAD LEADER utilizes Programmed Instruction to introduce each of its 12 scenarios gradually so the player need read only a fraction of the overall rules to get started.

Leaders play a major role in the game by directing fire, rallying broken units; and generally enhancing the performances of their troops. The underlying theme of *SQUAD LEADER* is one hinged on morale. The player who can

utilize his leaders most effectively to direct fire on the opposition while keeping his own forces under cover and out of enemy fire lanes will usually be the winner. *Usually* because nothing is ever 100% certain in *SQUAD LEADER*.

In the advanced scenarios, the game expands to incorporate Offboard Artillery, night rules, barbed wire, entrenchments, minefields, bunkers, multi-level buildings, rubble, fire, river crossings, snow, roadblocks, mortar, etc. Yet the biggest option is the very open-ended nature of the game itself. Complete Design Your Own and Campaign Game systems have been included to allow players an infinite variety of individual scenarios and extended campaigns.

SQUAD LEADER comes boxed complete with four 8" x 22" interchangeable full color isomorphic boards, 716 two-sided counters, 36 pp. rulebook, scenario cards, two Quick Reference Data Cards, and two dice.

The Avalon Hill Game Company
Dept SC10, 4517 Harford Rd.
Baltimore, Md. 21214

- Send me copies of **SQUAD LEADER** @ \$12 plus
- Just send me your full-color catalog showing all 70+ games.

Name _____

Address _____ Apt _____

City _____ State _____ Zip _____

Richelieu 5 6 7	Jean Bart 3 6 7	Strasbourg 4 3 7	Dunkerque 4 3 7	Lorrain 3 3 3	Bretagne 3 3 3	Provence 3 3 3	Courbert 2 3 3	Ocean 2 3 3	Schlesien 1 1 3
Algerie 1 1 7	Colbert 1 1 7	Dupleix 1 1 7	Duquesne 1 1 7	Foch 1 1 7	Suffren 1 1 7	Tourville 1 1 7	Bearn 1 0 1 6	Paris 2 3 3	Schleswig-Holstein 1 1 3

THE GENERAL

A.R.E.A. RATING SERVICE

As outlined in *The General*, Vol 11, No. 5, Avalon Hill offers a lifetime service whereby players are rated in relationship to other game players. Return coupon NOW, along with the \$4.00 lifetime service fee for complete details on the Avalon Hill Reliability Experience & Ability Rating.

I don't object to having my name and address printed in *The General* with the rating lists. I rate my self:

- A—an excellent player
- B—a good player
- C—an average player
- D—a novice in my first year of gaming
- E—a beginner

I realize that my rating may change according to how well I fare against others. For now, please send me complete details and membership card—here's my \$4.00

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

GENERAL BACK ISSUES

Only a limited number of *GENERAL* back issues are available for \$1.50 each plus normal postage and handling charges. Due to low supplies we request that you specify an alternate for any selection you make. The index below lists the contents of each issue by subject matter; feature articles are designated with an (*), series replays are italicized, and the number following each issue is the reader rating of that particular issue.

- Vol. 12, No. 1 — *1776, *Anzio*, miscellaneous, Panzerblitz, Chancellorsville, Panzer Leader, Stalingrad, Tactics II . . . 2.57
- Vol. 12, No. 2 — *3 Tobruk, *Panzerblitz*, Bulge, Blitzkrieg, Panzer Leader, Stalingrad . . . 3.10
- Vol. 12, No. 3 — *Jutland, *Waterloo*, miscellaneous, Third Reich, Chancellorsville . . . 3.96
- Vol. 12, No. 5 — *Panzerblitz, *Anzio*, miscellaneous, Afrika Korps, Blitzkrieg, Third Reich . . . 3.22
- Vol. 12, No. 6 — *Chancellorsville, *WS&IM*, miscellaneous, Panzer Leader, Stalingrad . . . 3.42
- Vol. 13, No. 1 — *Luftwaffe, *Panzer Leader*, 2 1776, Waterloo, Kingmaker, Alexander . . . 3.58
- Vol. 13, No. 2 — *WS&IM, *Diplomacy*, Third Reich . . . 3.32
- Vol. 13, No. 3 — *Caesar's Legions, *Midway*, miscellaneous, Panzerblitz, France '40, Kingmaker, 1776, Stalingrad, Russian Campaign, War at Sea . . . 2.53
- Vol. 13, No. 5 — *Origins of WWII, *Afrika Korps*, Chancellorsville, Caesar's Legions, WS&IM, Richthofen's War, 1776, Panzer Leader, miscellaneous . . . 3.31
- Vol. 13, No. 6 — *Starship Troopers, *Panzerblitz*, Starship Troopers 4, Russian Campaign, War at Sea, Tobruk, Panzer Leader, Diplomacy, Midway, miscellaneous . . . 3.62
- Vol. 14, No. 1 — *Caesar—Alesia -5, The Russian Campaign, Luftwaffe, Third Reich, Arab-Israeli Wars, Afrika Korps, Panzer Leader . . . 3.56
- Vol. 14, No. 2 — *Kingmaker -7, *Alexander*, Squad Leader . . . 3.27

WOODEN SHIPS AND IRON MEN IN PLASTIC TRAYS

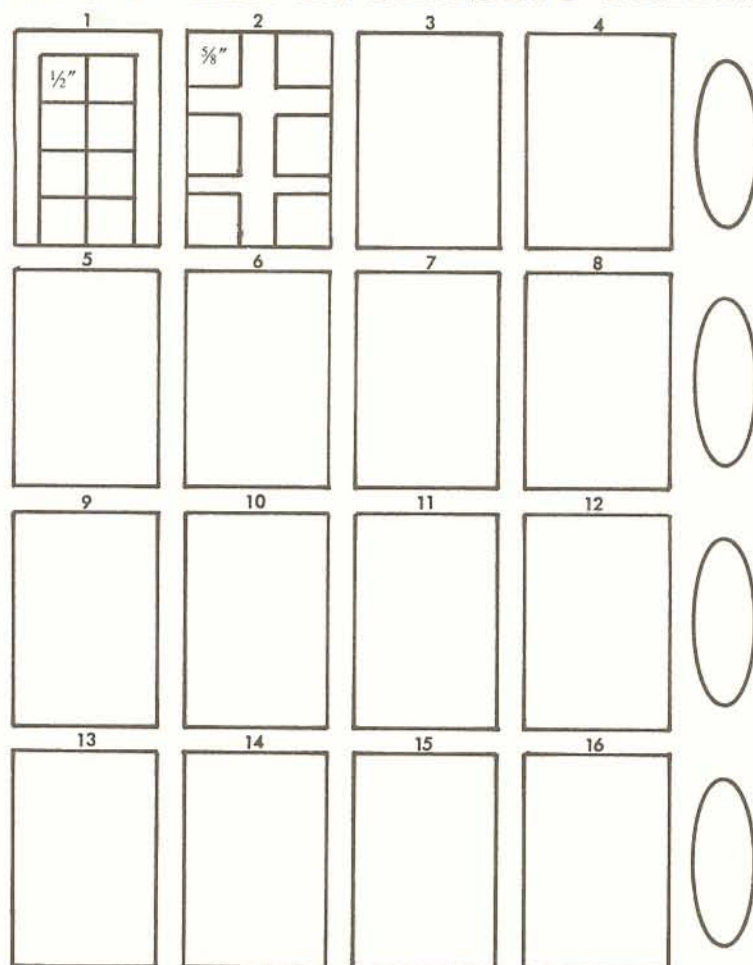
Back in the good old days games didn't have quite so many pieces, and storing them was no problem. Everything fit nicely in the single-compartment trays provided with each game. Times have changed. Games can have up to a thousand separate counters, counters have to be selected at random times during a game, and in any given situation, only a small fraction are used at any one time. Storing, sorting, and searching have become significant problems for many of today's complex games.

Fortunately, this problem is largely alleviated by the plastic trays now available from Avalon Hill. So you order a bunch of trays, dump out a pile of counters thrown randomly in a box, and wonder what goes where? Organizing your counters in your tray can be as difficult as organizing an assault on Opustoschenia. You want to arrange the counters in a logical fashion that makes sense to you. It should be easy to find a particular unit, and easy to sort the counters at the end of a game so that pieces are put in the proper place. In addition, all of the pieces assigned to a particular compartment must fit, which is not always easy.

I offer you tray arrangements for 16 of Avalon Hill's games (one at a time) with the most copious components. They have all been tried and they work quite well. Most games require one tray; a few require two.

Note that 1/2" counters can be packed in layers of 2 by 4 units. The 3/8" counters (*PANZERBLITZ* size) can be packed in layers of 2 by 3 units, and they fit quite snugly. The larger counters (*VICTORY IN THE PACIFIC* ship counters) don't fit quite so neatly as the smaller counters.

Note: it is quite a disaster if the top of a tray slips off and all the counters, once so neat, fall into one huge pile. To avoid this I suggest securing each tray with four paper clips, one in the middle of each side.



VICTORY IN THE PACIFIC

- 1, 2, 3: All Japanese Turn 1 units, including Marines, Land-based Air, and I-Boat
- 4: US Groups W, X, Y, Z
- 5: Rest of Allied Starting Forces (excluding Pearl Harbor)
- 6: Pearl Harbor ships, plus 1-point damage markers

- 7: Both Allied and Japanese Turn 2 reinforcements, plus 2-point damage markers
- 8: Turn 3 reinforcements, 3-point damage markers
- 9: Turn 4 reinforcements, 4-point damage markers
- 10: Turn 5 reinforcements, 5-point damage markers
- 11: Turn 6 reinforcements, 6-point damage markers
- 12: Turn 7 reinforcements, 7-point damage markers
- 13: Turn 8 reinforcements, 8-point damage markers
- 14: Turn 9 reinforcements, 9-point damage markers

- 15: Sunk and Disabled markers (plus blank counters)
- 16: POC, Control Flags, and all Garrisons

Although this arrangement takes a little while to sort after a game, note how easy it becomes to start a game, and how easy it is to find those damage markers in the heat of a battle. Taping an identifying label above each compartment does away with the need to memorize specific contents.

WE WANT YOU . . .

to write for the *GENERAL*. If you can string words together into an interesting article format on any Avalon Hill wargame, there's a good chance you're just the person we're looking for. You can supplement our literary staff with articles of strategy, game analyses, Series Replays, commentaries, new scenarios, or variants.

All articles should be type-written, double-spaced and accompanied by a self-addressed envelope bearing first class postage. Otherwise, rejected articles will not be returned. Articles should be supplemented with illustrations and/or charts whenever possible.

Commencing with the January, 1977 issue the *GENERAL* will pay \$5 per running 10" column of edited text. Letters to the Editor are not subject to remuneration. Alternatively, authors may elect to take their remuneration in the form of Avalon Hill products, paid at the rate of 150% of the cash remuneration.

At the end of each calendar year an EDITOR'S CHOICE article will be selected. The author of this article will receive a \$100 bonus and a lifetime subscription to the *GENERAL*. Articles will be judged on literary style and meaningful content. Quantity, bulk, or length of article will have no bearing on this selection. All types of submissions are eligible; Series Replays, tactical analyses, variants, etc.

This payment system is only valid for articles received after January 1, 1977.

FOREIGN READERS

Due to contractual obligations with our exclusive distributors we cannot accept mail orders for games from Australia, Britain, Germany, Greece, Italy or Japan. Such orders must be placed with our exclusive distributors whose addresses you'll find listed on Page 2 of this magazine. Orders for parts and airmail subscriptions to the *GENERAL* are not subject to this ban. APO and FPO addresses of U.S. servicemen likewise are *not* subject to this ban. We also urge you to get in touch with the distributor for your country in regards to placing your *GENERAL* subscription through him which in most cases will result in considerable savings for you.

REDUCED HEX SHEET PADS

Now available from the Mail Order Department is a pad of 30 hex sheets with normal half inch hexes printed on one side and $\frac{1}{8}$ " hexes printed on the back. The pads are useful for designing your own games, making hex overlays for actual maps, or generally sketching moves and/or concepts. The pads are available from the parts department for \$1.00 plus postage.

FACTORY OUTLET

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

Hours: Mon-Fri: 9 A.M. to 5 P.M.
Sat: 10 A.M. to 5 P.M.

PBM EQUIPMENT

Tired of playing solitaire or humiliating the same opponent day after day? You may be good in *your* game room but what can you do against a good player from another part of the country? There's only one way to find out — play them by mail! PBM is an easy-to-learn and convenient-to-use system of playing fellow gamers across the nation. A special CRT and combat resolution system makes it impossible to cheat! PBM is an entirely different experience from face-to-face play. It has made better gamers of many who have tried it, and all those who have mastered it. PBM is the only way to participate in the many national tournaments held regularly for Avalon Hill games.



PANZERBLITZ BOOKLETS

After hundreds of requests for it, we've finally published the best of the *GENERAL*'s many articles on *PANZERBLITZ*—conventional wargaming's all time best seller. Entitled "Wargamer's Guide to *PANZERBLITZ*", it initiates and may very well end the "Best of the *GENERAL*" series as no other game has been the target of a comparable volume of literary attention.

The 36 pp. manual resembles very much an issue of the *GENERAL* except that it is devoted 100% to *PANZERBLITZ*. The articles are taken almost exclusively from back issues, dating as far back as 1971. In addition, two never before published articles appear; Robert Harmon's "Commanders Notebook" which analyzes the original 12 scenarios, plus Phil Kosnett's "Chopperblitz"—a hypothetical variant utilizing helicopters with six new scenarios.

Reprints include Larry McAneeny's "The Pieces of Panzerblitz"—voted the best article ever to appear in the *GENERAL*, "Beyond Situation 13"—twelve additional scenarios by Robert Harmon; "Parablitz"; "Panzerblitz", "Blind Panzerblitz"; "Situation 13"; "Championship Situations"; "Panzerblitz Concealment"; and "Incremental Panzerblitz." Topping it all off is a complete listing of all errata on the game published to date where the Opponents Wanted Page once ruled supreme.

The Wargamer's Guide to *PANZERBLITZ* sells for \$3.00 plus 50c postage and handling charges from the Avalon Hill Game Company, 4517 Harford Rd., Baltimore, MD 21214. Maryland residents add 4% state sales tax.



COMPARTMENT TRAYS

At last! The long suffered problem of unit counter storage for Avalon Hill games is solved. The Avalon Hill compartment tray fits snugly into the bottom of the bookcase style box. A clean plastic cover fits over the mold to prevent counter leakage. Each tray has sixteen $1\frac{1}{2}$ " x $2\frac{1}{2}$ " compartments $\frac{3}{8}$ " deep which will accommodate up to 400 unit counters and 4 dice.

The tray is also usable in the flat box games. By cutting off with a pair of ordinary scissors three of the four side panels of two trays another perfect fit is arranged for the flat box games—this time with 32 compartments and 5 dice depressions.

These trays are available by mail order only direct from Avalon Hill. They will *not* be included in new game releases in either the retail or mail order line. The trays are available only in sets of 3 and sell for \$3.25 per set plus 75c postage charges. Postage coupons *cannot* be utilized to order compartment trays. Maryland residents please add 5% state sales tax.

Each kit sells for \$6.90 postpaid and includes enough materials (4 pads) to play virtually dozens of games, including addendum sheets which list grid-coordinates for those games not already possessing them. Half kits consisting of two pads and all the pertinent instructions sell for \$3.50 postpaid.

Kits are available for the following games:

- | | |
|-----------------|----------------|
| *AFRIKA KORPS | *KRIEGSPIEL |
| *ANZIO | *LUFTWAFFE |
| *BLITZKRIEG | *PANZERBLITZ |
| *BULGE | *STALINGRAD |
| *D-DAY | *RUSS CAMPAIGN |
| *GETTYSBURG '64 | *WATERLOO |

READER BUYER'S GUIDE

TITLE: **VICTORY IN THE PACIFIC** \$9
Strategic Game of Naval Action During WWII

INSTRUCTIONS: Rate all categories by placing a number ranging from 1 through 9 in the appropriate spaces to the right (1 equating excellent; 5-average; and 9-terrible). EXCEPTION: Rate item No. 10 in terms of minutes necessary to play game as recorded in 10-minute increments. EXAMPLE: If you've found that it takes two and a half hours to play FRANCE 1940, you would give it a GAME LENGTH rating of "15." Participate in these reviews only if you are familiar with the game in question.

- 1. Physical Quality _____
- 2. Mapboard _____
- 3. Components _____
- 4. Ease of Understanding _____
- 5. Completeness of Rules _____
- 6. Play Balance _____
- 7. Realism _____
- 8. Excitement Level _____
- 9. Overall Value _____
- 10. Game Length _____

The review sheet may be cut out, photocopied, or merely drawn on a separate sheet of paper. Mail it to our 4517 Harford Road address with your contest entry or opponents wanted ad. Mark such correspondence to the attention of the R & D Department.

Game to be reviewed next: _____

Good for Complete Game Purchase Only

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POSTAGE COUPON

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The postage coupon is usable only for purchases direct from A.H. No more than 1 coupon can be used per game ordered. Coupons are not usable for parts or non kit orders. Under no circumstances may coupons be used to pay for other than the maximum amount of postage due on any order.

Opponent Wanted 25¢

- Want-ads will be accepted only when printed on this form or a facsimile and must be accompanied by a 25¢ token fee. No refunds.
- For Sale, Trade, or Wanted to Buy ads will be accepted only when dealing with collector's items (games no longer available from AH) and are accompanied by a \$1.00 token fee.
- Insert copy on lines provided (25 word maximum) and print name, address and phone number on the appropriate lines.
- PRINT—if illegible your ad will not be printed.
- So that as many ads can be printed as possible within our limited space we request that you use official state abbreviations as well as the game abbreviations listed below:

Arab Israeli Wars = AIW; Afrika Korps = AK; Alexander = Alex; Anzio = Anz; Assault on Crete = AOC; Battle of the Bulge = BB; Blitzkrieg = Blitz; Caesar's Legions = CL; Caesar = CAE; Chancellorsville = Chan; D-Day = DD; Diplomacy = Dip; France 1940 = Fr 40; Face to Face = FTF; Gettysburg = Get '64 or '77; Jutland = Jut; Kingmaker = KM; Kriegspiel = Krieg; Luftwaffe = LW; Midway = Mid; Napoleon = Nap; Origins of WWII = Orig; Panzerblitz = PB; Panzer Leader = PL; Play by Mail = PBM; Richthofen's War = RW; 1776; Squad Leader = SL; Stalingrad = 'Grad; Starship Troopers = SST; Tactics II = Tac; The Russian Campaign = TRC; Third Reich = 3R; Tobruk = Tob; U-Boat = UB; Victory in the Pacific = VITP; War at Sea = WAS; Waterloo = Wat; Wooden Ships & Iron Men = WSIM.

NAME _____ PHONE _____

ADDRESS _____

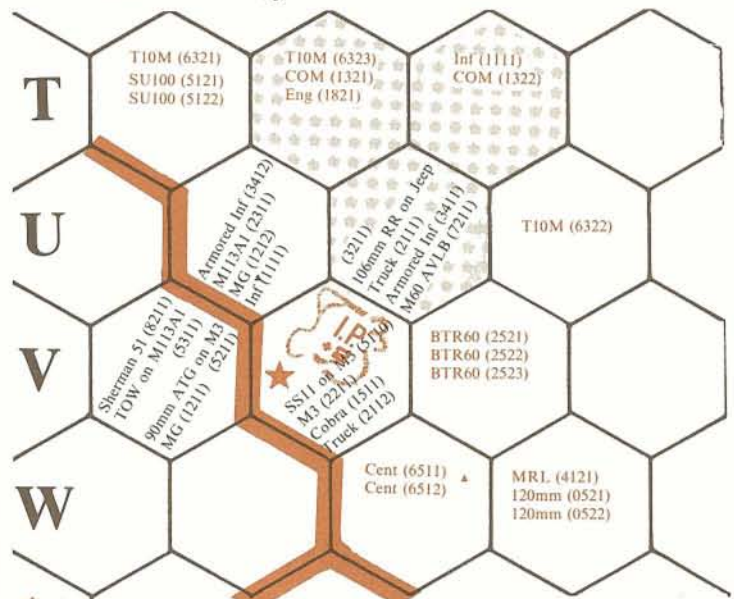
CITY _____ STATE _____ ZIP _____

The game is ARAB-ISRAELI WARS, it is the last turn and the Arab player must eliminate ALL of the Israeli units pictured to win the game. Fortunately, he has three air strikes left, arriving this turn on the hex marked by the star (this hex is "V-3" on board "C"). The STANDARD RULES are in effect—the three air strikes can attack V-3 or any adjacent hex, with no AA fire. The three air strikes are two 21-point "A" attacks and one 40-point "H" attack.

The year is 1973, and units' effective attacking strengths are affected accordingly; all Arab units are considered to be Egyptians (this puzzle has not been taken from any of the Situations in the game, so use any of the Arab counters as Egyptian).

There is bad news and good news: you, the Arab player, roll the highest number possible on all of your attacks, and the Israeli player rolls the lowest numbers possible on every one of his opportunity fire attacks (if any). Fortunately, you laid out your attacks so well that despite this you successfully eliminate every Israeli unit during your turn!

To win the contest, just specify each unit's and air strike's attack and position, in the order in which the attacks are executed. Remember, you have two 21-point "A" air strikes and one 40-point "H" air strike to start things off. No ADVANCED RULES; just STANDARD RULES.



★ Air Strikes: two 21 "A" one 40 "H"

Attacking unit:	Position:	Type of attack:	Target(s):
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

ISSUE AS A WHOLE: (Rate from 1 to 10, with 1 equating excellent, 10= terrible)

Best 3 Articles:

1. _____ NAME _____

2. _____ ADDRESS _____

3. _____ CITY _____ STATE _____ ZIP _____