Avalon Hill Philosophy Part 63

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 process has produced results 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 irritants. This is no exception. 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 want 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 ads submitted by those who do so just to use the form, rather than due to any real need, we are immediately more important the victims of Jack's prior review. Henceforth, no opponents wanted ad will be accepted unless accompanied by a 25¢ token fee.

Articles from subscribers are considered for publication at the discretion of the editorial staff. Articles should be typewritten, double-spaced, and embrace the tenets of good English usage. There is no limit to word length. Accompanying graphs and diagrams should be neatly drawn in black or red ink. Photographs should have caption and credit line embedded on back. Rejected articles will be returned whenever possible.

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Quarterly Conference Play, Research & Design Department. None: all questions should be thoroughly diagrammed. No questions will be answered that are not accompanied by a stamped, self-addressed envelope. Only questions regarding rule clarifications (not historical or design subject) can be answered.

Articles for Publication, Letters to the Editor, News for Brochures, and orders are handled by:
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W.T. and C. Unis Writing for the Game

The Intermediate Game is a updated version of the Basic Game with a wider scope for tactical play, armament, 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. You've got shadovs (a la De Gaulle Free French scenario) which aren't used for such a long time. Your players can take care of theInland 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 up to 12 large ships to have been engaged against each other including the TIRPITZ, GRAF ZEPPELIN, SCHEER, NORTH CAROLINA, DUNKERQUE, etc.

BISMARCK will be developed by the capable Rick Uhl and be ready for ORIGINS '78. Those who are familiar with Rick'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 played. The Basic Game has been played 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.

TRIAREME 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 astern and rowing into position, then ram and melee 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, and Carthage. Or they can combine games to recreate whole battles with hundreds of triremes. TRIAREME, designed by Richard Hamblen, will be exciting either as a two-player, solitaire, or multi-player game in much the same mold as WOODED 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 variety of drunks, 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 reconaissance 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-balanced 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:

4th Infantry Brigade: An efficient infantry organization unsuited for desert operations. Limited desert experience in 1948 gave Israeli military planners little understanding of the weaknesses of infantry in the desert. The result was a heavy reliance upon infantry which was only marginally useful in the actual fighting. This brigade possessed the only battalion-sized unit of anti-tank artillery deployed by Israel in the Sinai.
7th Armored Brigade: Largely responsible for Israel's success in the Sinai. Prior to entering combat, the 7th Brigade was 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 7th Brigade's teams, proved highly successful.

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. 51 HVs 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.

27th Armored Brigade: An abortive attempt at creating balanced combined arms teams at the battalion level. Each of the brigades' armored battalion combat teams was a self-contained unit with tanks, mechanized infantry, scouts, and artillery. With only two tank 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. Division 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.

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 AMX-90 armored cars), an engineer unit, and probably a 120mm mortar battalion.

The other two mechanized brigades were considerably different. One, deployed along the...
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 proportion 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 so great that tanks were sent to the front ahead of supporting infantry and artillery. 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 recoiless rifles in armored brigade 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. 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.

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.

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.

**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 Sinai) committed to Sinai was the 1st Armored Brigade of two tank battalions, a mechanized infantry battalion, a battalion of 57mm 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.

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-11s), and about 30 immobile, dug-in, Shermans used as static anti-tank guns. In addition, the 14th Tank Brigade, with 100 T-54 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

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**Diagram:**

**1956:**

- **Egyptian Infantry Brigade:** A satisfactory organization relying upon British weapons and tactics. While not overly strong in anti-tank weapons, Israeli tank forces were too weak to pose a major threat. In 1956, many Soviet weapons were integrated into the structure. The increased use of Soviet weapons and doctrines led Egypt to abandon this structure.

- **1st Egyptian Armored Brigade:** The first Egyptian unit fully equipped with Soviet equipment. Battalion organization was Soviet, but the types and number of tanks were uniquely Egyptian. Not very robust and increasing Soviet influence resulted in abandoning this structure for a totally Soviet organization.

**1967:**

- **Egyptian Armored Division:** A fully Soviet formation, heavily relying on equipment and tactics. A large number of T-54/55 tanks were available, allowing for greater local strength. The division was highly organized and well-prepared for the 1967 war.

**General Notes:**

- The 14th Tank Brigade was detached and sent south just prior to the war.
- Following the war, the division was reorganized and strengthened.
- The division's effectiveness was critically important to the defense of the Suez Canal.
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 (totaling about 100 T-55s) attached to the infantry brigades and an assault guns battalion of 18 SU-100s 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.

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.
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.

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 a probably reconnaissance, anti-tank, and support units. The 27th also had an attack 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 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 105mm propelled howitzers.

1973 Egyptian Infantry Division: The backbone of the Egyptian division to the organic armored vehicles, tank brigades taken from 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 5 attached to the brigades or in a battalion of 16 attached to the division. Nothing is known of the reconnaissance battalion. It is likely that the engineer battalion contained mine-laying and clearing special purpose vehicles.

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, but 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.

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 submachine guns). 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 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.
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-spout 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 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 the sources of the 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.I.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'Banion. 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 Abdallah Scherier'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.

Some 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 few tank units, in particular the Sagger rocket-launchers, were more effective than the tanks against Syrian armor. It is likely that the few Sagger teams still available were more effective than the tanks against Syrian armor.
### THE GENERAL

**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 T&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 PZBLFLE/PZ 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 equipment 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:

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<th>FOR UNIT DESCRIPTION</th>
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<td>MM</td>
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<tr>
<td>APC</td>
<td>MMG</td>
<td>Medium machinegun</td>
</tr>
<tr>
<td>AR</td>
<td>RG</td>
<td>Recoiless gun</td>
</tr>
<tr>
<td>AT</td>
<td>ROF</td>
<td>Rate-of-fire</td>
</tr>
<tr>
<td>ATG</td>
<td>RPM</td>
<td>Rounds-per-minute</td>
</tr>
<tr>
<td>AVLB</td>
<td>RR</td>
<td>Recoiless rifle</td>
</tr>
<tr>
<td>HMG</td>
<td>SMG</td>
<td>Submachinegun</td>
</tr>
<tr>
<td>KO</td>
<td>WWII</td>
<td>World War Two</td>
</tr>
</tbody>
</table>

#### ISRAEL

**INFANTRY AND NON-VEHICULAR UNITS**

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPOSITION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantry</td>
<td>25-35 men, several LMG, 20-30 AR and SMG, 82mm Mortal bazooka or LAW AT rockets</td>
<td>The composition and equipment of Israeli infantry and paratroop units have changed considerably over the period 1956-1973. Initially, mass infantry was equipped with rifles and SMGs. 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.</td>
</tr>
<tr>
<td>Machinegun</td>
<td>about 20 men, about 6 MG, SMG</td>
<td>Attached to weapons companies in many infantry and paratroop units is 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.</td>
</tr>
<tr>
<td>81mm mortar</td>
<td>6 81mm mortars, about 30 men.</td>
<td>Israeli-produced mortars with a range of over 4000 meters and a maximum RFR of 20 rounds per minute. There is another version, probably for paratroop use, with a range of only 4000 meters,</td>
</tr>
<tr>
<td>Engineer</td>
<td>About 30 men, with engineering and infantry weapons. About 30 men, with SMG.</td>
<td>Equipment probably varies considerably, but can include Israeli-produced LTH flamethrowers (as large as 80 kg, with a range of 40 m), small mortars, and Israeli-made rocket launchers for attacking fortifications.</td>
</tr>
<tr>
<td>Pontoon Engineer</td>
<td>About 30 men, with SMG</td>
<td>Special units put together after 1967 to use the bridging equipment to be used to cross the Suez Canal.</td>
</tr>
<tr>
<td>Cobra</td>
<td>About 10-15 men, 3 Cobra launch units, 6 Cobra AT missiles.</td>
<td>Equipment obtained from West Germany as part of some arms deals transacted in the early 1960s. The Cobra, 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 SS-11 or the Cobra).</td>
</tr>
</tbody>
</table>

#### VEHICULAR AND AIRCRAFT UNITS

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Components</th>
<th>Quantity</th>
<th>Firepower</th>
<th>Speed</th>
<th>IS</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trucks</td>
<td>2-6 five-ton trucks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Israel uses a variety of Western &amp; captured Soviet vehicles.</td>
</tr>
<tr>
<td>Scout Jeep</td>
<td>4 jeeps, 4 MG, 12 crew</td>
<td></td>
<td>1.5</td>
<td>90</td>
<td>280</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>106mm RR</td>
<td>4 jeep-mounted 106mm RR, 12 crew</td>
<td></td>
<td>1.5</td>
<td>90</td>
<td>280</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Armored infantry</td>
<td>4 M-113A1 APCs, 20 MG, 4.2” (52mm) mortars, about 30 men</td>
<td></td>
<td>10.9</td>
<td>70</td>
<td>490</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>AMX-13</td>
<td>5 AMX-13 light tanks mounting 75mm guns (32 rounds each), 5 MG, 15 crew</td>
<td></td>
<td>15</td>
<td>60</td>
<td>340</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>120mm Mortar</td>
<td>6 120mm mortars mounted on M-3 halftracks, about 40 men</td>
<td></td>
<td>9</td>
<td>70</td>
<td>320</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>TOW/M-113A1</td>
<td>4 TOW anti-tank missile launchers mounted on M-113A1 APC’s, about 35 TOW missiles, 12 crew</td>
<td></td>
<td>10.9</td>
<td>70</td>
<td>490</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SS11/M3</td>
<td>4 SS-11 anti-tank missile launchers mounted on M3 halftracks, 12 crew</td>
<td></td>
<td>9</td>
<td>70</td>
<td>320</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>90MM</td>
<td>6 90mm AT guns mounted on M3 halftracks (60 rounds each), about 30 men</td>
<td></td>
<td>9</td>
<td>70</td>
<td>320</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sherman 50</td>
<td>5 Sherman Mk. 50 tanks mounting 76mm guns (about 75 rounds each), 10-15MG, 20-25 crew</td>
<td></td>
<td>32?</td>
<td>40?</td>
<td>160</td>
<td>4.5</td>
<td>2-3</td>
</tr>
<tr>
<td>Sherman 51</td>
<td>5 Sherman Mk. 51 tanks mounting 76mm guns (about 75 rounds each), 10 MG, 20 crew</td>
<td></td>
<td>32?</td>
<td>40?</td>
<td>160</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sherman 51HV</td>
<td>5 Sherman Mk. 51HV tanks mounting 105mm guns</td>
<td></td>
<td>37</td>
<td>44</td>
<td>240</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>M-48A5</td>
<td>5 M-48A5 Patton tanks mounting 105mm guns (about 60 rounds each), 10 MG, 20 crew</td>
<td></td>
<td>47.5</td>
<td>50</td>
<td>450</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
**THE GENERAL**

- **M-60A1**
  - 5 M-60A1 tanks mounting 105mm guns (66 rounds each), 10 MG, 20 crew
  - 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 r.p.m.; Range effective out to 3,000 meters.

- **Centurion**
  - 5 Centurion tanks, mounting 105mm guns (66 rounds each), 10 MG, 20 crew
  - Obtained in 1959, equipped with 20 pdr. gun. 105mm guns were obtained later. While only 10 Centurions were lost in 1967, inferior mobility necessitated the development of Patton. Of 1000 Centurions acquired, 180 from the Netherlands, 25 captured from Jordan, and the rest from Britain. ROF: 10 r.p.m.

- **Patturion**
  - 5 Patturion tanks mounting 105mm guns (66 rounds each), 10 MG, 20 men.
  - Converted Centurions with the same diesel engine and transmission as used in the M-60A5 and the M-60A1. 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 r.p.m.

- **TI-67**
  - 5 TI-67 tanks mounting 105mm guns (about 40 rounds each), 10 MG, 20 men.

- **motorized ferry**
  - several self-propelled ferries.
  - Able to carry medium tanks. Used in 1973 to cross Suez Canal until bridges available.

- **M-60 AVLB**
  - several M-60 AVLB bridge layers.
  - Israel also uses similar M48 AVLB.

- **Sherman flail**
  - several Sherman tanks modified to carry mine-clearing flails.

- **20mmAA**
  - 6 twin 20mmAA guns mounted on M2 half-tracks, about 40 men.
  - Guns made in Israel. Uses optical sighting system.

- **TOW/M-113A1**
  - 4 TOW anti-tank missile launchers mounted on M-113A1 APC's, about 35 TOW missiles, 12 crew.

- **SS1/1 M3**
  - 4 SS-11 anti-tank missile launchers mounted on M2 half-tracks, 12 crew.
  - SS-11 also used by Saudi Arabia.

- **HueyCobra**
  - Several AH-1 Huey-Cobra attack helicopters.
  - Obtained in 1976. Can carry up to 6 TOW AT missiles with 400m range.

- **UH-1**
  - Several UH-1 assault helicopters.
  - Italian-produced AB-205A version of U.S. designed UH-1 assault transport.

---

**ARAB**

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPOSITION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantry</td>
<td>25-35 men, up to 25 AR, LMG, and SMG, several RPG-7 AT rocket launchers possibly a B-10 62mm RG, Sagger AT missiles.</td>
<td>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 Sagger AT missile team, but capabilities are included in the Sagger units.</td>
</tr>
</tbody>
</table>
Engineer

about 50 men, with engineering and light infantry weapons including flamethrowers.

Sagger

about 12 men, 3 Sagger AT missile launchers, Sagger AT missiles.

Known as PUR-64 ("Bumblebee") to Soviets, code names given by Western intelligence include AT-3 and Sagger. Foot troops carrying so-called suitcase version of the Sagger AT missile (the name comes from the case in which the Sagger is carried). The Sagger 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 TOW AT missile). It is estimated that about 15 to 25% of all Israeli tanks destroyed in 1973 were knocked out by the Sagger. The Sagger 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 Saggars over Suez Canal on the first days of the 1973 war to support troops in the Sinai.

107mm RG

4.6 B-11 107mm RG, about 20-40 men.

This weapon has long since been removed from front-line Soviet use, replaced by better weapons. The B-11 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 B-11 is not rifled.

Towed Artillery Units

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPOSITION</th>
<th>WEIGHT (TONS)</th>
<th>SPEED (KPH)</th>
<th>RANGE (KM)</th>
<th>CREW</th>
<th>MG</th>
<th>ORIGIN</th>
<th>USE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 pdr</td>
<td>6 17-pdr (76.2mm) ATG, about 50 men.</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>UK</td>
<td>JN</td>
<td>WWII Surplus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 pdr</td>
<td>6 25-pdr (88mm) gun howitzers, about 80 men.</td>
<td>1900</td>
<td>12000</td>
<td>6</td>
<td>8</td>
<td>UK</td>
<td>JN</td>
<td>WWII Surplus.</td>
<td></td>
</tr>
<tr>
<td>85mm ATG</td>
<td>6 SO-44 85mm ATG, about 70 men.</td>
<td>2300</td>
<td>2000</td>
<td>10-15</td>
<td>7</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
<td>Equipped with Auxiliary Propulsion Unit (APU) giving self-propelled speed of 25 kph.</td>
</tr>
<tr>
<td>122mm HOW</td>
<td>6 M-38 122mm howitzers, about 80 men.</td>
<td>2500</td>
<td>12000</td>
<td>5-6</td>
<td>8</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
<td>WWII vintage. Still effective although out-ranged by modern weapons. Israelis organized several battalions of captured guns.</td>
</tr>
<tr>
<td>120mm Mort</td>
<td>6 M-43 120 mortars, about 40 men.</td>
<td>500</td>
<td>5700</td>
<td>15</td>
<td>6</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
<td>WWII vintage. Very efficient weapon even though it barely outranges Israeli 81mm medium mortar.</td>
</tr>
<tr>
<td>S-60</td>
<td>6 S-60 57mm AA guns, about 60 men.</td>
<td>4000</td>
<td>6000</td>
<td>120</td>
<td>?</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
<td>Highly effective optically-controlled gun.</td>
</tr>
<tr>
<td>ZPU-4</td>
<td>6 ZPU-4 quad 14.5mm HMG, about 40 men.</td>
<td>2100</td>
<td>1200</td>
<td>4x600</td>
<td>?</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
<td>Optically controlled weapon, relying on large numbers for effectiveness.</td>
</tr>
</tbody>
</table>

Vehicular Units

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPOSITION</th>
<th>WEIGHT (TONS)</th>
<th>SPEED (KPH)</th>
<th>RANGE (KM)</th>
<th>CREW</th>
<th>MG</th>
<th>ORIGIN</th>
<th>USE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTR-152</td>
<td>4 BTR-152V, MG, 8 crew.</td>
<td>8.6</td>
<td>75</td>
<td>650</td>
<td>2/14</td>
<td>1</td>
<td>SU</td>
<td>SY</td>
<td>First APC used in large numbers by Arabs, after 1967 confined to second-line use.</td>
</tr>
<tr>
<td>BTR-80</td>
<td>4 BTR-50PK, 4 MG, 12 crew.</td>
<td>14</td>
<td>44</td>
<td>240</td>
<td>3/18</td>
<td>1</td>
<td>SU</td>
<td>EG</td>
<td>SY</td>
</tr>
<tr>
<td>Vehicle</td>
<td>Description</td>
<td>Crew/Armament</td>
<td>SU</td>
<td>SY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTR-60</td>
<td>4 BTR-60PB, 8 MG, 8 crew</td>
<td>10 80 500 2/14 2</td>
<td>SU</td>
<td>SY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT-62</td>
<td>4 OT-62, 3 107mm RG, 12 crew</td>
<td>13 — 440 3/18 1</td>
<td>CZ</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPM</td>
<td>4 BMP-1, 1.4-73mm guns, 4 MG, Sagger AT missiles, 12 crew</td>
<td>12 60 325 3/8 1</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-113</td>
<td>4 M-113, 4 mg, 8 crew</td>
<td>11 65 326 1/12 1</td>
<td>US</td>
<td>JN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>truck</td>
<td>2-6 S-151 trucks drivers</td>
<td>4.5 60 600 1/19 —</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106mm RR</td>
<td>4 jeep mounted 106mm RR, 12 crew</td>
<td>1.5 90 280 3</td>
<td>US</td>
<td>JN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT-76</td>
<td>3 PT-76, 2 76mm guns, 2 BTR-50PB, 5mg, about 30 men</td>
<td>14 45 250 3 1</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140mm MRL</td>
<td>6 BM-14 140mm MRL, about 60 men</td>
<td>8.2 60 600 7</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRDM-1</td>
<td>3 BRDM-1 Sagger missile carriers, 1 BTR-40PB, 1 MG, 42 Saggiers, 20 crew.</td>
<td>6 80 500 5</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-34/100</td>
<td>6-100mm AT guns mounted on modified T-34 chassis, 70 men</td>
<td>30? 50 275 ?</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SU-100</td>
<td>6 SU-100 assault guns, 6 MG, 24 crew</td>
<td>30 57 300 4 1</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-34/85</td>
<td>5 T-34/85 tanks mounting 85mm guns, 10 MG, 20 men</td>
<td>32 50 275 5 2</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-55</td>
<td>5 T-55 tanks mounting 100mm guns each 10 MG 20 crew</td>
<td>36 50 480 4 2</td>
<td>SU</td>
<td>CZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-62</td>
<td>5 T-62 tanks mounting 115mm smooth-bore guns (40 rounds each), 5 MG, 20 crew.</td>
<td>36.5 48 500 4 1</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-10M</td>
<td>5 T-10M tanks mounting 122mm guns (30 rounds each), 10 MG, 20 crew.</td>
<td>50 45 260 4 2</td>
<td>SU</td>
<td>EG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centurion</td>
<td>5 Centurion tanks mounting 20 pdr (83.4mm guns, 64 rounds each), 10 MG, 20 crew.</td>
<td>51 35 97 4 2</td>
<td>UK</td>
<td>JN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- The BTR-40 is a command vehicle. In Egypt all BRDM Sagger carriers were assigned to mechanized infantry brigades but many were detached during the 1973 war to support the infantry brigades in the Sinai.
- Syria uses a version mounting a 122mm gun. The T34/100 mounts a Soviet T-12 100mm ATG with a range of 3000m, ROF of 7-8rpm, and crew of 7.
- The T-55 was a command vehicle, with a 125mm smooth-bore gun, 10 MG, 20 crew.
- The T-62 was a command vehicle, with a 115mm smooth-bore gun, 5 MG, 20 crew.
- The T-10M was a command vehicle, with a 122mm smooth-bore gun, 10 MG, 20 crew.
- The Centurion was a command vehicle, with a 122mm smooth-bore gun, 10 MG, 20 crew.
- The BTR-60 was a command vehicle, with 8 MG, 8 crew.
<table>
<thead>
<tr>
<th>THE GENERAL</th>
<th>PAGE 15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PT-54</strong></td>
<td><strong>MTU-2</strong></td>
</tr>
<tr>
<td>several T-54 tanks mounting mine-clearing equipment.</td>
<td>several T-54 tanks modified to carry and lay bridge.</td>
</tr>
<tr>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td><strong>Captured models used by Israel.</strong></td>
<td><strong>Similar to T-55 carrying a 10m bridge; Egypt also used earlier MTU-1 based on T-54.</strong></td>
</tr>
</tbody>
</table>

---

## 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 Aqaba 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 Israeli 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 reserves 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 morale 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 counts can easily be used for units given a different morale level from the rest of the Arab countries.
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. 9), 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 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 break the Russians by taking advantage of the weather. The MLD is also the line where reserves should be committed to hold key rivers and major cities. Only in the most dire circumstances should this line be abandoned. Only when all hope of a victory 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 cross to 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
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more pouring in every turn. These units are invaluable, as their mobility and strength can stop all but the most determined German drives. Don't hesitate to use them to reestablish the MLD, but care must be taken to prevent these units from being surrounded. Allow paths of retreat and screen with the weaker infantry forces. Don't go chasing minor German units out in the open where counterattacks are inevitable.

With the exception of the Moscow-Tula region, the MLD uses river lines to best advantage. It is unfortunate that no river lines exist around Tula that can be efficiently utilized for defense because this area must be guarded. The rail line from Moscow to Y-8 is the only rail line linking the North with the South. Control of this line is essential if the Russian is to have the capability to shift his forces quickly to meet the various threats. (Note that the reserve forces should be placed on the rail hexes in order to insure their rapid deployment.) Severing of this critical rail line is tantamount to splitting the Russian army in two, a situation from which it may never recover.

In the north (Diagram 1 again) we find the Leningrad front garrisoned less heavily than some may desire. However, I don't recommend committing a large force to this area for several reasons. First, it is a difficult area in which to maneuver, and thus requires armored or guards to defend adequately. Also, it is somewhat isolated, and a heavy commitment may find themselves surrounded and away from the fronts where most of the action occurs. Therefore I have only two basic objectives when defending Leningrad: 1) to prevent a first impulse attack whenever possible, and 2) holding the Finns in Finland to allow an escape route should the Leningrad defenders be required to retreat. The first objective can be attained by maintaining a unit on F-12 (as indicated). The second objective requires 7 factors to defend on B-10, preventing the Finns from getting a 1-1 (without air support). If resources are available, counterattacks may be made in order to regain F-12, thus buying more time for Leningrad. Generally, however, I prefer to let Leningrad stand alone but with a sizeable garrison, forcing the German to commit armored and/or Stukas in his attack, and thus robbing other fronts of these valuable units. If (or when) Leningrad falls, the defense shown in Diagram 2 should be established as quickly as possible. It is not necessary, or desirable, to place a unit on J-10. This hex can be assaulted from both H-11 and J-11, thus losing the benefit of the river. The mountain hex of J-10 is much more effective to hold the line. Note the J-3 and J-4 armored units stationed in the mountains. These units have more mobility than infantry for penetrating into (or out of) the mountains, yet are doubled in defense, creating effective retardants against German attacks. Holding the river line on A-9 and B-9 is not recommended. First, this would require an extra unit. Second, units retreating from this line have a long way to go to reach any type of security. And finally, as long as the hexes F-5 or G-8 are held, the German supply must be traced to B-11, which severely restricts any advance north of Lake Ladoga.

The defense in front of Moscow is rather standard, the goal being to prevent an easy overrun which would leave Moscow vulnerable to an attack in the second impulse. The river line in front of Tula is heavily garrisoned, for reasons mentioned earlier. Note that only one unit in this defense is susceptible to being surrounded: the 4th Inf on V-13. The unit on Y-13 is necessary if Kharkov is to be protected from being flanked. Even if overrun, the German doesn't gain much. In order to surround Kharkov, this maneuver would cost a minimum of 39 factors and two Stukas to assure success. And after all that he hasn't even broken the river line.

If available, German forces are near Rostov, the unit on GG-13 is almost mandatory to prevent a first impulse attack against units along the Donest river. In the second impulse, the Germans can then cross the river lines near JG-11, making the defense of the lower Don difficult, if not impossible. The small armored and cavalry units are found defending the Donest river. These faster units are necessary to reach the MLD once the Donest river cracks. The slower moving infantry would just be trapped on the open steppes. A unit on JJ-15 is necessary if Rostov is to be protected from a sea invasion.

Note carefully the paths of retreat shown. If units have been properly placed, the MLD can be formed in only one turn. Rail movement is necessary to provide Stalingrad with the proper protection.

With a severe shortage of units, it may not be possible to form the Donest river line. In this case, the Don river line should be formed as quickly as possible, with bastions of defense in Kharkov and Rostov to slow the Russian drive.

The more astute among you may have noticed that Archangel has not figured heavily in this analysis. Generally I don't worry about Archangel during the first two years for the following reasons: The Germans must first take either Leningrad or Moscow before they can even consider moving on Archangel. The Finns by themselves have no chance to succeed even after Moscow or Leningrad has fallen, it is still a long way to Archangel, and the German goal will be advertised by the disposition of his forces. And unfortunately for the German, his supply line must run through N-2, a hex which is very vulnerable to attack by Soviet reinforcements.

These reasons, plus the fact that there are no major cities within hundreds of miles, makes for a very formidable German task.

The Combat Results Table

The CRT in RUSSIAN CAMPAIGN is quite interesting, and when coupled with the double impulse attack and attacks, can yield some interesting facts. One of the more significant features is that a 1-1 (or even a 1-2!) attack is not as bad as it appears. While the German is loath to attack at poor odds (he generally wants to be assured of breaking a position and is very unhappy with exchanges or A1 results), the Russian commander can be much freer with such tactics. Assuming he is willing to chance some losses in order to retake a key position, a well-executed attack at low odds can give quite favorable results.

Consider Table 1. The first column lists the attackers' odds, the second the chance of success when attacking in only one impulse, and the third column gives the chance of success when attacking in both impulses at the same odds. (A Contact result is considered a success as it will hold a desired position. But obviously a Contact followed by an A or A1 is not a success, and this fact has been considered when computing Table 1.)

<table>
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<th>Odds</th>
<th>One Attack</th>
<th>Two Attacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1-3</td>
<td>16.7</td>
<td>2.8</td>
</tr>
<tr>
<td>1-2</td>
<td>33.3</td>
<td>44.4</td>
</tr>
<tr>
<td>1-1</td>
<td>50.0</td>
<td>66.7</td>
</tr>
<tr>
<td>2-1</td>
<td>66.7</td>
<td>83.3</td>
</tr>
<tr>
<td>3-1</td>
<td>83.3</td>
<td>94.4</td>
</tr>
<tr>
<td>4-1</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From this table we can conclude that in all cases except for a 1-3 (or worse) attack, a double impulse attack definitely increases your chance for success. Double impulse attacks, however, are more difficult to mount because a reserve force of armored or guards must be available should the first impulse attack fail. A case in point is shown in Diagram 3.

Due to a well-coordinated German attack, good weather, and Russian mismanagement, you have lost Leningrad in September of 1941 (shame!). Only token forces face the bulk of Army Group North and the Finnish army. It appears that Leningrad is lost forever. What would you do? (Assume some replacements are available and that the weather is clear.) The solution is given in Diagram 4. A double impulse 1-2 attack against the Finns is planned, with a resulting chance of success equal to 38.9%.(It is not 44.4% as indicated in Table 1 because if the result of the first impulse attack is A, there are not enough armored units in the vicinity to make another attack at 1-2. However, if the arriving 16th Inf. is replaced by an armored unit, the expectancy is raised to 44.4%.) If an A is the result of the first impulse attack, the 8th Inf. should be eliminated, allowing the two armored units to return Leningrad and attempt a second 1-2 attack. Since there is a 50% chance of snow next month, you may find yourself in possession of Leningrad for the entire winter! The best odds the German can get is a (assuming snow) against the 5th Inf. on F-13 is 3-1, and then only by soaking off against the 7th Inf. on G-11. The Finns will face at best a 1-1 attack on Leningrad, and at worst 1-2. Some luck is necessary and some...
risk must be taken, but the rewards are well worth the effort. The situation is nowhere near hopeless, as suggested by Diagram 3.

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 O 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, 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 Germans use 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.)

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

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 Germans will be driven in retreat by the powerful and more mobile German forces. The 7th Armored access to N-12 should be necessary. The 5th and 20th are retreated to non-rail hexes, almost always a good idea.

DIAGRAM 8 "AGC Stalemate" (Dec '41)

Note carefully the retreat paths for the Germans. The 13th is not needed and would allow the 7th Armored access to N-12 should it be necessary. The 13th must block the railroad, as the 7th and 20th must block the railroad and assist the 39th and 59th Inf. for a 3-1 against the 7th. Not a sure thing, but it beats the hell out of a 1-2.

DIAGRAM 9 "AGC Stalemate" (Dec '41)

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Comparing Diagram 7 with Diagram 8, we can see a difference in Russian strength of 47 combat factors against 39 German combat factors. Despite the movement restrictions among 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 10 "AGC Stalemate" (Dec '41)

Russian Offensive Tactics

The 7th Armored can attack the 13th Inf. on 0-12, 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 19.03% 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 his losses have already been considerable, may amount to a major disaster.
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And while some may criticize the soundness of placing a worker unit 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 against 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.

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The above example will I consider placing a partisan 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 38th 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 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. Considering the odds, results, the chance for a favorable mission is 75.06%. Even if the mission is a failure, this strategy 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. The German 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, Rumania, a 3-5 armored unit should invade the Rumanian coast at EE-27 in September, advancing to BB-18 in October (see Diagram 10). Note that this trick will not work 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-winter 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 invaders.

Regardless of the number of ports controlled by the Russian, I still recommend an invasion against an unengaged 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-ramp" 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
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 pathetic (to be frank) efforts in other magazines, "monster" games, most notably of their own choosing, and the current flood of relatively few articles on tactics and strategy. Aside print.

Third Reich responds. THIRD REICH defies the buried under the avalanche of counters and abilities. So it is strange that so few would explore the 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 in these pages.
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.

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.

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 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 not 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-end sequence and receiving a fresh BRP allotment. For this reason, Germany benefits little from attacking France in 1939. Absent an 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

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, on the average, 7.59 BRP casualties on Germany (figure 1).

However, Beyma's article is subject to criticism in this respect. First, I believe he errs in picking 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 6-6 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:

Expected losses = .03125 (14) + .03125 (16) + 96875 [1714 (16) + 1143 (8)] + 6.67 BRP’s.

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:
abandon. So Germany should attack in Spring 1940, forcing France to stretch her BRPs 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 wants to 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 overtake in preparation for the drive on Paris.

The better course, therefore, is to wait until Winter 1939, then take Belgium, Netherlands, Luxembourg and Denmark, in one offensive option. The 15 BRPs 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.

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 Poland. For the air force, one unit must start in the east to counterair the Polish air force. As for the armored units, two reoccupying the hexes across the river from Strasbourg and one in the northwestern portion of the country. The other 2 air units base in western Germany, poised to attack Poland. Deploy one unit at 20 air factors and provide ground support for one infantry attack. Place an air base on the hex east of Strasbourg and an air unit there to counterair the French air unit at Lyons. Deploy the other 2 air units there to attack Paris. Place the fleet in Kiev or further west to threaten interception of British transport missions.

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.

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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 Magninot 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.

With the air unit on Lyons is counterattacked (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 replacement backed into Sedan. The remaining 2 armored 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.

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 for the east. 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.

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of Paris and 2 taking the hex northeast of Paris. With the para unit, they attack Paris at 3 time Paris, and 2 taking the hex northeast of Paris.

Figure 7 (German units in black, French in blue)
Position after German Winter 1939 combat phase. France can get only 17 ground forces 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 it has assumed no other effect 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. If France only deploys miserably on the border, France should be content to stand on the defensive. The AH French set-up (figure 3) seems best, although it would like a unit on Marseille. That port provides the only link between France and her colonies.

Britain, however, is another matter. The British need have little fear of a “Scalaf” 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 attack 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. 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 1:2 and a usually successful 5:1. 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-take 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 unoccupied Finland; (2) attack on an unoccupied 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 Talam, 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 BRP pool totalling 61 BRP's and will have available 149 BRP's, with a base of 124.

**NO WAR WITH TURKEY**

<table>
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<th>Year</th>
<th>1939</th>
<th>1940</th>
<th>1941</th>
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<tbody>
<tr>
<td>Old base</td>
<td>90</td>
<td>90</td>
<td>90</td>
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<tr>
<td>Surplus x .3</td>
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<td>+16</td>
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</tr>
<tr>
<td>New base</td>
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</tr>
<tr>
<td>Conquests</td>
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<td>+25</td>
<td></td>
</tr>
<tr>
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<td>115</td>
<td>161</td>
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<td>30</td>
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<td>161</td>
</tr>
<tr>
<td>Surplus</td>
<td>0</td>
<td>54</td>
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</tr>
</tbody>
</table>

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 two 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 resources immediately 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.

**THE GENERAL**
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 Norway may be won or lost in Norway. Germany needs Norway as a base for the invasion of Murmansk convoys, potentials Russia’s life line. 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 Oslo, there, Oslo lies in range of another drop. One more 4-5 factors, making amphibious assault possible. Norway BRPs substantially cover strategy in 1940. This is as it varies greatly, depending on the reason. German air units staged to Oslo or German range of the relatively few units usually sent there, can tip the balance of supply sources for Allied and Axis units, respectively. As it did historically, supply plays a crucial role in North Africa.

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.

Initiative

The initiative rule, unique to 3R, provides that the alliance with the most BRPs 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 supply 116 BRPs in the 1941 Year-Start sequence, the Axis opponents can do nothing to prevent the German supply of 6 naval factors (2 combat points) attack the 1-3 hex. Attrition combat encourages deploying weak units on critical hexes. Their sequence of attrition combat creates this anomaly. The resulting 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 non-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 rational dilemma, assume Russia declines to 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 occur in North Africa. After France falls, the Axis 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. Yes, the turn before France fails 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, occupying the beach hex. They 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.

CONCLUSION

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 PBW turkey ... err, opponent). Even if you don’t love your opponent, be sure to get 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, 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 renowned hotspot 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 Strangara, 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 invertebrates.

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 ORIGENS II over 140 other extranas while Joe has never finished higher than this year's 4th. Paul's neutral comments are pruned in strictures. This will be our first Series Reply to be separated 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 long been a mainstay of the TOurnement. It was created by Rick Balak, the major designer in the AREA since the "Dark Ages" of Avalon Hill history.

Avalon Hill, unfortunately, chose AFRICA 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. AFRICA 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. AFRICA KORPS can be won by one die roll, a "one" by the Germans attacking Tobruch at 1:1. RUSSIAN CAMPAIGN is too long and still draws prose despite the revisions in the rules. Possibly the finest tournament PRM game ever developed will die an unnatural death at the hand of its own creator.

This SERIES REPLY, played using the old PRM CRT but with the latest rules, is an illustration of the high level of play that STALINGRAD has achieved. It will either become a ruling standard for the "old guard" wargamers to barrage Avalon Hill with letters to keep this classic on their retail list, or possibly a elegy 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 setup has no tactical weaknesses except along the Prut. A concentrated German effort here would bestrategic suicide (lessening the alternatives available for future turns); therefore, a series of tactical "risks" in one specific area—along the Brest-Nemunas de- fense 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 PJB table there are 4 chances in 10 of success with only 3 chances in 10 of an AElim.

Neutral Comment: The Russian setup is good. I like the 5 units on the Finnish border. Not placing a 2-3-6 at UI8 leaves S18 vulnerable. If S17 cannot be held next turn, I would have attacked S18 at 3-1 since a lone 7-10-4 there on turn one is no less tempting than a single 7-10-4 is Best Litovsk. I've seldom found sticking my nose into BB14 to be successful. It is better to attack CCC12 from CC13 only (one big-1-1, 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- 3's, and soak-offs. It is 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.
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 results. The exchange GERMAN JULY '41:

**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 disastrous 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 July Move**: Losses are starting to mount and the Russian position is still as solid as a rock. I'm not waiting around for 3-1 attacks and soak off, 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 June Move**: Joe's move. I like a Russian who doesn't wait around for 3-1 attacks and soak off, as it is standard although it allows you to take the 1-1 in 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 doesn't hold up in Stalingrad on the last few turns of the game.

**Russian August Move**: Well, the Nemunas is assaultable, but what a soak-off. Maybe I should just kill the 17, 29, and 62? 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 doesn't hold up in Stalingrad on the last few turns of the game.

**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.

**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 H14 is a good move.

**Russian September Move**: What a blood bath! It's time to count 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 FFT 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 S18 isn't surrounded and may live. I would have another unit in Finland.

**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.

**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 H14 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 count 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 FFT 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 S18 isn't surrounded and may live. I would have another unit in Finland.
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 DD into the swamp) would be better. Mg looks safe.

As he did last turn the German takes what the Russian offers 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 offers, I think that this is really the essence of German strategy. He has to be strategically flexible (translational: 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 easily 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. Thesouth is the key and G022 is the critical hex. By defending along the Dnestor 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 criticism approaching a serious level involves 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 back (vs. A Elms) 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 November ‘41:** Despite the arrival of the 2nd and 15th Armor and 4th Cav as replacements the Russian is feeling the piece shortage and bases 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 October ‘41:** The Russians have dived into their strength along the Dnepr to return the 2nd Army from Finland where it takes part in a successful 3-1 vs. PO—reducing Axis strength there to three units and 11 factors. The first Russian replacements appear (7,15) to take up delaying positions.

**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 (77) is eliminated at 3-1. As a result of the

**German November ‘41:** 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 15th 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.
The General

German December '41: The Russian winter reduces the bloodshed and slows the arrival of reinforcements—only the 7th Armored getting into position. The 2nd and 8th Armies take up position for next turn's use. The German attacks are limited to 3 AVs vs delaying units, 7, 4, & 15 Armor.

Russem January '42: Snow brings a resurgence 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 3 Elim tracks. The German, unable to reach undefended Leningrad due to snow, retreats to Hildesheim and sends FX4 on a run to the hinterland.

On the eastern front the Russians offer only one sacrificial delaying unit—the 2nd Armored—which the Germans can slowly AV its. 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 roll in (29, 4, 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 reinforcements in the form of the 10th Inf, 2nd Cav, and 2nd Arm 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 Dneprpetrovsk with a 3-1 D 160 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 Dnepr, especially since the Dnepr will be in trouble next turn.

Given his somewhat higher than normal losses to this point and given the 1-2 opportunity along the Dnepr next turn, the German takes the (correct in my mind) conservative approach this turn.

Russian December Move: Well, kiss the Dnepr goodbye this turn; it was nice for the short time it lasted. My sacrifice in Finland continues to pay off. 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 Dnepr 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 Divana and the Dnepr) is a good move.

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

Russian January Move: I would sure like to exchange or two on these double 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 ZZ4 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 delay out in the open.

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 D Back 2'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 north.

Neutral Comment: Rather than contain the German bridgehead at Kiev with a couple of units and hold the rest of the Dnepr, 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 gobbling 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 Repl...

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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 Admiral Joffre 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 border, 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 CA; 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 2nd 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, Admiral 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 and most were sunk by the French at 5:54.

Were the British right in their assessment of the situation, and the subsequent attack on Oran? Could more have been done to persuade the French? If so, there was a definite gap in British command and control of the Allied maritime elements in the Mediterranean. The next day, Admiral Darlan joined the French and brought the French Fleet. These and many other questions concerning the French Navy have been source for centuries 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 WW1. Escalation became so expensive that the 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 5:5:3:1:1.75:1.75. 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 signers.

The immediate consequence of the treaty was the surrenders of Britain's century-old position as the world's strongest naval power. Also, through the treaty, France came to be the world's 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 area was based on equal force application by both the British and the French. The French Fleet was based on a combination of modifications to WW1 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 8th 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 was 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, these 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 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 end of modern standards. 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 best 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 42,000 tons (announced as 35,000, later revised to 38,500) the first ship, the RICHELIEU, had 16,500 tons of armor—35% 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 GASCOIGNE. 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 CBs 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-WW1 DRESDEN 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: SCHLESIEN (1-1-3); SCHLESWIG-HELSTEN (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 (6-6-7); JEAN BART (6-6-7); COURBERT (2-3-3); OCEAN (2-3-3); PARIS (2-3-3); BRETAGNE (3-3-3); PROVENCE (3-3-3); LORRAINE (3-3-3); DUNKERQUE (4-3-7); STRASBOURG (4-3-7); ALGERIE, Colbert, Duplex, DUCQUESNE, FOCH, SUFFREN, TOURVILLE (1-1-7).
THE GENERAL

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 two 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 POCs 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 arena could 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.

3. 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.

D. Changes in Points of Control
The Mediterranean was a vital focal point for the ALLIES during the war. Only in the Mediterranean 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.

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<th>British Fleet</th>
<th>German Fleet</th>
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<td>(c) none built</td>
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DIPLOMACY WORLD is a quarterly magazine on Diplomacy which is edited by Walter Buchanan, R.R. #3, Box 324, Lebanon, IN 46052 and subsidized by The Avalon Hill Game Company. The purpose(308,912),(588,984)
**Bill Farone** is a member of the Old Guard who does most of his playing by mail. As such it comes as no surprise that he presides as an official judge for AHK5S postal PanzerBlitz games. AHK5S, by the way, is the exclusive (adults only) national club devoted entirely to postal play of wargames. As so few of the new games these days are suitable to play by mail it is only natural that a postal buff such as Bill would favor us with yet another Situation 13 for one of his favorite postal games.

Although many situations have appeared for PanzerBlitz the early actions of 1941 have not been developed as fully as the time period from 1942 to the end of the war. This is somewhat unfortunate because it was in 1941 that the German Blitzkrieg achieved some of its greatest successes. This period deserves more attention because part of the lure of games of armored warfare is to recreate the situations where the speed and firepower of the tank allow for an intense, fast-paced struggle.

The situation presented here is based on a typical skirmish immediately after the crossing of the Russian border. Elements of a Russian Rifle Division face the onslaught of the lead elements of a Panzer Division. The situation in mind is the crossing of the Bug River by Guderian’s 2nd Panzer Group on the way to Minsk.

The objective for the Germans is to destroy as many Russian units as quickly as possible and to break through to the East keeping their route open for the units that follow. The Russians have to extract whatever toll they can in German units and block the roads thus slowing the blitz.

Only Board 3 is used and it is oriented such that the gully squares between rows V and Z are to the West. This places Grabyosh on the East edge.

All the units are contained in the standard game. At this time in the history of the war the attack and defense factors of the German Panzer units should be less than that printed on the counters because earlier versions of the tanks were in use. However, they are left as they are to simulate the advantage that the Germans had due to surprise and tactical air superiority. These factors can be included this way without the requirements for any extra rule which may be helpful to future designers of 1941 scenarios.

The gully squares on the Western half of the board represent the Bug River and 329 is the only allowed crossing point. The Russian units set up first East of row T. The Germans set up West of the River and move first. The game length is 9 turns. It should be noted that game length in this situation is a good way of handicapping when players are not of equal experience or skill. A game of 12 turns makes the German job much easier. The only special rule that has been added for the sake of logic is that all German infantry and guns must be carried by trucks or halftrucks. This is the lead element of the attack and the tanks are not to be slowed down picking up or carrying infantry or guns!

The Germans get 1 victory point for each Russian unit destroyed plus 1 point for each armored vehicle or loaded transport unit off the East edge by the end of the game. Once exited, units may not return. The Russians get 1 point for each German unit destroyed and 3 points for each town or road hex occupied at the end of the game. In addition the Russians get a 5 point bonus if the Germans fail to exit 8 or more armored vehicles or 10 points if they fail to exit 5 or more. The side with 1-5 more points achieves a marginal victory, 6-10 points achieves a tactical victory and more than 10 points is a decisive victory.

For the German player time is of the essence. If he tries to play a “safe” game he can run into problems and have to give up valuable road and town squares. He must find and destroy the Russian mobile units lest they block roads on the last turn! An all out attack will result in some losses which must be made up either with exited units or Russian losses. The Russian player will find that there is just enough hiding space in the two towns and 4 woods areas but any one of them can be easily attacked so that unit placement is critical. The situation is designed to allow several tactical options. The basic German decision is one of concentration while the Russians can play to delay at Opustoschenia with artillery to the rear or for doing major damage to the German as soon as possible.

The situation is balanced in the sense that either side can win but any individual playing can end up being highly unbalanced due to the difference in tactics selected.

The difference between various tactical doctrines will become apparent. The German can learn about the doctrine of committing armor in mass as opposed to piecemeal and the Russian can learn the value of using armor-piercing weapons at close range.
I advance to meet their doom. Actually, the Arabs fellow is in for a rude awakening as the dunes and indicate. This is as true on the mapboards of subtle tactics? He just takes his overwhelming have plenty to fear, for the lsraelis have much more power at their command than their numbers ridges become littered with the remains of his once and especially Kuneitra, we have a horde of Arab ISRAELI WARS as it is on the battlefields of the Middle East.

This article is about Arab tank tactics in A1H. 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 dunes become littered with the remains of his once mighty armored force. In situation after situation, Tel Masehara, Botzer, Abu Aghel, 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 3 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 Shermans. The Israelis have a 2 or 4 hex range advantage, 12 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 Arabs 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 Israelis are 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

Note that while most units, including Israeli tanks, get a +2 hull down bonus, your Russian-made BMP's 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 Israelis need 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 only be 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 A7W 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.

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 until shotguns, carbines, Buffalo rifles, and revolvers open up—or until the players are suddenly locked in a desperate hand to hand combat. TOTOW will be a fast, fun game for 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 many days of the 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 long-awaited 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 kickoff from the 35 yard line), and introduces 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 to set (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 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 had 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 Battelline'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 production process to be subjected to one of our full-by-mail playtest programs but we do have roughly two weeks of final proofreading 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 to an independent 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, etc. 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. We have received many letters saying that 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 backtrack 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 KINGMAKER**............................387
**Series Replay ALEXANDER**............................187
**In Praise of KINGMAKER**............................154
**A Squad Leader Preview**............................142
**More KINGMAKER Surprises**............................118
**Avalon Hill Philosoph**............................70
**KINGMAKER By Mail**............................43
**Design Analysis: KINGMAKER Rules Explanation**............................34
**And Still More KINGMAKER Surprises**............................32
**Postal KINGMAKER Mechanics**............................31
Dear Sir:

It was with considerable interest that I read Dwight Hamner's recent criticism on our article "Genetics: Khao Soi Dao rears its ugly head". This is one of the most comprehensive and insightful articles on the subject, and it is sad that such a thorough analysis has been marred by a few errors.

I am concerned that the criticism is based on an incomplete understanding of the concept and the composition of the forests. It is clear that the authors have not been able to grasp the complexity of the situation.

In conclusion, I must express my strong support for the original article and I urge all readers to carefully consider the arguments presented.

Yours sincerely,

Richard J. Arndt
Stuttgart, Germany

Dear Sir,

This spring I read about two dozen out of print games that are available only to people who registered various artisans on a hobby magazine. The single high point of the year, TRAFALGAR II, I sold for $40 in cash - more than 300 times the price paid for the original game. TRAFALGAR II has an interesting story. Approximately 123 copies of this game were put on the market by the original publisher, who paid $1 to the author, but when the game was published, the author received only $10. Since the original game was very successful, the publisher decided to publish a new edition, which was also successful. The author received $100 for each copy sold, which meant that he had made $1000 in total.

TRAFALGAR II is an important game, so I thought it would be interesting to see what happened when the game was released. The first few copies were sold at a very low price, but as the game became more popular, the price increased. Eventually, it reached the point where the publisher was making a profit on the game. The author was happy with this, and the game became very popular.

Don,

Gentlemen,

I am writing this letter with the regard to the availability of some of your games. The best PBM kit that you now produce is TRAFALGAR II, which is a very high quality game. The original game was very high quality, and the new version is even better. The game is now available in two versions, the original and the updated version. The updated version is even better than the original.

The so-called "big" games are written for a small fraction of the cost of the original games, and they are very expensive. As a single player, it is also better to write the strategy for play than to simulate the actual game. As a single player, it is also better to write the strategy for play than to simulate the actual game. As a single player, it is also better to write the strategy for play than to simulate the actual game.

In conclusion, I am very grateful for the work that you have done to make this game available to us. I look forward to playing it in the future and I am sure that it will be a great success.

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Yours sincerely,
ARAB-ISRAELI WARS ARE THE 33rd GAME TO UNDERGO ANALYSIS IN THE RBG AND FOCUS RELATIVELY WELL, PLACE IN THE OVERALL LIST WITH A CUMULATIVE SCORE OF 2.6. THE GAME WAS PIPPED BY A NEAR RECORD SETTING PERFORMANCE FOR COMPONENTS WHICH PLACED SECOND ONLY TO THE 1.83 OF FRANCE, 1940. THE JAZZY ARMOR AND AIRCRAFT SILHOUETTES OF THE PANZERBLITZ FAMILY COUSINS SEEM ALMOST DESIGNED FOR GOOD RANKINGS AND THOSE PROVIDED IN RBG SEEMED NO EXCUSE. OTHER STRONG POINTS WERE IN THE REALISM CATEGORY (7TH BEST), PHYSICAL QUALITY (11TH), ENJOYABILITY (1ST) AND OVERALL VALUE (12TH).

ON THE NEGATIVE SIDE, RBG POSTED TWO SUB- AVERAGE SCORES FOR ITS RESPECTIVE CATEGORIES. THE EASE OF UNDERSTANDING RATING WAS ONLY THE 26TH PERFORMANCE TO DATE AND FAR BELOW THE AVERAGE RATING OF 2.76—ALTHOUGH THIS WAS NOT UNEXPECTED FOR A GAME AS COMPLEX AS RBG. THE PANZERBLITZ SYSTEM GAMES HAVE BECOME INCREDIBLY COMPLICATED WITH THE PUBLICATION OF EACH NEW SISTER GAME, AND RBG HAS NOT SHINEd ITS ROLL IN THIS REGARD WHILE INTRODUCING SUCH NEW FACTORS AS MAXORIZED GUIDE TACTICAL ADVICE, CLOTH AND FIRE, IMPROVED ARTILLERY MECHANICS, AND MORE CLOSERLY DEFINED TERRAIN EFFORTS (FULL DOWN, ETC). THE OTHER SUB PAR RATING WAS IN THE Play Balance WHERE THE GAME'S INNATE DESIGN BIAS FORCES THE ARABS TO WIN WITH SUPERIOR NUMBERS IN THE FACE OF FAIR BETTER ISRAELI TECHNOLOGY, MORALE AND WEAPONS.

**The Question Box**

**ARAB-ISRAELI WARS**

Q. Can you double or triple your attack strength (using the SUPPLY option) rule when making OVERGOM OR CAT ATTACKS?

A. No. OVERGOM AND CAT ATTACKS RELY ON TECHNIQUE FOR SUCCESS AND THE RULES PROVIDE NO OTHER MEANS.

Q. Why does the game include units (such as the Arab MILITARY) and rules (such as the building points for bridge building rules that require 40 or 60 turns) that are used in the game but not in any of the situations?

A. NOT ALL OF THE WEAPONS AND TECHNIQUES THAT WERE IMPORTANT IN THE MIDDLE EAST FIGHTING COULD BE INCLUDED IN THE LIMITED NUMBER OF SCHEMES PROVIDED. HOWEVER, THE DESIGNERS DECIDED TO INCLUDE THEM IN THE GAME EVEN IF THEY WERE NOT IN ANY PARTICULAR SITUATION. MANY PLAYERS OF RBG-STYLE GAMES (PANZERBLITZ, PANZER LEADER) ENJOY MAKING UP THEIR OWN SITUATIONS AND SO WE ALLOWED PLAYERS TO HAVE ALL THE IMPORTANT MIDDLE EAST TACTICS TO WORK WITH.

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

A. No. Opportunity Fire is not applied to CAT attacks. CAT attacks use a different method for attacking units.

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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 ‘Flaid 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

Earl of Essex

Chancellor of England; or Treasurer of England

Chancellor of England or Treasurer of England

Burgundian crossbowman or Flemish crossbowman

Castle Rising or Framlingham Rockingham

Archbishop of York to anyone

One mercenary to anyone.


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

Chancellor of England or Treasurer of England

Chancellor of England or Treasurer of England

Chancellor of England or Treasurer of England

Archbishop of York

Earl of Essex

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.

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.
OPPONENTS WANTED

College Rodeo News is now accepting entries for the 1988 NCA College Rodeo National Finals. The competition will be held June 22-24 at North Carolina State University. The competition will be composed of 22 events and include both open and team events. The events include bareback, saddle bronc, steer wrestling, team roping, calf roping, bull riding, tie down, barrel racing, and more. To enter, individuals must be enrolled in an accredited college or university and be a member of their school's rodeo team. Entries can be submitted online or by mail. For more information, please visit the College Rodeo News website or contact the NCA College Rodeo National Finals committee at 555-555-5555.

We have 10 fishermen who want to go to Lake Powell. We need 5 more passengers. If you or anyone you know is interested, please contact the NCA College Rodeo National Finals committee at 555-555-5555.

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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 ______

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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 myself:
  ☐ A—an excellent player
  ☐ B—a good player
  ☐ C—an average player
  ☐ D—an 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.

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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 assigned to a particular compartment must fit, the label above each compartment does away with the need to memorize specific contents.

VICTORY IN THE PACIFIC
1, 2, 3: All Japanese Turn 1 units, including Marines, Land-based Air, and 1-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 1½" inch hexes printed on one side and ½" 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.

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 1½"x2½" compartments ¾" 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 75¢ postage charges. Postage coupons cannot be utilized to order compartment trays. Maryland residents please add 5% state sales tax.

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.

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 be 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 Kosnitz's "Chopperblitz"—a hypothetical variant utilizing helicopters with six new scenarios.

Reprints include Larry McAneny's "The Pieces of Panzerblitz"—voted the best article ever to appear in the GENERAL. "Beyond Situation 13"—twelve additional scenarios by Robert Harmon. "Parabellum", "Panzerwacht", "Blind Panzerblitz", "Situation 13", "Champion Settings", "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 50¢ postage and handling charges from the Avalon Hill Game Company, 4517 Harford Rd., Baltimore, MD 21214. Maryland residents add 4% state sales tax.

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 almost 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.

Each kit sells 22.90 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
Opponent Wanted

25c

1. 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.
2. For Sale, Trade, or Wanted to Buy ads will be accepted only when dealing with collector's items (gaming materials no longer available from AH) and are accompanied by a $1.00 token fee.
3. Insert copy on lines provided (25 word maximum) and print name, address and phone number on the appropriate lines.
4. PRINT—if illegible your ad will not be printed.
5. 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 = AW; Afrika Korps = AK, Alexander = Alex; Anzio = Anz; Anzio on Crete = AOC; Battle of the Bulge = BB; Blitzkrieg = Bliz; Caesar's Legions = CL; Caesar's War = CAE; Chancellorsville = CH; D-Day = DD; Diplomacy = Dip; France 1940 = FR 40; Face to Face = FTF; Gettysburg = GET '64 or '77; Junct = Jun; JunKrieg = JunK; Krieg; Luftwaffe = LW; Midway = Mid; Napoleon = Nap; Origins of WWII = Orig; Panzerblitz = PB; Pantzer Leader = PLL; Play by Mail = PBM; Richthofen's War = RW; STS; Squad Leader = SL; Stalingrad = Stal; Starship Troopers = SST#; Tannen = Tann; Tempest II = TII; The Russian Campaign = TRC; Third Reich = TR; Tobruk = Tob; U-Boot = UB; Victory in the Pacific = VIPP; War at Sea = WAS; Waterloo = Wat; Wooden Ships & Iron Men = WSIM.

NAME

PHONE

ADDRESS

CITY____STATE____ZIP

CONTEST NUMBER 79

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 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.