The start of a new year is always an appropriate time to turn our editorial attention to the discussion of new games. Last fall was the first time in recent memory that AH did not reveal a new game for the Christmas season. This shouldn't be taken as an indication of a slowdown; however, as we've been working quite hard on our '77 releases and have a number of titles to offer in the coming year.

Not the smallest happening is our acquisition of yet another game company. Last December we took over the complete line of SPORTS ILLUSTRATED games which include PAYDIRT (pro football), BOWLBOUND (college football), SUPERSTAR BASEBALL, GO FOR THE GREEN (golf), and TRACK & FIELD (Olympic track competition). All five games sell for $10 and are available both by mail and through our regular retail distribution. These are just repetitions of our already existing sports games. Whereas the FOOTBALL, BASEBALL, and BASKETBALL STRATEGY series emphasized pure competition in the form of the matrix play selections, the SPORTS ILLUSTRATED line utilizes the "replay" concept of sports games by providing realistic statistical ratings of actual teams and individual athletes so that the player can recreate the exploits of his favorite team/athlete. All the participants perform in direct proportion to their accomplishments in real life. In this way, baseball fans can check how Sandy Koufax would have done facing Babe Ruth, Ted Williams, etc. These games are particularly well suited to solitary play, and can be a definite place in the sports game market. They will make a fine addition to our line of simulation games. The effect of the SPORTS ILLUSTRATED acquisition does not end however. We will be repackaging all our sports games to take advantage of the clout of 5 Amos. The first to receive this treatment will be our remakes of the previous 3M games SPEED CIRCUIT and WIN, PLACE & SHOW. These two were the class of the 3M sports line and will effectively round out our greatly expanded sports line which you'll see advertised frequently in the pages of... what else, SPORTS ILLUSTRATED.

Of more immediate concern to most of you as wargamers is naturally enough, news of the upcoming wargame releases. The following is meant as only the briefest sketch of what we'll offer in 1977 so as to whet your appetite for the long awaited new releases. The game will incorporate the capital ships of the Pacific Theatre plus destroyer, submarine, and auxiliary divisions with detailed combat, repair, and ship building rules to give a tactical feel to a very big strategic game. At this point the game will utilize approximately 1,000 wargaming counters representing land, air, and naval units plus a roster pad to maintain order. The game will incorporate interlocking scenarios for play balance and playing time purposes. A complete Campaign Game will be included but due to the inevitability of the outcome, players will find the initial mid-War scenarios to be the meat of the game.

Another wargame slated for release in 1977 is our reincarnation of U-BOAT. This game will have nothing to do with its simple predecessor of the early 60's; will incorporate sub actions in all play, and will include the misadventures of the submarine in the insinuations of the title. The game will include a multitude of ship vs. sub, and sub vs. conv scenarios as well as an interlocking campaign.
Europe and the Pacific

By Mark Saha

The origins of World War II in Europe have been explored more thoroughly than perhaps any other war in history. If for no other reason, the sudden total collapse of Fascist Italy and Nazi Germany made available to historians documents ordinarily not available for study until a hundred years after the fact. Contrast this extraordinary body of material has still not been adequately explored. Nonetheless, the main European causes, both immediate and long range—political, cultural, economic and technological—are generally known and have been admirably summarized, by way, in the Designer's Notes of AH's ORIGINS game.

But the contribution of the Pacific to the outbreak of war in Europe is less well known. Some people would say the Pacific made no contribution whatsoever to the outbreak of hostilities in Europe. Granted, the Japanese were aggressive and bent upon empire, but they could have been contained had not the war in Europe tempted them into a bold and opportunistic land grab. So goes the argument. But a glance at the Objectives Table of Zedek's PACIFIC ORIGINS reveals a very interesting fact: Germany has no interests in the Pacific at all.

This situation came about because of Germany's defeat in the Great War of 1914-18. So intense was hatred of Germany after four bloody years of trench warfare (and some outrageous wartime propganda), that the subsequent Versailles Treaty (1919) reduced her to little more than a bankrupt puppet state. Almost incidental, in the course of this wholesale political/economic destruction of Germany, was seizure of all her overseas colonies and interests. This proved to be a grave strategic error that was to come back and haunt the Allies with consequences that persist to the present day.

Strategist Harvey DeWeerd, in a series of university lectures, said the stripping of Germany's overseas possessions was an error on three counts. First, the manner in which it was done: the Allies, he said, might at least have been honest about it. They might have said, "Look, you've lost the war, so we are going to take your colonies." The Germans are pragmatic if nothing else, and that kind of talk might have been understood. But the British and French were not so blunt. They said, in effect, "You, the Germans, have shown yourselves to be a morally inferior people, unworthy of the great task of bringing along colonial peoples in the Christian tradition. Therefore, we are going to undertake this burden for you." That, of course, is a paraphrase, but it reflects the general contempt that existed at the time in regarding the Huns as, indeed, morally inferior savages. Germany was given a national inferiority complex. Which made Hitler all the more welcome when he arrived with a new message: "We Germans are not a morally inferior people. Quite the contrary. We are a race of pure Aryan supermen whose destiny it is . . . ."

Seizing Germany's overseas possessions was an error on the second count because it gave the Allies no "handle" by which they might have controlled Hitler. Suppose the colonies had remained in German possession. And Hitler marched into the Rhineland. What does Britain do? She seizes a rich German colony in retaliation, as a "police action." Germany immediately feels the sting. But in fact Germany had nothing to seize. All had been taken in 1919. If Hitler chose to march into Czechoslovakia, Austria, Poland . . . it was a matter of go to war or do nothing.

Finally, seizing German colonies left Germany the only major Western power without colonial interests. Germany was therefore indifferent to Japanese expansion and aggression. France, England, Netherlands, etc., had a great deal to lose and therefore a great deal to protect in the Pacific. If they went to war with Germany over Rhineland, Czechoslovakia, or Austria, it would really gain them nothing--while an opportunistic Japan took advantage of such European entanglement to seize their priceless resources in the Pacific. Thus, it can be seen, the Allies found themselves in the 1930s in a trap of their own making; and this situation accounts for Hitler getting away with as much as he did before war finally came in 1939. Indeed, Hitler did not expect Britain and France to declare war on him even then. Why should they sacrifice their colonial empires to honor a treaty (the Polish guarantee) they could not possibly enforce anyway? He was almost right. England almost let it pass; but after three days England declared war and persuaded a reluctant France to do the same.

JAPAN OVER ASIA

But the Versailles seizure of German colonial interests in 1919 would not have created nearly the problem it did, except for the fact that in the 1930s all Western possessions came under increasing pressure from an expanding Japanese empire. This is the other side of the coin. It must be remembered that Asia had never welcomed Western colonization in the first place. In fact, they resisted it; European trade was often forbidden by law in Asia, and resisted by force of arms. But, although a very high level of civilization had always existed in this part of the world, they lacked almost entirely the pragmatism of Western science and the technological weapons it produced. Resistance was useless. Asia was conquered, and it was developed, but it was in many respects an occupied country. Railroads, telegraph lines, and instruments of economic exploitation were owned and operated by Western powers under treaties dictated by those powers. This is not a very pretty chapter in the history of the West, and because it is
still a controversial subject, perhaps the best thing is to refer readers to a couple of recent popular
accounts and highly recommended.

Japan was the first major Asian nation to actively seek and master a knowledge of Western technology. A main reason for this decision on Japan's part was that she had little other choice. Like England, Japan was an island nation, and thus highly dependent upon fishing and trade for economic survival. However, Japan entered the 20th century with problems more desperate, and solutions more elusive, than any Britain has ever faced. It was not necessary that Japan should go to war in an effort to solve these problems— throughout history many nations have and some have not—but a unique combination of cultural and political events made the road to empire an increasingly attractive solution.

Japan Over Asia by William Henry Chamberlin is an attempt at an objective Western assessment of Japan's problems, published in 1936 and revised—with developing events—in 1937 and 1939. It is a good idea to study a contemporary account of an historical event because hindsight makes the problems of the past appear so silly, and a national solution so obvious; a contemporary account may be less accurate, but at least it reflects what people believed at that time. Few people accept their beliefs, not what is subsequently found to be the truth. In any case, Chamberlin did a remarkable job, in my opinion, in examining Japan's problems and explaining why the solutions of Western advisers did not work. Most of what follows is drawn from this book.

Chamberlin points out that although Japan was an island nation like England, any resemblance ended there. Japan was an island of volcanic rock; with best efforts, only 15.6 percent of her land area could be farmed. Suitable for farming, compared with 24.2 in Britain (and 27.8 in Netherlands, 40.2 in Belgium, 43.7 in Germany. This is 1936). This situation was aggravated by a sudden population explosion. Chamberlin quotes from a translated Japanese textbook: "The territory of Japan represents one of the most restricted in the world's total. The whole population makes up five percent of the world's total. . . . (her) population density is approximately ten times greater than the average population density of the world."

Three possible "peaceful" solutions to Japan's woes were birth control, emigration, and industrialization. Japan's reply was that it was too late for birth control, and in any case the Japanese family tradition was strongly against it, and the Western countries themselves had all sorts of trouble with birth control. The only country which was really open to Japanese emigration was Brazil, but this resulted in such a migration that even Brazil was forced to impose quotas. That emigration should be encouraged by Western advisers as a solution thus another step by birth control.

Finally, there was industrialization. This, was the direction of Japan's major effort at a solution but industry requires raw materials and natural resources, and here Japan ran into a truly remarkable streak of bad luck. The much-needed mineral wealth, including iron, was found in the Philippines, rubber in Indochina, oil in Borneo—but the volcanic rock of the Japanese islands yielded very little. Perhaps the ultimate insult in this regard came on the Island of Sakhalan, which was divided by the treaty between Japan and Russia. Japan searched diligently all along the southern portion of the island but found nothing of value; the Russians, after brief exploration, found on the northern half one of the largest oil fields then known.

What was Japan to do without resources? Again, there were two economic theories then prevalent, offering two different solutions. The first theory originated in Italian Fascist intellectual circles—a strange place for such a theory—because it was analogous to the communist "class struggle." Just as there can be a class struggle between rich and poor within a society, so Japan faced a struggle with her own territory. This argument went, so there could be an international struggle between "have" and "have-not" nations for global raw materials and natural resources. Chamberlin comments, ironically, that even in Germany "... National Socialist leaders have displayed an increasing tendency to attribute their country's economic difficulties largely to the lack of colonial sources of essential raw materials."

Thus, Germany, Italy, and Japan were the major "have-not" nations of the world. And, in their struggle against the "have" nations, Germany sought a solution in an Asian empire, Italy in a Mediterranean empire, and Japan in an Asian empire.

Western economists of the "have" nations disagreed with this theory. They claimed that the mere ownership of colonial resources meant nothing because "the expense of conquering and administering colonies is out of all proportion to the trade, investment, and migration benefits which accrue from colonial imperialism." And, "Since the producers of essential raw materials are only too eager to find buyers... there is nothing to prevent a nation which is poor in raw materials from buying what it needs in the cheapest market and building it up its industries on imported raw materials."

(There is interesting to notice that this theory has suddenly become relevant once again, with the Arab oil embargo of 1973, and the shoe on the other foot! United States and Europe were suddenly "have nots" and found it distinctly unpleasant. Western economists promptly dusted this theory off and reminded us that if the Arabs refuse to sell us their oil, or put too high a price on it, they will be stuck with a product for which they have no other possible use. The Arabs also understand the argument, from the standpoint that it is not in their interests to wreck the Western economy and thus destroy their own market.

Nevertheless, although everybody seems to agree with the theory, few countries like being in the position of Japan of the 1930s. Even though this theory may appear to be sound, it is not necessarily true. In the 20th century with problems more desperate, and faced. It was not necessary that Japan should go to war in an effort to solve these problems - the Japanese problems—published in 1936 and revised—with developing events—in 1937 and 1939. It is the Sage-King that is answerable in person for the view, quite naturally concerned by the plight of the Lancashire textile industry, imposes a quota which sharply reduces Japanese sales of textiles in Malaya. Thus, "Trade restrictions established and multiplying all over the world, it is not easy to convince the Japanese that physical possession of their essential goods is a matter of indifference" and "There is a strong temptation to cast the samurai sword into the mercantile scales that seem unfairly weighted against Japan."

This temptation, and popular feeling in Japan at the time, is captured better than any dry historical account could possibly, by a remarkable series of quotations of translated speeches and articles from the island empire.

Chamberlin quotes from an article by Japanese publicist Rin Kaito:

For over a century and a half the Asians have been pressed down by the Whites and subjected to Western tyranny. But Japan, after defeating Russia, has aroused the sleeping Britain to shake off the Western tyranny and torture.

From a pamphlet issued by the Japanese Naval Ministry in 1935:

In view of Japan's geographical position the powers should leave the maintenance of peace in the Orient in the hands of Japan, which is now powerful enough to perform this task. If other powers fail to recognize the mission of Japan they may well be said to disobey the will of Heaven.

Translated excerpt from Japanese and Oriental Political Philosophy, by Professor Chikao Fujisawa:

The Emperor as Sage-King would think it his sacred duty to love and protect not only the people of this land, but also those non-white peoples who are suffering from misgovernment and privations. It must be recalled that the Sage-King is answerable in person for the pacification of the entire Under-Heaven, which is the ancient name for the whole world; consequently his moral and political influence ought to make itself strongly felt through the length and breadth of the earth. Should any unlawful elements dare to obstruct in one way or another the dictates of the Sage-King, he would be permitted to appeal to force... the heavenly mission of Japan to tranquillize the whole world.

Chamberlin writes that during his visits to Japan he spoke with many Japanese university professors with similar views. One of them concluded such talk with "a very amicable smile" and added, "Some people say I am an imperialist. But I think I am only a sane liberal."

Having quoted the above statements, I hasten to remind readers that these are quotations taken out of context of a tumultuous period of history; and, if you will compare carefully, you will find them no more than opinions, just as absurd, than those Nazi Aryan propaganda of the same period. Moreover, like Nazi propaganda, it mostly originated from high political or academic positions where it was "party line". There is little evidence that the Japanese or German peoples believe their respective propaganda so much as they along with it due to a sense of national duty. Thus, in the recent book, Tojo, (Ballantine, 1975) Alvin D. Cox states that if it had been put to a vote, as late as 1940, he estimates 80% of the population of Japan would have voted against going to war. Most of Japan's political leaders felt the same way, in the same boat! Thus, even the public prosecution of the government was seized by the military, and they exploited the popular conception of Emperor Hirohito as Sage-King to present their military expansion as a religious crusade.
THE GENERAL

ZEDEK'S PACIFIC ORIGINS

Dan Zedek's remarkable PACIFIC ORIGINS game variant, included in this issue, may not be a "perfect" game. However, every gamer who has playtested it so far (and this includes about twenty home groups from England, California and Maryland) have found it superior to standard ORIGINS and more than a few remarked "this is the only thing that could really get me back into playing ORIGINS."

The game subject is one that defies perfection as a simulation. Many players, for example, were unhappy that they could not appropriate their PFs to Europe or the Pacific as they pleased. Obviously, this would have resulted in a very wild game almost impossible to balance. Moreover, it would be unrealistic to suppose that, say, Britain would pull out of the Pacific entirely to stop Hitler, or let Japan have Europe to gain ascendance in the Pacific. Thus, European and Pacific PF allocations for a country like Britain represent an overall policy commitment to these respective theatres. Moreover, many of the PFs in one theatre could not have been transferred to the other even if England had desired to do so. For example, abandoning Hong Kong would not have increased England's influence in Europe—indeed, would likely have decreased it. And vice versa. The same holds with the other "two-theatre" countries.

A certain amount of PF transference could have taken place—especially in terms of fleets, etc.—and this is abstracted in the present game in the interboard relationship rules. Readers who are interested may experiment with a system if they wish; wherein total PFs for both theatres are given a player each turn, and he has a certain amount of discretion as to which theatre to place his PFs within set Max/Min limits. General feeling, however, is that such rules discriminate against the one-theatre nations of Germany, Japan, and China.

Perhaps the toughest nut to crack was the problem of the Sino-Japanese War. This was a very unique event, in that it represented "hot" war being actively carried out through much of the global diplomacy era of the 1930s. Many games felt that it should be omitted entirely. Zedek felt it should be included as a Japanese option, but if Japan opted for a "hot" war with China it would obviously have to be a very different game design element from the standard Diplomatic Attacks that continue among non-belligerent powers. And so you have the Sino-Japanese War Table. The Japanese player must judge carefully whether, as events unfold, his best chance for a win on Objective Points lays in a major Diplomatic Assault on Western Colonies, or a "hot" war with China.

Meanwhile, Western powers can never make their colonies "safe" from Japanese diplomatic aggression, since only Japan seeks a colonial control. The Western parent nation seeks NC (no control) for his colony and the Allies seek a mild (low point) understanding with each other's colonies. This was done to reflect their mutual self-interest in keeping their colonial possessions from Japan.

PACIFIC ORIGINS captures very well, I think, the overall strategic essence of the global diplomacy era that preceded the global war of 1939-45. Obviously, this is not a simulation-in-detail. Zedek had a lot of problems to solve; he has come up with some interesting solutions and a fast, intelligent, and fun game that is well worth your time and a place in your collection.

I. HOW TO PLAY

Pacific Origins is a companion game to ORIGINS OF WORLD WAR II and is primarily designed to be played simultaneously with that game. The new mapsheets is of East Asia in the 1930s; it should be placed on a separate table, if possible, but arranged so players have easy access to both gameboards. China and Japan are also introduced as active participants, so this variant may be used for a stand-alone players. (However, five people may still play, Germany/Japan/ and France/China can be single players as there is no conflict of interests between these respective countries. See below). Hereafter, we shall refer to these simultaneous games as PO (Pacific Origins) and EO (European Origins).

All rules for standard ORIGINS are used except as modified or expanded here. However, the rules changes are minimal, you will see. Thus, playtesters have found this game easy to learn, very fast moving and, perhaps most important of all—it's now interesting even to France and the U.S.A.

II. STANDARD RULES: MODIFICATIONS & EXPANSIONS

(1) Separate National Objectives (Chart I) and PF Allocations (Chart II) are provided for the Pacific Theatre. These are used in the same way as standard EO charts.

(2) PF allocations received in the Pacific must be placed on the PO mapsheet. PF allocations received in Europe must be placed on the EO mapboard. PFs of any country may NEVER be transferred from one gameboard to the other.

(3) As in standard rules, PFs received in the Pacific must be placed on the mapsheet immediately, either in his own home area or as the player desires. Notice that special holding areas in the Pacific have been provided for Britain, France, and the U.S.A. These are "home" areas for these countries in the Pacific.

(4) British, French, Russian, and United States PFs in home areas on the PO board are continually separate from similar PFs on the EO home areas. No exchanges are allowed between a nation's two home areas, nor may units in these two home areas be transferred to one another.

(5) For purposes of this simultaneous game, standard European Origins is considered to begin in 1934 and end in 1939 (instead of 1935 to 1940). This is no way changes the play of that game. It remains six turns long, and all Objectives, PF allocations, and victory conditions remain the same.

Pacific Origins begins in 1932 and ends with completion of the 1940 turn. It is nine turns in length. The German player has no active part for the first two game turns, but may if invited sit in on negotiations to pave the way for any future benefits as the situation in the Pacific unfolds.

A complete Player Turn Order is now as follows:

U.S., France, Britain, Russia, Germany, China, Japan.

III. SPECIAL INTERBOARD RELATIONSHIPS

Although PFs may not be transferred from one board to another, certain interboard relationships do exist and may be used to advantage by countries with PFs on both boards.

(1) Remember that Britain, France, Russia, and the United States have two Objectives Tables—one for Europe and one for the Pacific. Objective points in Europe count only toward victory on the European board. Objective points in the Pacific count only toward victory on the Pacific board. Thus, each of the above countries will have two separate Objective Point totals at game's end, and, for example, Britain could win on one board and lose on the other.

(2) The Pacific Objectives Table sometimes gives an "E" as an objective for one of the above countries in the Pacific. This merely denotes that although there are no Pacific interests, there are European ones and these may be relevant. For example, Russia's Pacific interests with Britain are denoted by "E," thus, although Russia cannot gain an Understanding with Britain in the Pacific, the "E" refers him to the European board, where an Understanding is possible.

(3) UNDERSTANDINGS on one board are binding on the other. If Russia should get an Understanding with Britain on the European board, this Understanding is binding to Britain on both boards.

Understandings with colonies have no significance whatever apart from their Objective Point value. For example, a Russian Understanding with French Indochina gives Russia 2 Objective Points but does not constitute an Understanding with France. Only Japan seeks to Control colonies; colonial parent nations seek NC (No Control) in resisting Japanese desires, and colonial Understandings merely reflect the mutual self-interest among Western powers that their colonies should be free of Japanese Control.

Players may still ALWAYS attack foreign PFs in their home countries or home "holding" areas.

(4) COMBAT: As previously stated, players may never combine PFs on the two boards for an attack. However, there is a special case in which a player may use PFs in his home area on one board to attack foreign PFs in his home area on the other board:

(a) When an opponent places PFs in your home area, you may attack those PFs only with your own PFs in that home area on that board.

(b) If you do not have enough PFs in the home area to make a legal attack (and you may deliberately bring this situation about during placement of PFs if you wish), then—and only then—you may elect to attack with PFs in your home area on the other board. This assumes you have enough PFs in your other home area for a legal attack. Remember, PFs in the two home areas may not be added together; losses are taken from the area from which the attack is made.

Example: Britain has 9 PFs in England/Europe and 3 PFs in Britain's Pacific "home area". Japan has 3 PFs in Britain's Pacific "home area". If Britain should wish to attack, she must attack with Pacific PFs at 1-1 odds, since this is a legal attack. However, if Britain had only 2PFs in the Pacific "home" area (no legal attack), she could elect to attack with the 9 PFs in Europe at 3-1 odds. In event of an exchange, British losses would have to be taken from the attacking (European) area; the two British PFs in the Pacific would be unaffected by any adverse results since they were not involved.

Notice that the above still does not entail any actual transference of PF units from one board to another.

(5) This rule would also make it legal, for example, for British PFs in the Pacific "home" area
to attack German PFs in England. Britain did not have enough PFs in England/Europe "home" for a legal attack. Likewise, France, U.S., and Russia may all use this tactic for breaking undesired European Understandings.

This also allows for a minimal amount of German/Japanese cooperation: Japan may attack British PFs in British/Pacific "home" area to prevent these units from attacking a German Understanding in England/Europe. Or, if it does not have a legal attack on Britain's Pacific "home", attack British PFs in England to weaken Britain in Europe. This is greatly to Japan's interest, as she wants to see a war break out in Europe (i.e., a German win with 15 points) since this greatly increases Japan's own possibilities, as we shall see.

Germany, on the other hand, will seldom opt to attack PFs in Pacific holding areas even if the opportunity arises. Adverse results weaken Germany in Europe, and it is no benefit to the German to eliminate (say) British PFs in the Pacific.

IV. SINO-JAPANESE WAR

(1) Starting with the 1937 turn, Japan may elect to do away with diplomacy and declare outright war on China. It is not necessary for Japan to control Manchuria or to attack/ remove any Chinese Understanding with Japan.

(a) At the beginning of his turn, prior to placement of his PF allocations, the Japanese player simply announces his declaration of war. This may be done on any turn from 1937 to 1940 (although the point of doing so in 1940 would be to convert a shared Control of Manchuria to Exclusive Japanese Control).

(b) All Chinese PFs in Japan are removed (including any Understandings) and no Chinese PFs may be placed in Japan for the remainder of the game. All Japanese PFs in China are removed, including any Understandings.

(c) If China and Japan have SHARED Control of Manchuria, this automatically converts to exclusive Japanese Control. The Chinese Control marker is simply removed.

(d) The Japanese player may now place as many PI allocations as per usual. He may, and probably will, place them in China.

(e) The usual Diplomatic Attack Phase is now executed, starting with the United States (both boards) on through to Japan.

(4) After all diplomatic attacks are completed, a "Turn" now has a "Sino-Japanese War Phase." Simply, it is this: at the end of any turn that Japan has more PFs in China than the Chinese do, the Japanese may roll the Sino-Japanese War Table. When allowed to roll on the table, he may roll for every city on the table.

The first time the Japanese player rolls on the table, he must roll the WAR I column; the second time he uses it, the WAR II column, etc. Thus, if he declares war in 1937, and is superior to China in PI's on every subsequent turn, he will get to use the WAR IV table in 1940.

(g) Each city needs to be captured only once. It becomes a permanent Japanese possession for the remainder of the game.

(h) If Japan captures every Chinese city, he may conquer China. All Chinese PFs are removed from the board and China scores "zero" for the game.

But this is not likely. It is possible only on the last game turn; and then only if Japan is rolling on the WAR IV Chart, and rolls a "1" against Chungking.

(i) Thus, throughout the Sino-Japanese War, China or any other Player in the Pacific may continue to place as many PFs as they please in China. Russia may even secure her Understanding (U) with China. These foreign PFs may even be
used in separate foreign attacks, if sufficient for legal attack, on Japanese PFs in China. This would be in an effort to control Japanese PFs in China. (It is not likely that anybody can put enough PFs in China for a legal attack against Japanese PFs unless the Japanese player is not making an all-out effort here).

Any turn in which Japan is unable or unwilling to place enough PFs in China to exceed Chinese PFs there, he is not allowed to roll on the WAR Table. (i) Prior to rolling the WAR Table, Japanese PFs in China may make diplomatic attacks on Chinese PFs or any other nation's PFs (except nations that have an Understanding in Japan). Only after the Diplomatic Attack Phase are Chinese Japanese PFs in China compared to determine whether Japan may roll the WAR Table.

(ii) Each Chinese city that falls to the Japanese reduces China's PF allocation per turn for the remainder of the game by the amount indicated on the WAR Table. A country (or kept of the PFs lost; or, more simply, at time of China's PF Allocation, these "lost" PFs are physically set aside or handed to the Japanese player (he may not use them). At the end of the game, Japan gets 1/2 Objective Point to win such Chinese PF in his possession. Fractions are not rounded off, Japan could win by a fraction of an Objective Point.

Notice that since there is no PF allocation after the 1940 (end of game) turn, no PFs are lost from this non-allocation phase. Accordingly, no PF loss is given for Chungking.

(2) JAPANESE CONTROL OF CHINA: The Pacific Origins Objective Chart lists NC (No Control) as United States, British, and French Objectives in China but does not list a C (Control) to oppose them. Japan's stated Objective is Understanding (U1) and this would seem to give the Allies automatic NC points.

However, if Japan declares war on China, an Understanding is no longer possible. Japan is said to CONTROL China if four or more cities are captured, at such a time, a Russian war would automatically lose all its war (without being attacked) and all foreign PFs would be removed from China without attacks. Only Japanese and Chinese PFs would remain in China; the Chinese, to try to prevent total fall of the country, even if China survives, China still has a good chance to survive and, thus, to win, with four captured cities, the allies lose their NC points. China is Japanese Controlled for remainder of game.

Summing up: Japan is not required to declare war on China, but may do so at the beginning of any turn from 1937 to 1940. Only in event of war do these rules apply. Japan should declare war in 1940 in any event, since (a) it would automatically convert a SHARED Control of Manchuria to Japanese Exclusive Control, and (b) some lucky die rolls would rip-off some fast NC points from the Allies.

But to be sure, Japan must go to war in 1937 and make this a major conflict of interest if Japan is to win. It is possible that the game may break out early by capture of cities rather than diplomatic confrontations with the Western powers.

V. WAR IN EUROPE

The European game ends in 1939 and the winner is determined in Europe by standard victory conditions. If a war has broken out in Europe (i.e., Germany has won with 15 or more Objective Points), Britain, France, and Russia are considered to be "soaked-off" in the Pacific and the following conditions result for the final (1940) turn in the Pacific:

(i) Only the United States, China, and Japan receive their 1940 PF allocations in the Pacific. Britain, France, and Russia receive no new PFs and must play the final Pacific turn with whatever PFs they have on hand.

(ii) PFs in European "home" areas may not attack foreign PFs in their Pacific "home areas" even if otherwise legal according to rule III-4 above.

Nor are Understandings in Europe binding in the Pacific. The European board is dead for all play purposes in the Pacific.

(3) If there is no war in Europe, the above conditions do not occur. While the European game is still over, any Understandings there are still binding and rule III-2 interboard attacks may still be made when legal.

VI. HOW TO WIN

(1) There is a separate winner for Europe and Asia.

(2) As in European Origins, the player with the most Objective Points in the Pacific wins.

(3) To compare how the European and Pacific winners did, multiply the Asian's total by 5 and the European's by four. The higher score is the TOTAL game winner: there is still only ONE winner!

VII. WAR IN ASIA

As in European Origins, whether or not war breaks out in Asia has no effect on play or victory. However, if at the end of the game (a) Japan wins and (b) Japan is in war with China, war in the Pacific may be considered to have broken out. However, if at the end of the game Japan has completely conquered China or has not declared war on China, there is no war. Only if Japan wins the game while still bogged down in a Sino-Japanese war does the Pacific theatre of war result.

VIII. FIVE PLAYER VERSION

The rules as given above are for seven players. However, five may also play this variant; and, indeed, may find the game more interesting.

(1) For five players, Germany/Japan should be a single player, and France/China should be a single player.

(2) The only conflict of interest entailed here is France/Chinese Objectives in Mongolia. Therefore, in this version allow France (only) an Understanding with Mongolia even if China is shared Objectives in Mongolia.

IX. SETTING UP THIS VARIANT

We've tried to make this game as easy to set up as it is to play. Suggestions:

(1) Obviously, you need a copy of ORIGINS OF WORLD WARS; but it will help if you have two copies, since you will need extra European PF counters. If you don't have two people with copies, simply order extra countersheets from the AH parts department.

(2) Chinese and Japanese PF counters are provided here, but you should mount them before play.

CLARIFICATIONS

(1) The map sheet shows a special "Holding Area" for Hong Kong. This is merely a play-aid convenience. Units placed in the Hong Kong box are considered to be in the city; thus, all PFs in the Hong Kong box are simply placed in the holding box.

(2) Manchuria and Mongolia are not considered part of any country. They are exactly like Alsace-Lorraine and the Rhineland in European ORIGINS.
CAMPAIGN FREDERICKSBURG—A CHANCELLORSVILLE VARIANT

by Richard Hamblen

THE CAMPAIGN GAME: There are two time record charts used in Campaign Fredericksburg. One, measured in days, keeps track of the periods of inactivity between battles; the other, measured in turns, is used during a battle.

A. The day chart is called the game calendar; each game-day is called a calendar date. The game calendar consists of a list of the actual calendar dates, in sequence, from November 18, 1862 (when the game starts) until January 31, 1863 (when the game ends). The players have to make this chart themselves.

1. Game Procedure: The Confederate Player keeps track of the game calendar. Starting with November 18, 1862, he calls out each date in turn.
   a. After the date has been announced both players check their “Order of Appearance” tables. All units listed under “Present to be deployed” for that date are placed in the proper player’s base pile. Units listed for a previous date but which have not yet appeared in the game also appear. Units that have already been on the board do not return.
   b. Each player in turn moves any of his units he desires from each edge pile to any complete hex along that edge. These units may not be placed within an enemy combat unit’s zone of control; they may push aside enemy Headquarters units in the way.
   c. If the Replacement Pool has arrived on the Order of Appearance chart, the Union player may use it to rebuild eliminated infantry divisions. When he expends a number of replacement points equal to the infantry strength of a division, he may move that division from the eliminated pile to the wrecked pile. The Replacement Pool has 15 points that may be used once a game; they do not all have to be used the same turn.
   d. The Union player may move all the units of one corps (or the Artillery Reserve) from the wrecked pile to the Federal base pile. The corps may not be a “ruined” corps. The Confederates may move all the units of any one division from the wrecked pile to the south edge pile. In addition, the Confederates may move any Corps or Army HQ units from the wrecked pile to the base pile. The Federals may move any Grand Division or Army HQ’s to their base pile.

2. The turn record chart is called the battle chart and is simply the CHANCELLORSVILLE Time Record Chart with one more day (i.e., column) of turns added on. The players can use the chart provided in CHANCELLORSVILLE, adding a column of turns along the right edge.

1. Battle Procedure: a battle is played just like a game of CHANCELLORSVILLE except for the modifications listed in these rules.
   a. The battle will last four days (each column of turns on the Time Record Chart is a “day”). As each column of turns is completed, the Confederate player checks off another date on the game calendar and announces the next date.
   b. The player who announces the battle is the initiator. He immediately gets to make a Strategic Movement (see rule 1.A.e above). He also gets the first player segment each turn of this battle. There is no special initial movement turn.
   c. As the turns pass, both players should watch their Order of Appearance tables. By date, the “Arriving” column lists the units, hex location and turn when new units enter the game. These units are placed on the named hex—pushing aside any counters in that hex, if necessary—and may move immediately.
   d. Any unit may exit the board along any edge, either during movement or as the result of a retreat. Headquarters units go into the edge pile for that edge. Combat units go into the edge pile only if their immediate Headquarters unit is already in that edge pile.
   e. When the fourth column of turns on the battle chart has been completed, the battle is over.

2. Ending the battle: after the last turn each player goes through the following steps. The Union player does each step first.
   a. Isolation: Each unit on the board must be able to trace an unbroken path of hexes free of enemy ZOC to any edge of the board. Units which cannot are immediately eliminated.
   b. Supply lines: Each unit must be able to trace a path five hexes long to a supply road. The five hex path may cross a river only at a ford, an emplaced pontoon, or an emplaced boat. Any unit which cannot is immediately placed in the wrecked pile.
THE GENERAL

VICTORY CONDITIONS: These are calculated at the end of every battle and the end of the campaign for the end of each major event. The results are as follows:

1. Difference of one point: Minor victory. Critical newspaper editorials for the loser, hopefully for the victor.
2. Difference of two points: Victory. Doubts are raised about the loser. Hosannas about the victor. The victor carries forward two victory points.
3. Difference of three points: Major victory. North and South alike are stunned—momentarily—by the outcome. The victor carries forward two victory points.
4. Difference of four victory points: Decisive victory. The campaign goes into the history books, whichever Congress seems appropriate, and the loser is removed from command.

III. RULES MODIFICATIONS: These are not really part of the campaign game, they're just good rules for the sake of historical authenticity.

A. Stacking Limits

1. All units that use the road bonus may stack with other units that use the road bonus to a limit that is one half the standard stacking limit (i.e., one Confederate unit or 11 Confederate combat factors per hex). They may stack up to the normal limit with units that do not use the road bonus.
2. The stacking limit is also halved in roadless woods hexes.
3. Union cavalry units may not swim. They can cross river hexes only at fords and surrounded pontoon bridges.

B. Terrain Considerations

1. The Rappahannock was really not that wide; artillery firing across it from Stafford Heights (which should be right on the bank of the river) had considerable range. So: artillery units firing from one side of a river to a target on the other side have a range of three hexes.
2. Hex GG36 was blocked by a drainage ditch during the battle of Fredericksburg. Any unit that enters that hex stops and becomes disrupted before any combat takes place.
3. Command Foibles: to represent the individual idiosyncrasies and abilities of the various commanders:
   a. Bumsid didn't think the fords were usable until after the first battle failed. Union infantry and artillery and pontoon units may not cross at fords until after the first battle has been completed.
   b. The Federal command structure was unwieldy. On any one turn during a battle the Federal player may move the units of only two Grand Divisions—the other Grand Divisions may not move. If the Army HQ unit moves, then only one Grand Division's units may move. In any case, the Artillery Reserve units may always move.
   c. Longstreet was the most devastating attacker of the war. The Longstreet counter may join in an attack like any infantry unit—the attack he joins goes up one column on the combat results table.
4. Jackson's long suit was his elusiveness. Treat the Jackson counter as a special substitute counter—Confederate units stacked with him at the end of movement may be removed from the board and kept in a separate stack, face down. These units may return to the board at the beginning of any

ORDER OF APPEARANCE OF THE ARMY OF NORTHERN VIRGINIA

<table>
<thead>
<tr>
<th>Date</th>
<th>Present to be deployed:</th>
<th>Arriving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 18</td>
<td>W.H.F. Lee, Norfolk Lt. Arty</td>
<td>McLaws, Ransom and Cabell* at A-10 (12 PM)</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>add McLaws, Ransom and Cabell*</td>
<td>add Longstreet HQ, Hood, Pickett, and Anderson at A-10 (12 PM)</td>
</tr>
<tr>
<td>Nov. 20</td>
<td>add the rest of I Corps</td>
<td>add Arty Reserve and I Corps Arty Reserve at A-10 (3 PM)</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>add Lee, Stuart, Pelham*</td>
<td>add Jackson’s Corps at A-24 (12 PM)</td>
</tr>
<tr>
<td>Nov. 22</td>
<td>add Lee, Stuart, Pelham*</td>
<td>add Jackson’s Corps at A-24 (12 PM)</td>
</tr>
<tr>
<td>Nov. 29</td>
<td>add Jackson’s Corps</td>
<td>add Jackson’s Corps at A-24 (12 PM)</td>
</tr>
<tr>
<td>Nov. 30</td>
<td>add Jackson’s Corps</td>
<td>add Jackson’s Corps at A-24 (12 PM)</td>
</tr>
</tbody>
</table>

THE ARMY OF THE POTOMAC

<table>
<thead>
<tr>
<th>Date</th>
<th>Present to be deployed:</th>
<th>Arriving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 18</td>
<td>Army HQ, Left Grand Division, one boat</td>
<td>VI Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>add VI Corps*</td>
<td>I Corps* at W-12 (6 AM)</td>
</tr>
<tr>
<td>Nov. 20</td>
<td>add I Corps**</td>
<td>III Corps* at M-7 (3 PM)</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>add Center Grand Division***</td>
<td>V Corps* at W-12 (3 PM)</td>
</tr>
<tr>
<td>Nov. 22</td>
<td>add Center Grand Division***</td>
<td>Arty Res at W-12 (6 PM)</td>
</tr>
<tr>
<td>Nov. 23</td>
<td>add Artillery Reserve</td>
<td>Averett at M-7 (6 PM)</td>
</tr>
<tr>
<td>Nov. 25</td>
<td>add two pontoons</td>
<td>Sickles at JJ-19 (6 PM)</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>add Sickles</td>
<td>SI Corps at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Nov. 27</td>
<td>add two pontoons</td>
<td>XII Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Dec. 1</td>
<td>add an assault boat</td>
<td>XI Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Dec. 2</td>
<td>add an assault boat</td>
<td>X Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Dec. 14</td>
<td>add Replacement Pool</td>
<td>XI Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Dec. 15</td>
<td>add XI Corps*</td>
<td>XI Corps* at JJ-19 (12 PM)</td>
</tr>
<tr>
<td>Dec. 17</td>
<td>add XII Corps**</td>
<td>XII Corps* at JJ-19 (12 PM)</td>
</tr>
</tbody>
</table>

* Includes Grand Division HQ and artillery
** Includes Grand Division cavalry
*** Includes Grand Division cavalry
3. Delayed effects of rain. On the date after rain:
   a. All fords cease to be fords for that turn
   b. Off-road movement is penalized
      (i) infantry and cavalry units may move half their MF
      (ii) pontoons and artillery cannot move at all off the road.
A. H. Philosophy . . . . Continued from Page 2

Game. Playtest reactions to this game have been extremely favorable and it stands out as perhaps the most entertaining multi-player, non-Diplomacy type wargame we've ever done.

Wargames aren't the only thing of interest we've been working on however. Indeed, the current rage among our staff and the local playtest group is a form of sophisticated railroad MONOPOLY called BOXCARS. A great little multi-player blend of luck, skill, and Diplomacy it will please anyone not totally sworn to cardboard tanks and called BOXCARS. A great little multi-player is a form of sophisticated railroad MONOPOLY.

Another little gem which will make its retail appearance this spring is THE COLLECTOR—a renamed and redesign version of 3M's old High Bid game. A great social game for 3 to 5 players faintly resembling Rummy, this item has the added advantage of a short playing time (30-45 minutes) making it a delightful pastime for family play or a fun evening with two couples.

We have still other brands in the fire but they may not see the light of your gameroom in '77. We trust that somewhere within our crop for the coming year is something you'll enjoy. To us each game seems to surpass its predecessor in quality and we are extremely pleased with the coming yield. We hope you'll be too.

*****

REduced Hex Sheet pads

Now available from the Mail Order Department is a pad of 30 hex sheets with normal half inch hexes printed on one side and 1/4" hexes printed on the back. These 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.

*****

Explanation of Orders of Battle:

General: The titles of each level of command are in capital letters; each body of troops that should have its own unit counter in the game is indicated by the name of its commander printed in lower case. After each name in lower case is the combat strength and movement allowance of that unit, enclosed in parentheses. Thus:

Binny (5-4)

stands for Binny's infantry division, which has a combat factor of 5 and a movement factor of 4 hexes a turn. Many of the artillery units are identified by the name of their organization, rather than their commander. The titles in upper case indicate the units are artillery or cavalry. Units which are not so indicated are infantry divisions, each having a movement allowance of 4. The units indicated by a (0-9) following their name are headquarters units.

Artillery (*) indicate infantry or cavalry units that contain "attached artillery." In addition to the combat factor printed for such units, each unit has one "invisible" artillery factor which always travels with the unit and which may be used as an artillery factor in any of the artillery combat methods. This is a variation from the standard game of CHANCELLORSVILLE; it is meant to represent the large number of batteries in each army which were assigned directly to brigades or divisions to give artillery support on a small scale to the smaller infantry organizations. In practice, these batteries were almost never massed.

Federal organization: Each Grand Division consists of two infantry corps, a cavalry force and an artillery unit. The Right Grand Division has no extra artillery. The four Grand Divisions and the Artillery Reserve make up the whole Army of the Potomac.

Note also if it rains the day after a previous "ruined" units go into the road. Supply Road: A road that runs free of enemy ZOC to a friendly edge. A supply road may cross a road only at a pontoon.

Friendly Edge: For the Federals, the north and east edges of the board; for the Confederates, the south and west edges.

Edge Piles: The piles of units that move off each edge of the board. There are four edge piles, one for each edge.

Base Piles: For the Federals, the north edge pile, for the Confederates, the south edge pile.

A. H. Philosophy...
The Best Alternative to Play Balance

By Donald Greenwood

Back in days of yore when wargames were scarce and the strategy game attracted far more abundance, I was just one of many enthusiasts who read the GENERAL from cover to cover, printed eagerly one day a week. The second edition of the game, published on the heights of Quatro Bras in WATERLOO. Those were the days when we analyzed every facet of the classics until we knew them backwards and forwards or so I thought until the next pep opponent taught me yet another trick after adding another notch to the negative side of my win/loss ledger.

Gradually I came to recognize that play balance was primarily a function of who "got there firstest with the mostest"; "there" being pronounced ex- pert-ise with the accent on experience. Even the much-maligned STALINGRAD, the grandaddy of all supposedly imbalanced wargames, gruesomely came to be accepted as a toss-up when played between a real man and the highest caliber. A shame too, for it was always great fun to watch some upstart brigadier, loud in his conviction that a "competent" Russian player could not be beat, meet humility at the hands of a master such as George Philby or Dave Roberts. One's only defense in such a position was quite untenable—after all, he was a "competent" player was he not? Missing the "master" label myself by a small millennium, I am probably less saddened by the onslaught of titles of recent vintage than are those belonging to that exclusive club. Yet, I am hardly overcome with mirth by the state of the art today, for I have come to learn that the phrase of game designers everywhere and apply it not only to the commercially published but equally important game player. Whereas the growing number who fancy themselves professional designers have used not one a greatly improved product in search of the elusive perfect game, the players have been falling behind. There is barely time between the release of one new game, grasp the rules, play a sample game or two, wait for your favorite wargaming magazine to arrive, and settle down to analyze... the next descriptive review of yet another new game! And so it goes with nary a chance to gain any real insight into the subtleties and nuances of a game, no pet theories shared with compatriots, and all too few lessons taught by painful experience.

Perhaps that's as it should be. Realism devotees have long advocated the need for "fog of war" and put down the role reaction that comes with over-familiarity. I, who cares how many times a cavalry to get to Nivelle from Charleroi?", they scream. After all, Napoleon didn't know how long it took a horseback ride. Yes, we will be the one to be and maybe he didn't, but it's certain that he would have dearly loved to know that little fact—down to the very minute his Lancers would draw fire. I'm with Nappy there... I want to know as much about the battle as possible—before I sit down to my battleground. Granted, there's got to be a first time but that doesn't mean I can't have read over the rules several times, looked for helpful tricks in all too infrequent strategy articles, or solved the situation a few times before facing a real opponent who not so viciously thirs for my gaming blood.

All of this may seem a bit heavy to those of you for whom simulation is the end-all, be-all of your wargame persuasion. And, if so, I apologize for taking up space you undoubtedly could put to better use. But for those to whom the game is the thing I dedicate what follows. For I am a firm believer that there are few rewards in gaming more gratifying than the inner pleasure one derives from the near mastery of a game. To stand above one's peers and realize the pleasure of piecing together one pre-planned move after another into an inexorable vortex of victory as if it were so many pieces of a puzzle is, to me at least far superior to playing any game for the first time. Alas, mastery of any one game seems to being the way of the great American dream. At least, that's the impression one is left with due the dearth of authoritative analyses published in today's hobby magazines. The journals of our trade seem to place a premium on design theory or what I, less politely, refer to as "as—at the expense of educating the game public in the nuances of play in all these splendid new games. And anybody out there who professes to know all there is to know about gaming is either a dumb fool or a better liar. Granted, it takes a lot more work to put out an authoritative strategy article than to record flowery phrases on role, presentation, and such that can only print what one receives, but there is a principle of leadership by which dictates with wider acceptance in the hobby.

If all this sounds like a eulogy for strategy articles in wargame magazines I'm vastly relieved for that is my intent. At the point in the hobby's evolution when other slick magazines joined the GENERAL in competing for the wargamer's attention because they are highly fashionable to toil down "Perfect Plans" as the immemorial ratings of the great unwashed. The tendency to label any article smacking of being "strategy"—now that this phenomenon erudite the analysis might be, as a Perfect Plan evolved into a hobbywide hysteria. Before long those who still dared ponder their strategy tips, have perished to the muses with the standard opening: "I don't believe in Perfect Plans, but..." of some other such explanatory device. Well, I don't believe in Perfect Plans either, but I am a firm believer in enhancing my enjoyment of a game by analyzing it to the nth degree. There's only one way to gain expertise in a game and that's to play it over and over and over again against as many different people as possible. If I can shortcut this learning experience by picking up pointers others are willing to share with me from their experiences I'm more than happy to oblige them by putting their theories to the test. Victorious visions of charging Hussars are fine and certainly do much to flavor our hobby but the game remains the thing and enjoyment for me is still largely a matter of pitting my expertise against yours. Anybody who enjoys losing with the underdog is too masochistic for my tastes.

I think the recent trend towards new games, variants and history ad nauseum in hobby journals has left the hobby with a subconscious craving for strategy analyses. Case in point—which was the most popular seminar at ORIGINS II! Despite the presence of such famous designers as James F. David and Redmond E. Simms, the seminar was the design seminars. Rather, it was the throw-in of the SIP quarter "Tactics of Game Playing" with F. P. David and Redmond E. Simms' seminar. I was unable to prove a point, and we developers don't need any glory anyway. Seriously, only a shortage of space at the seminar allowed for my seminar from far exceeding the others in attendance.

Having made this public plea for a return to comprehensive analyses of game strategy, I can hardly count out by leaving you without some pearl of wisdom to apply in your next match. So, having painted myself into a corner in the true tradition of the world's Charley Browns...

VICTORY IN IDIOTVISIO I LEASY TURNS

Let me hasten to add that my claim to fame in this or any other game on pure playing ability is highly questionable. I feel remotely comfortable with football strategy—probably a result of a frustrated defensive tackle which I could have been a great quarterback if only...FOOTBALL STRATEGY is only a fair simulation but without peer as a competitive game in my estimation and after over 300 games against some 90 different opponents and more than a few vicarious conclusions what would I know? Any attempt at objective was obliterated two Super Bowl games. You see, I won 78% of those 300... contexts, I like this game! But delay those fears for this isn't a pedagogical review of the first Idiotviso Bears. Being a professional game developer means that I play a lot of games. Unfortunately, I get to play very little. Those who can't fathom the difference between playing and playtesting haven't done much of the latter. One of the games I tested more times than I care to remember is CAESAR'S LEGIONS. In its earlier form as GDW's EAGLES I was among the unheavenly blessed "imbalance" and hurled never ending criticism on the God of designers who dared treat the imperial Legions of Rome with such scorn. Loren Wiseman, the original designer of EAGLES, took this in stride and knowingly advocated alternate strategies with which I might have more success. In the true tradition of the great unwashed, never did make any headway with Loren's suggestions and ended game after game with my legions hopefully huddled down in the woods of the Suebi chasing elusive German chiefs because the game was "imbalanced" became the all too frequent rallying cry. "We have to increase the time limit to 15, no, 16 turns." Loren remained unperturbed and I kept playing as we drafted the 17th matrix CRT into the game design. Go and behold after about 30 playing a winning strategy evolved. Only now the Roman was winning with relative ease. The solution—drop the game length back to the original 14 turns. This article will relay that strategy and hopefully, like STALINGRAD, AFRIKA KORPS, MIDWAY, and BULGE before it, set right the question of play balance for the fourth scenario of CAESAR'S LEGIONS.

First off, play with a touch of class. Don't duplicate my mistakes and subtract the whole populace from those beautiful 45-4 legion-counters. Swearing across the Rhine and Danube from all the players is a sure way to make crooking dices in a tearoom and less chance of success. Don't feel sorry for Arminius' travel and escape. The location of the boundary line is the populace to riot. You're bound to be more successful at it than he ever could be. I used to think next to nil that to send the XIII Legion into the Danube and watch it plow through the Hermunduri like a modern day battlewagon through 18th century frigates. Next, but not very productive. If the Sugambri, Suebii, Lugii, and Hermunduri are to enter the game it should be as a result of a long ride by Arminius—one which takes him out of the action until it's too late. Don't do his recruiting for him.
TURN 1—

Set up as many auxiliaries in the forts across the Rhine as possible. The aim is not attrition. You'll need these units for screening purposes later on and to reinforce the legions while moving through wooded areas. They can be used as, but upon occasion if their sacrifice will lure a sizable German force into the open within reach of a Legion. Otherwise, auxiliaries should be risked only in even or better odds battles against L.t. Infantry. The German L.t. Infantry is especially valuable for the ambush as it lends killer stacks in woods hexes as well as for its extreme maneuverability. It should be attacked in the open whenever an opportunity presents itself. The Batavians are equally valuable to the Roman player and his first move should be to withdraw them to a Roman fort. Their ability to infiltrate unguarded wooded flanks makes them extremely valuable to have around during the end game despite the fact that they can not stack with Roman units.

The V and XXI Legions should split into half-legions with Drusus accompanying the fast cohorts to M21 with maximum auxiliary support. This support will both use the Usipatii and Frisii to flight. The half-legions with full cavalry support skirt the Marsii village to the west and dispatch the luckless Marsii chief who has undoubtedly been deserted by his troops which will proceed to flee through the woods of Lesser Chaucii. The I and XXI Legions follow closely behind.

The Rhine river fleet will be used to ferry auxiliaries into the land of the Batavi and XXI & XIV Legions with auxiliary support into the northern half of the Tencterii. This should put the Tencterii roughly in the center of 4 Roman legions. If they react correctly they can escape but if they dawdle they can and should be hit before they can combine with others to form a killer stack. The II and XIII Legions bring up the rear as they travel north on the Rhine road net. They will eventually become the knot in the noose we are just now beginning to fashion.

TURN 2—

Like all such analyses our plan will become increasingly vague as the game goes on, dependent as it is on reaction to an opponent's variable response. If the Germans have not selected their initial disposition wisely, pursuit may yield early favorable battles against the Usipatii and Tencterii. Failing that, the V and XXI Legions should recombine and proceed at a more leisurely pace into the rapidly forming cordon of Roman units. Now occupy 8 roughly equidistant points along the lines of J5,06, Q9, T11, U15, S18, M19 and K6. Spread out behind them so as to avoid combat but create an infiltration proof screen will be the auxiliaries—thus deployed only when an escaping chief and captured eagle might be heading their way. Combat is offered now only in the open under Roman terms.

TURN 3—

By this time Arminius may well have succeeded in raising Lesser & Greater Chaucii. No matter. You'll do him a favor now and raise the Chatti by advancing into that land with Drusus, two legions, and six auxiliaries being careful to skirt T16 so as not to free the Lesser Chaucii Eagle. The Chatti will doubtless disdain combat in the open northland and mobilize in protective stance around their temple. The XXI and V Legions draw a bead on the northernmost Lesser Chaucii village while the Rhine river fleet puts to sea.

TURN 4—

This is a crucial turn for the German player if he is to seriously impede the Roman plan. One of the northernmost legions continues on to the eastern peninsula of Lesser Chaucii while the other seals off the gap between the two forests in the center of the land, being careful to maintain a four hex distance from the temple at all times. Drusus and two legions cross the river into the extreme south of Lesser Chaucii followed at a distance by XIV and XVI Legions. A pincers movement is starting to become apparent, anchored at the Marsii village by the just arrived II Legion. If the German is to offer more than passive resistance he must act now and put heavy battle groups into the triangle formed by the woods hexes at U13. A chief, heavy infantry, and a light infantry mob in a woods hex have an almost even chance against a Legion if Drusus is not present. In any case this is the German's best chance to cause significant Roman casualties and his only chance to seriously impede the pincers movement.

TURN 5-7-

By now the Rhine river fleet should be in position to ferry the XXI Legion across the major river and into Greater Chaucii while maintaining a 4 hex range from the Greater Chaucii temple. On turn 7 it will again take ship to cross into the land of the Suebi. Now the marines will disembark and join the auxiliaries which have accompanied the XXIst. All units are still more than 4 hexes away from the German temples. Drusus continues his advance into Greater Chaucii with two legions and the XIII Legion arrives to form the bottom of the cup. Arminius has by now roused all the support he's likely to get but finds himself and most of his forces outside the rapidly forming cordon of Roman might.

TURN 8—

The trap springs shut. Roman legions should now occupy 8 roughly equidistant points along the lines of J5,06, Q8, T11, U15, S18, M19 and K6. Spread out behind them so as to avoid combat but create an infiltration proof screen will be the auxiliaries—thus deployed only when an escaping chief and captured eagle might be heading their way. Combat is offered now only in the open under Roman terms.

TURN 9—

The ring tightens as the three easternmost legions advance on the Greater Chaucii temple—forcing the German standard bearer to flee west—deeper into the contracting circle. The rest of the ring is careful not to violate the reaction zone of the Lesser Chaucii temple.

TURN 10 & the End Game—

The ring tightens further with all eight legions forming a tight circle around the Lesser Chaucii temples and its two Eagles. On turn 11 the bloodletting will begin in earnest as the Legions cut their way through to the Eagles with no regard for casualties. Care must be taken to maintain a screen of auxiliaries and cohorts to prevent a breakout by the Eagles and this will become increasingly difficult as Arminius and his recruits enter the fray. However, experience has shown that the Roman can gain the upper hand frequently—especially if Arminius gets a little too bold and offers combat in the open against the Eagles. The result is never guaranteed but is always close and usually fun. What more could you expect from an imbalanced game.
AFRIKA KORPS

Axis Commander: R. J. Beyma
Allied Commander: D. S. Burdick
Neutral Commentator: Thomas Hazlett

This is the 3rd Series Replay published to date on AFRIKA KORPS. None has been free of player error and perhaps that is as it should be. What is generalship if not taking advantage of an opponent’s mistakes? This game was interesting primarily because the loser thought he was robbed of victory by the luck of the die. Closer examination reveals that while certainly unfortunate in some areas, he did have good fortune in avoiding casualties in his early attacks. The question of whether his opponent was “lucky” or that he was negligent in not taking extra precautions against the desperate options of an opponent pressed by the relentless tide of war is one which we thought you would enjoy answering yourself.

Note that this game was played by mail in 1975 and as such uses the old CRT and supply tables—thus explaining the different percentages of events referred to by the players. The commentator, Tom Hazlett, is an acknowledged expert in AFRIKA KORPS, having won a competition similar to the AH CLASSIC 500 at the 1975 convention in Cincinnati. His commentary appears in italics below.

Opening Allied Comment:

The primary Allied objective for the first stage (April—June, 1941) of the upcoming campaign is to establish and maintain a defensive perimeter in the escarpment around Tobruch. This is an admittedly ambitious objective; the Germans may very well succeed in investing Tobruch. In that case I hope to force the Germans pay in casualties for their success.

In addition to the main goal of defending Tobruch I will endeavor to maintain control of the pass at K-34 and, of course, my Home Base. No

offensive operations are planned at this time except that I may try to slip a 1-1-6 behind German lines to

harass his supply line.

German supply is the key to this game. This early stage is especially critical. If my navy can sink two of the first three Axis supply ships Rommel will be in serious trouble.

German April 15 Commentary

This is my standard opening move. The Italians isolate Bengazi, my Recco unit heads for the British Southern Flank, and the main units of the 21st Panzer deploy in a threatening manner in the central desert. Trenta will anchor my southern flank at N-17 next turn and can participate in attacks on H-16 and K-18 on Turn 3.

I will adopt a wait and see strategy early in the game while I gauge the British response and assess the supply situation. My units will always be ready to pounce on a British mistake that could lead to a major victory.

Allied April 15, 1941

I moved 7/31 Motor to N-19 to prevent 21/5 and 21/104 from reaching the escarpment between O-21 and S-24 next time. My opponent can get a surrounded 3-1 against 7/31 Motor but I doubt that he will use a supply and risk an exchange at this stage of the game.

With 21/5 and 21/104 out of the picture I should be able to use the 1-1-6’s to counter the threat from the south. 21/3 can’t reach my Home Base before June 1 by going through the desert because Rommel is too far away to contribute his bonus.

April 1 Neutral Commentary

The pattern of the game is quickly established. The German player has a good basic knowledge of

the game but his play in many instances indicates either he does not pay attention to, or is not aware of, the subtleties of troop positioning. Here he failed to garrison N-19 with 21/3. He will quickly discover that the Recco unit is almost useless as a solo threat in the south. The British properly took advantage of this lapse, moving to N-19 and preventing a southern move by the rest of the 21st Division.

German April 30 Commentary

Brescia and Savena isolate Bengazi and the 2/25 S. G. dies at the end of the turn. The 21st Recco is harassment of the British southern flank. The rest of the army deploys in front of the British escarpment line. A local attack on this line next turn is a possibility, especially if I get another supply unit.

Allied April 30, 1941

The Axis move contained no surprises. The best Rommel can do now in the west is a 4-1 against a 2-2-6 or a 3-1 and 3-1 against 7A/1.2. This is why it was important to leave 2/25 S. G. in Bengazi last turn so that two Italian units would have to stay back on siege duty this turn.

I’m glad that 21/3 moved to R-31 instead of to the escarpment at R-29. This way I only need the three brigades of 4th Indian Division to keep 21/3 away from Tobruch and off the escarpment on Row L. Since I don’t need a garrison at my Home Base until May 1, I’ve sent Supply #2 south into the desert.

April 11 Neutral Commentary

The Germans continue to position units poorly. Trenta should be several hexes north where it can reach the road and still threaten all the targets reachable from his present position. 21/3 ignores a position on the escarpment, and the extra pressure it would provide on the British line.

German May 15 Commentary

I consider the 4-1 attack to be unnecessary to break the escarpment line. A D-back 2 won’t be too bad as it will leave the British 2-2-6 cut-off from Tobruch. The British player will be in a poor defensive position next turn unless he pulls back.

Losing the supply unit was unfortunate. However, if I get the expected two out of three in April and May I will be ok.

The 21st Recco is simultaneously threatening J-27, J-34, and the British Home Base. Unless he takes positive steps this turn, I will capture his home base on June, 1941.

Rommel did a little fancy footwork this turn. He went from C-9 to C-11, back to E-6, down to N-13, and then over to N-16.

Allied May 15, 1941

I was surprised that my opponent would risk the 4-1, especially with only two supply units on board. He got the result he wanted, but at least his units are...
somewhat out of position. My disposition exploits the fact that he can't bring 24 tanks to attack 1-25. He can get at a 3-1 against 22 Guards on 1-27, which is probably his best attack, but an exchange would hurt him.

At first I had 41/11 on J-33, but I finally decided it was better to keep 21/3 from going to I-29. If I changed 7A/2 from S-24 to S-25 in order to prevent its being attacked from R23 while G-23 is attacked from H-23. Both of these attacks could have been supplied from M-23.

May 1 Neutral Commentary—
The Germans must now pay the price of failing to outflank the British to the south. Any exchange possibility this early is a British victory. The Germans get away with the attack, rolling a D-Elm, but it costs a supply; a commodity they will find to be all too precious in the game.

Again the Germans misplace units. The 15th should be closer to the coast road, at J12. Why didn't 21/104 join in the advance after combat? I think 7A/2 would be better off on S24, in spite of British comments to the contrary. He overestimates the possibility of an attack on G-23 from H-23 only. S-24 ties up two German units if an attempt is made to block it.

German May 30 Commentary—
I've decided to take a calculated risk this turn in order to get a chance of taking Tobruch next turn. I can get a D-Back 2 on an exchange on my 1-2 (A 40% chance) I can take the escarpment on I-25. From there, with all but 4 factors of the British forces cut off, I can mount a good attack on Tobruch on the June, 1941 turn.

If my attack doesn't succeed I will still be in a relatively good position with light losses. I should be able to complete the encirclement of Tobruch next turn. I've decided to go ahead and eliminate the pesky 7A/2 while I have the chance. Note that Hex H-23 was deliberately left open in case more than one British unit had to retreat from I-25.

 Allied May 31, 1941—
I made an error last time which, fortunately, worked out well for me. His attacks were well conceived. He had a 40% chance of clearing 9A/20 from 1-25 so that Ariete and possibly Pavia could advance to that hex. That would have prevented my units on G-23 from getting back to Tobruch this turn. As it happened, the loss of Savena was not worth the slight gain in position. Nevertheless, I should have placed 2/3 by itself on I-25 last time.

The elimination of Savena accomplishes my objective of causing Axis casualties before Tobruch is put under siege. There should be more to come. He'll have to make at least one more soak-off in order to besiege Tobruch. In fact, his best chance may be to take the soak-off against I-27 next time in order to hit 2/3 at 3-4 surrounded. If he doesn't attack 2/3, my defensive line will be stronger next time.

May II Neutral Commentary—
The British player made his first major error, leaving the 4-4-7 on G-23, where it could be cut off. The Germans made a good attack. If their 1-2 had succeeded, they would have been guaranteed a 3-1 on Tobruch next turn.

German June 15 Commentary—
I was most disappointed with the results of my attacks last turn. I seemed to have lost all of them. To make matters worse, I lost another supply unit on a 30% chance.
Fortunately, my opponent made a serious miscalculation. Using Rommel and getting an A/V on POL enabled my supply unit to reach 1-24. This enabled me to roll over 41/7 and surround the British Units on I-27. They will be automatically eliminated on his turn.

At this point I have bottled up the British in Tobruch and have destroyed the British Forces outside. I will have several turns now to assess the supply situation and to decide whether to drive into Egypt or assault Tobruch.

Allied June 15, 1941—

Ouch! I didn’t think his supply unit could get past Row 23. That was a costly oversight. Then, to top it off he comes unchoked through two 1-4 soak-offs and a 3-1. I suppose I deserved those battle results though for my blunder.

The thing to do now is get over the shock and take stock of my assets. There are some positive aspects to my situation. 1) 2/3 is still alive to defend Tobruch. 2) Rommel has no supplies on the board (although he is in no real danger of losing his army through miscalculation. Using Rommel and getting an A/V on POL enabled my supply unit to reach 1-24. This enabled me to roll over 41/7 and surround the British Units on I-27. They will be automatically eliminated on his turn.

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In the following ship vs. ship battles, which ship has the best chance to end the turn still at sea? If both ships' chances are about equal—i.e., within 2% of each other—rate the battle a draw.

1.

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5. Assume the Bismarck (4-9-6) is fighting the Washington (5-5-4). What's the largest number of damage points the Bismarck can have at the start of the battle and still have a better probability of ending the turn at sea?

6. How many ASW points does the Allied player have to put in a sea zone to have a 50% chance of disabling and/or eliminating all 7 U-boats in one battle?

7. How many ASW points does the Allied player have to put in a sea zone to have a 50% chance of disabling and/or eliminating 5 U-boats in one battle?

8. Three 1-1-7 cruisers are fighting the Bismarck (4-9-6). Which side has the better chance of controlling the sea zone?

9. Two 1-1-7 cruisers are fighting the Scharnhorst (3-5-7). Which side has the best chance of controlling the sea zone?

10. What is the probability that all 3 Allied convoys will get to Russia, assuming maximum Axis air attacks in the Barents Sea but no U-Boat or surface attacks?

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

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A British 1-1-7 is determined to stand and fight it out. Which German ship should it fire on first (i.e., which German ship is most dangerous to the cruiser's chances of remaining at sea?)

Draw

Ellerby

ISi

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The British supplies were sunk on the July 15 move so the German continued himself with eliminating 41/11 by isolation. The British fell back to El Alamein leaving 41/23 as a rear guard at K-45. and reinforce Tobruch with 7/7. 

Reinforced by the arrival of their 2nd Supply unit the Germans move east on July 20th, Pavia and Brescia remain at H-24 and H-26 to contain Tobruch. The British have 9A/18 in reserve—continuing their psychological play of killing the German into ignoring the missing unit. 11 British factors and a supply now occupy Tobruch. The stage is set for the big gamble.

German August 15 Commentary

I am moving and recording this move prior to checking to see if I get supplies. It won't make any difference in my move. 41/23 is not worth a supply unit. Besides, I can only attack one time in August anyway. So, I will isolate 41/23. Note that I, in effect, have double isolation because of my advanced Panzers. Next turn I should be able to get in a good attack. With 2 or 3 additional supply units, I can raise some hell before November. There's a 25% chance that I may lose a supply unit in the next 2 turns because of having 3 on the board. But having 3 on the board in August isn't all that bad. Having a 50% chance of killing 3-5 factors is better than a 100% chance of killing a factor that you can isolate anyway.

Allied July 31, 1941

My opponent continues to use just Brescia and Pavia to cover Tobruch. I'm thinking seriously about trying the breakout from Tobruch next turn.

My 41/23 on J-45 prevents him from hitting me very hard before August II.

July II Neutral Commentary

There is nothing worth attacking, so the Germans merely continue their advance. The German comments about a 2-1 out of Tobruch will come back to haunt him. When one has an advantage in a game he should expect his opponent to do things he would not consider were the game even.

August 15, 1941

Well, the time has come to bite the bullet and take the bull by the horns. If I get an "AElim" or an "A back 2" in my 2-1, I'm a goner. On the other hand I should win if I get a "DElim", "D back 2" or "Exchange". A 7/3 AElim" would permit me to hang on for a while, but I would probably lose eventually.

August I Neutral Commentary

The British attack had to be made, but I question whether it was necessary so early. The situation could change. The Germans may get a string of DB2's, or fail to receive a supply in September. Either one of these events would make capture of the Home Base unlikely, as the Germans will need at least 4 attacks to break through the double line of 1-1-6's along a narrow front. The 2-1 would still be there in September or October and may not have to be made at all if the situation changes.

German August 30 Commentary

The British player made a risky attempt and got away with it. His 2-1 out of Tobruch put the whole game on one die roll. I feel that he attempted to win with luck what he couldn't otherwise win.

The only chance for a real victory was a D-Elim and He got it. An A-Elim or A-Back 2 and I win immediately. I feel as though I could still have a good chance of winning with a D-Back 2 or Exch result.

The 2-1 has changed the entire complexion of this game. The British player has a good chance of driving on my base and cutting off the Afrika Korps. I must now attempt to extricate my army and fight a long war against difficult odds.

Allied August 30, 1941

My opponent complained loudly about my good luck. That doesn't bother me though, because that's loser talk. While he's demoralized, I'm going to try to deliver a knockout blow.

He made a nice move, almost, in an effort to get his Supply #3 out to his main force in the east. My attack will prevent this, however, because his 15/33 will not be able to join forces with Supply #3 next time even if it survives my attack. He should have put 15/33 on P-37 and moved Supply #3 to T-21. My attack leaves me exposed, but he can't exploit it without using his Supply #2. That would leave his main force out on a limb and subject to eventual isolation.

At first I had 2SA/7 on N-17, but changed it to N-18. Now, if he sends his Supply #3 to T-28 or U-29, I can capture it and still reach W-29 to block the southern route. I feel that option is worth more than the threat to reach the coast road south of Bengasi.

August II Neutral Commentary

The Germans had to move back to Tobruch but sloppy placement cost them dearly. 15/33 could have made it clear to T-36 with Rommel. assuring him a next turn link-up with Supply #3. Even a one hex adjustment would have put him beyond attack range, a fatal error as it turns out. As for Supply #3 I cannot understand why it moved only 9 squares. 

August 15, 1941 — The German bypassed 41/23 and left it isolated while they move eastward on the British HB. This advance leaves them further in the hole which is about to be created by the British supply unit on 41/23, as it is now isolated. The weak point of the British position is the lack of a strong unit between the British troops. The German attack is expected to be strong and could possibly reach the coast road south of Bengasi.
AUGUST 30, 1941—The British breakout of Tobruch forces the Germans to flee westward, abandoning their encirclement of 41/23 and forcing them to use a vital supply to AVI at 1:45 with 15/9. The British make good use of sea movement to land the bulk of their forces in Tobruch and fan out into the desert to block the German retreat. 2SA/7 is sent into the desert to track the German's supply #3 which, in connection with the 3-1 on 15/33 by 7/7 and 2/4 makes the German supply situation a very tricky predicament.

The British attack probably should not have been made, as it left his armor exposed, but against this German it proved to be a winning move.

German September, 1941 Commentary—

Although the British player did not make any major blunders I think he made a weak move. He has his Recce unit after my supply line and prevented Recce 15 from linking up with Supply 3. However, his Recce unit cannot threaten my home base next turn. He has exposed 8 factors (7/4, 7/7, 41/5) in the desert. Had I gotten a supply unit I could have gotten a 7-1 against 41/5, 5-1 surrounded against 7/7, and a 1-2 surrounded against 7/4. Even if the 7/4 survives it will be eliminated on the British turn. This is made possible by putting supply units on T-20 and W-30. The British Recce unit can only capture one or the other—not both. I can use the other to kill the Recce unit and withdraw my Army. Either the British Player made a dumb move or luck saved him again. The luck of the dice is winning this game for the British Player. There is not enough rolls in this game for luck to “even out”.

Allied September 15, 1941—

My assumption last turn that Rommel could not afford to attack my exposed units was too hastily made. My intelligence informs me that Rommel has drawn up attack plans, but scrapped them when his supply ship was sunk. Upon reflection it appears that he might have gotten away with it. I should have sent 7/4SA Motor to N34 and left 7/7SG on H-25 to protect Tobruch.

For his part I believe that Rommel erred in allowing me to capture his supply on W-30. Even though he can annihilate my Recce unit now, it will cost him another supply unit to do so. Two supply units for one Recce is a good bargain for me.

September 1 Neutral Commentary—

Although the game continued well into 1942, we will drop it after September 1, because it is here that the Germans missed their last real chance to stay in the game.

It certainly would have been easier on the British Player if they might another supply but the attack should have been made anyway. Both players have overestimated the ability of one Recce unit to block the entire southern half of the board. A link up with supply would have been difficult, but possible. It should have retreated this turn while the German Recce units race west and the rest of the Germans wipe out the British armor. The Recce units would have been in a position to link up with the Home Base before British reinforcements could arrive in the southern desert.

The opportunity of killing two armor units at the cost of a 1-2 soak-off does not occur often and cannot be passed up. It was the last real chance the Germans had to stay in the game. Instead of killing the armor with one supply unit and retrieving the other out of danger he sacrificed one to the Recce unit and used the other to kill it on Sept. II. This 2 supply for 1 unit exchange was the death knell of the German effort.

He managed to link his army up with his Home Base without further opposition but received only 1 supply in the next 4 turns. By the time he had supplies the British were dug in along a line from G-7 to S-24.

After several turns of sitting in an attempt to draw the British into the open, the Germans finally attacked on January II, and got an exchange against a 3/3-7 on K-18. A British counterattack killed a 7-7-10 in an exchange, and 2 turns later a 2-1 against a 4-4-7 on G-23 resulted in an A-Elim, as the hosps desparate German offensive failed to even reach Tobruch.

In his final comments the German decreed the 2-1 out of Tobruch as the crucial battle. There is no doubt that it was, psychologically. From that point on, the German play deteriorated. Militarily there were several other crucial battles. There was the 40% chance to take Tobruch that failed, and another 40% chance that was passed up. Finally, there was the failure to kill the British armor, which later anchored such a strong defense that the Germans never even reached Tobruch for that hoped for 1-1. The German supply rolls were poor but they failed to use what they had to maximum advantage.
RULES EXPANSION FOR W.S.&I.M.

by Mick Uhl

Much more material was available for inclusion in WOODEN SHIPS AND IRON MEN than actually made it within the material limits imposed by economics. Rather than omit it entirely from the game, provisions for their eventual utilization were included in the design of the components with the fore-knowledge that they would be published in the GENERAL.

A new scenario is included below which utilizes these rules in recreating the British land and naval operations in clearing the Delaware River after the fall of Philadelphia.

BOMB-KETCHES:
As already noted, one of the counters included with the game is an overview of a bomb-ketch.

As these vessels were used to reduce forts and other land structures, they must be used in conjunction with amphibious operations (to be detailed later).

Bomb-ketches as a general definition were ships which carried mortars, i.e., guns which fired explosive shells on a high trajectory in order to hit objects behind breastworks or walls. Bomb-ketches were not very effective nor were they ever designed to do battle with other warships. Their main function was to reduce the defensive capability of forts and/or entrenchments so that amphibious units could land and capture the position.

1. There are three types of bomb-ketches (more accurately termed bombs) which are available in the game.

Single Mortar

Two Mortars
Mortar Vessels

Note that the Two Mortar bombs were superior to the other two vessels in every respect. This should not limit the players to using this model exclusively.

Mortar vessels were used during the French Revolutionary Wars and were not popular which soon led to their abandonment.

These ships also carried regular cannon as well as mortar(s).

1. Bombs may only fire their mortars while anchored.

2. The line of fire for the mortars may never be blocked. They fired over, not through, obstacles.

3. Fire with broadside guns is normal. These guns may not be loaded or fired during the same turn that the mortars are loaded or fired.

4. For the single mortar bomb, a mortar's field of fire is 270° (bow field) which encompasses both left and right broadside fields and the field between the two toward the bow. In other words you may not fire through the stern. For the two mortar bombs the second mortar may fire in either the left or right broadside but may not fire across the bow or stern.

5. It takes four turns to load mortar(s) (not necessarily in sequence). This is noted in the load section by marking M in the R section for the bow (270° field of fire) mortar and in the L section for the second mortar of the two mortar bombs.

7. The players filling out the log for bombs should mark off the mortar's hit boxes in the cannonade section.

8. Mortars may only be fired at fixed targets on shore or at motionless ships (i.e., anchored or aground), not at ships drifting, no matter how slowly. They have a maximum range of 10 hexes.

9. Mortars use a separate entry in the HDT. See chart below.

10. All hits scored by mortars are tripled. Only the Hull Hit Tables are used. Each mortar is fired separately and may be fired at the same or different targets. Mortars may not fire at targets at less than three hex range.

FORTS AND FORTIFICATIONS:
Naturally, these will be placed on hexes designated as land. Forts were used to protect...
waterways and the commerce and ports associated with them from naval and/or amphibious invasions. Forts had the advantages of thick walls and sturdy gun platforms which could hold higher calibre weapons as well as large numbers of defenders. Their drawback was that they were a fixed and often isolated target.

1. No counters have been provided for forts, so you must make your own.

- a. Remembering the dimension of a hex as 100 yards in diameter, forts may be as small as one counter or several formed to pattern the outer walls of the forts.

- b. Forts were designed in many polygonal shapes, so as a general representation of these varieties and to fit within the geometric pattern of the game, a hexagon can be used as the basic shape of a single counter fort. This also greatly facilitates field of fire determination. The example below of a fort labels each side so as to identify the number of guns per wall.

![Single Hex Fort Diagram](Image)

- c. For multi-counter forts or fortifications, the walls of the forts may be drawn to correspond to the hex sides of the counter forming the wall.

- 2. The field of fire for each wall is shown below. Note that these fields overlap. At points where they do, the guns of two or more walls may fire together at one massed battery.

- 3. Adaptions to the log must be made to include new information and to remove irrelevant sections.

- a. For loading more than two sides of the fort, add columns to the moves section and label them each to a corresponding side of a fort.

- b. In the time scale of the game, the effects of bombardment on a fort's walls would be too small to damage its performance. The hull section on a fort's log will be ignored. Only gun and crew hits are recorded. Crews will be divided into three sections as normal. Guns are divided into sections for each side of the fort. The extra sections may be recorded in the rigging section of the log.

- c. Gun specificatons are determined by the players in any manner desired. Each side of the fort need not have the same number of guns as any other.

- d. The number of crew squares allotted is a direct proportion to the number of gun squares allocated. The ratio is 6/5 crew square for each gun square rounded up. Crew squares are distributed to the crew sections as evenly as possible with the lowest number sections having the highest priority.

- e. The number of gun squares allotted is a direct proportion to the number of crew squares allocated. The ratio is 6/5 gun square for each crew square rounded up. Crew squares are distributed to the crew sections as evenly as possible within the geometric pattern of the fort. This also greatly facilitates field of fire determination.

- f. An example below of a single counter fort. This also greatly facilitates field of fire determination. The example below of a single counter fort. This also greatly facilitates field of fire determination.

- g. The number of gun squares allotted is a direct proportion to the number of crew squares allocated. The ratio is 6/5 gun square for each crew square rounded up. Crew squares are distributed to the crew sections as evenly as possible with the lowest number sections having the highest priority. Additional crew squares as garrison units may also be added. But they must be placed in a separate section and may fire guns as poor crews only.

- h. All sides of a fort may be loaded and fired during the same turn.

- i. Guns in forts or fortifications fire at a +2 hit table modification for 1-6 gun squares, and +3 for 7+ gun squares. This is doubled if the advanced game is used.

- j. Mortars may also fire from a fort. Land based mortars take just three turns to load and have a +2 hit table modification when firing. They have a full 360° field of fire.

- k. A maximum of 5 gun squares (excluding mortars) per fort wall should be allocated, though this is up to a player's discretion.

FLOATING BATTERIES:

These were large rafts sturdily built with protective walls and housing large guns to break down land fortification defenses. They are used exactly like forts with the following exceptions:

- 1. Use a counter exactly as the type designed for single hex forts.

- 2. They have no movement of their own but are towed into place by another ship. For towing purposes they are treated as first class ships of the line.

- 3. These batteries must be anchored. If they are forced to up anchor or break anchor they drift in the same manner as a first class S.O.L.

- 4. They are set up in the same manner as forts. In other words they have no hull squares therefore they may not be sunk. They may be grappled and boarded.

SHIPS/BOATS:

Each ship generally carried one or more boats used for various details which could not be performed by the owning vessel itself. Within the game framework they best function as screens for various operations on land, remove one gun square from the parent ship. In every other respect while independent a boat is treated as a gunboat and is subject to all rules covering such.

THE GENERAL

5. Crew/Military units and/or artillery may be placed aboard a ship's boat counter by means of a Transfer Boarding Party.

- 6. Crew squares used to "man" a boat counter should be drawn from the lowest numbered crew section.

- 7. Boat counters cannot be used to block shots. Ships may target any ship on the board.

- 8. While a boat is attached to the parent ship it absorbs some of the damage directed toward the ship. For every four hull or gun hits in any combination, a boat loses one hull, crew, and oar square available. This, of course reduces the speed and the size of the force allowed to board. As soon as the boat is placed on the board it receives damage independently and is considered a separate target. A boat does not block line-of-sight.

In every other respect while independent a ship's boat is treated as a gunboat and is subject to all rules covering such.

LAND FORCES AND AMPHIBIOUS ASSAULTS:

Certain ships may be designated as carrying extra crew squares representing forces and material to be used in an amphibious assault. Ships' boats would be the vehicle by which units would land. Combat between land forces are handled with the Melee system of combat. Players have total freedom in deciding what types of units may be used in assault capacity.

- 1. Counters will have to be made (use reverse side of those included). There are three possible types of units available for amphibious assault:

  - Infantry
  - Cavalry
  - Artillery

- 2. Each counter represents one section or equivalent being transported by boat and a side record must be maintained of its strength.

- 3. One Infantry square may be transported for each crew square available on the boat.

- 4. On the turn of landing, ground units may not move. From the next turn on units may move at the following rates:

  - a. Infantry—2 hexes per turn
  - b. Cavalry—4 hexes per turn
  - c. Artillery—1 hex per turn (2 hexes if defined as field artillery)

- 5. When amphibious units are adjacent to the fort, melee may occur. Use identical procedure to that used on board ships. Crew quality is determined before scenario begins. Crews defending a fort each get an additional 3 melee strength points added to their original strength.

- 6. Units must melee every unit in a fort even if they are not adjacent.

- 7. Guns on land fire with same modifications as guns in forts.

- 8. When putting artillery gun square (other than field artillery, which is carried just for land operations) on land, remove one gun square from either broadside. Carronades may be used.

ROWING CAPABILITIES:

Ships of smaller class had the ability to move by oar as well as by sail.
THE GENERAL

1. All ships mounting 24 guns or less may use rowing capabilities at any time. The player must note in the Notes section the turn beforehand that he is changing to oars. He need not do this to change back to sail.
2. Wind effects on ships while rowing are the same as for galleys and ship's boats.
3. Rowing ships handled like galleys except that a $60°$ turn costs one movement factor.
4. Two crew sections must be used for rowing. They may not perform any other duties while in this capacity.
5. The speed diagram for ships using oars is:

   ![Speed Diagram for Ships Using Oars](image)

   - C: Fast
   - D: Normal
   - E: Slow
   - F: Very slow

THE DELAWARE FORTS

October 3—November 21, 1777

I. INTRODUCTION

Of major consequence to General William Howe's success during the British campaign to capture Philadelphia in the summer of 1777 was the exposure of his supply lines to the ambush style of attack in which the Americans excelled. This exposure was a result of the overland route which the supply trains followed along Howe's line of march. All the territory gained as a result of the superior British feat of arms could not be held if the supplies could not reach the invading army for the man the forts adequately. The bulk of the defense was unable to forage to maintain their position in America and had to import most of their supplies from Europe.

An alternate supply route would have to be developed which would be both safe and efficient. The obvious answer was the Delaware River. It was navigable as far as Philadelphia for large ships and safe from depredations by American forces. The utility of this route was equally apparent to both sides and its protection from enemy utilization had been anticipated by the American command. In the proceeding weeks, the Americans had built two lines of underwater obstructions set to rip open the hall of any ship passing overhead. These lines were anchored by three forts. Howe had by-passed the Delaware upon his descent to Philadelphia from New York and had chosen, instead, to land his army at Elk's Head at the mouth of the Chesapeake Bay. Now, upon his capture of Philadelphia, he had to open the Delaware or retreat.

The first line of obstructions was 12 miles downstream from Philadelphia and protected by Fort Billingsport, a weakly constructed and defended redoubt. A force detached from Howe's army was sent to capture this fort. It landed upriver and quickly captured the fort by a flanking attack although the garrison was able to spike the guns and escape.

Enough of the underwater obstacles were cleared to allow passage of the British fleet, commanded by Admiral Richard Howe, William Howe's brother.

The second line was five miles closer to Philadelphia and in two sections; the center being protected by a mud bank. This was a more formidable challenge to the British, being protected as it was by two large forts.

The eastern fort on the New Jersey shore, Fort Mercer, was chosen as the target for the first British attack to break the line. A brigade of Hessians who marched directly from Philadelphia tried three separate assaults on the fort. All three failed due to a combination of stiff resistance by the fort's defenders and support of the American gunboats along the river. Five British ships ran aground as they attempted to maneuver close to the fort in support. Three were able to extricate themselves but two, the Augusta, 64 guns, and the Merlin, 18 guns, were destroyed. The Hessians returned to Philadelphia with approximately 33% casualties to their force.

After the debacle at Fort Mercer, the British turned their attention to Fort Mifflin which occupied a small island west of the obstructions. Unable to land an amphibious party here, the British concentrated a tremendous amount of firepower both from the land based batteries on the Pennsylvania shore and from guns on their ships. On November 15 they opened into one of the heaviest bombardments of the war. It was estimated that over 1,000 rounds were fired every twenty minutes. Unable to withstand this fire Fort Mifflin surrendered and the garrison escaped.

Upon the fall of Fort Mifflin, Cornwallis with a force of about 2,000 British regulars crossed the Delaware and again attacked Fort Mercer. This time it was empty. Christopher Green, commander of the fort, had pulled out earlier realizing that its usefulness to protect the river had ended with the fall of Fort Mifflin as the British could breach the obstructions near Mifflin and bypass the remaining fort. The American fleet, trapped upriver, was scuttled.

The whole affair was marked by an amazing lack of cooperation between the continental forces, the local militias, and the navy which was under the control of the State of Pennsylvania. The fleet did not risk any of its major vessels in defense of the forts and in the end lost them anyway. The militia was unable to provide the reinforcements needed to man the forts adequately. The bulk of the defense fell, therefore, on Washington's regulars who were stretched to defend Philadelphia as well as the river. In this situation the Americans did not have any hope of preventing the Howe's eventual control of the Delaware River. With what they had, the Continental Army performed brilliantly, exacting almost as many casualties in Von Donop's assault on Fort Mercer as the British lost in the battle of Germantown. They also destroyed a ship-of-the-line, the largest that they were to capture or destroy without French aid during the entire war. The British were delayed for almost two months in getting supplies to the campaigning army who, if Washington had defended the Delaware more strongly, may have been forced to retreat back into Maryland.

II. PREVAILING WEATHER CONDITIONS

Wind Direction: E
Wind Velocity: 3—Normal breeze
Wind Change: 6

III. SPECIAL RULES

A. Basic and Advanced game rules including those described above are used except the Advanced Game Log Modifications.
B. The following Optional Rules are in effect:
   VII. Towing
   XI. Running Aground
   XII. Casting the Lead
   XIV. Fore-and-Aft Sails

III A. Fireships

III D. Gunboats

See PAGE 29

Land and Prohibited Area—vessels of all types may not enter.
Shallows—Only certain ships may travel over these hexes without fear of running aground. These ships are noted by an S on their entry in the Order of Battle.
Channel—Only certain ships may pass through the Channel without fear of running aground. These ships are noted by a C on their entry in the Order of Battle.

D. The river current runs in direction 1 and 6. All ships and rafts drifting must drift in either one of these two directions and may change to the other direction only to prevent the ship or raft from moving into a land or prohibited hex. The owning player decides the initial drift direction. River current has no other effect on a ship's movement.

Wind has no effect on drifting.
E. A ship may fire into a coastal land hex but cannot fire through a land hex.
F. The river channel may be entered by qualified British vessels from hexes EE1, FF1, or GG1, at least 5 turns after the successful penetration of line 1 of underwater obstructions at the earliest.
G. All vessels may anchor.

H. UNDERWATER OBSTRUCTIONS

1. Ships may not pass over any hex occupied by an underwater obstruction or enemy. All rafts may pass over. A ship which is forced to move into an underwater obstruction hex is considered destroyed and the counter removed from play. Underwater obstructions are stationary and may not be moved.
2. Underwater obstructions can only be cleared by a ship of at least 28 guns. The ship must be adjacent to the obstruction counter for 4 consecutive turns without being fired upon to remove it.
3. The American player may secretly choose a passage through the second line of underwater obstructions between Fort Mifflin and Fort Mercer. Ships may sail through this passage. Once used, by the American player though, the British player is also free to use it. If the American player does not use the passage the British assume the second line of obstructions as solid.
4. A ship (not raft or gunboat) can be intentionally sunk to block passage across two hexes in the same manner as an underwater obstacle. The sinking is accomplished immediately upon the announcement by the controlling player at the end of the movement phase. The hexes must be marked and cannot be kept hidden.

1. Fire rafts can only be sent at intervals of one raft every three turns. Those British vessels which cannot enter the board at the start of play may remain off the board and enter at a later time. Those British vessels which are allowed to enter the
Channel may leave the board along the entry hexes (see Order of Appearance) and re-enter at the Channel a minimum of 4 turns after the breaching of the first line of obstructions.

J. LAND UNITS
1. Infantry counters cannot be stacked. Land batteries may be stacked two high. Field artillery may be stacked with infantry up to 2 counters high.
2. When forming infantry units, the British may have a maximum of 10 infantry or crew squares per counter: the Americans, 8.
3. Some American forces are in the form of reinforcements. They may enter as either infantry units or as replacements to fort garrison's. As replacements they may replenish any garrison squares lost in melee or gunfire. The garrison may never be increased above its original strength. The reinforcements are added at the end of any turn in which a melee did not occur against the garrison to be reinforced.

K. MELEE
1. Melee may occur between land units in the open as well as against forts and ships as long as the battling units are adjacent to one another. This form of melee is conducted in the same manner as regular melee.
2. Losses due to melee conducted on land are always taken from the units or garrison sections of lowest quality first.
3. If an infantry unit loses 33% of its squares (rounded up), it may no longer voluntarily enter into melee but may melee as a DBP.

L. Amphibious assault against Fort Mifflin is not allowed.

M. Those vessels with an asterisk by their gun strength in the Order of Battle may fire every turn provided they lower their Hit Table by one.

N. Guns in forts may be spiked (destroyed) at any time by the controlling player if he has at least one crew, garrison or infantry square in the fort.

O. The British Mortar batteries can only fire at one fort wall at a time (i.e., if 2 gun hits are scored and only one gun square is on the wall being fired at, only gun square is marked off).

P. Running Aground
1. All ships which cannot move over the shallows normally (see Order of Battle) may attempt to do so by risking running aground.
2. For each ship not qualified to move over shallow hexes and attempting to do so, both players secretly record a number from one to six and the name of the ship on a slip of paper. The opposing player then takes both slips, cross indexing both values on the table below to obtain a Run Aground Value (R.A.V.). For each turn including the turn of entry, that the ship occupies a shallow hex, the controlling player rolls a die which if it equals or is less than the R.A.V. indicates that the ship has run aground. R.A.V. indicates that the ship has run aground.

IV. ORDER OF APPEARANCE
At Start Place the following counters in their assigned hex:

<table>
<thead>
<tr>
<th>COUNTER LOCATION</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort</td>
<td>D4</td>
</tr>
<tr>
<td>B</td>
<td>H19</td>
</tr>
<tr>
<td>C</td>
<td>DD12</td>
</tr>
<tr>
<td>Underwater</td>
<td></td>
</tr>
</tbody>
</table>

Obstructions
- line 1 H3, I3, J2, K2, L1, M1, I4, J3, K3, L2, M2, N1.
- line 2a U13, V12, W12, X11, Y11, Z11, AA11, V13, W13, X12, Y12, Z12, W14, X13, Y13, AA12.
- line 2b N17, O17, P16, Q16, R15, P17, R16, O17, S16.

American Forces
- All vessels may start anywhere between obstruction line #1 and board edge 4.
THE GENERAL

British Force

British vessels may enter the board between D1 and K1 inclusive. At least four turns after successful penetration of the first line of obstructions, those ships qualified to enter the Channel may do so between hex EE1 and G1 inclusive.

American Reinforcements

The reserve pool may be used to form infantry units at any time. Those squares used to form a unit may not be used to replace a fort's garrison losses.

Turn 5 Greene's Detachment may be brought into play anytime between turn 5 and 10 provided that there are British infantry units on the board. As soon as all British infantry units have been removed from play, Greene's detachment must also be removed.

Turn 25 Greene's Detachment may return on this turn or thereafter if there are British forces on the board. Greene's detachment may not be brought into play between turns 11 and 24 whether there are British infantry units on the board or not.

VI. ORDER OF BATTLE

<table>
<thead>
<tr>
<th>Name</th>
<th>Guns</th>
<th>Class</th>
<th>Nr.</th>
<th>Hull</th>
<th>Qual.</th>
<th>Crew Section</th>
<th>Guns LR</th>
<th>Rigging</th>
<th>Point Value</th>
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<tr>
<td>Somerset</td>
<td>10</td>
<td>SOL</td>
<td>2</td>
<td>12</td>
<td>Cr</td>
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<td>5</td>
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<td>4</td>
<td>Cr</td>
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<td>3</td>
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<td>Cr</td>
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<td>6</td>
<td></td>
<td>12</td>
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</tbody>
</table>

V. VICTORY CONDITIONS

The British player must accomplish the following two objectives in order to win:
1. Capture Fort Billingsport and Fort Mercer; and
2. Remove enough of the underwater obstructions to allow passage of at least one British ship through line 1 and 2a; the accomplishment of which will end the scenario.

Victory points are awarded as described in the rules plus extra points for the following:

American Player
1. Each British infantry square destroyed 2 points
2. Every 4 turns played 1 point
3. Every British land artillery or Mortar square destroyed 1 point

British Player
1. For every American infantry or garrison square destroyed 1 point
2. For each land artillery square destroyed ½ point
3. Each fort captured 20 points
(If any part of the garrison escapes) 17 points

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Note: The American should use French ships to complete his fleet.
A CLOSER LOOK AT RICHTHOFEN'S WAR

For years now Avalon Hill has been producing wargames of extremely high calibre. To date, however, none compare with the game of RICHTHOFEN'S WAR, for here one can truly command every aspect of the plane's flight. The fact that it is an aerial combat game, and that it is set during World War I, simply adds to its quaintness as a departure from the run-of-the-mill wargame.

I therefore felt it would be interesting to conduct an investigation of the game, using mathematical probability and my own experience.

First, I decided to compile a chart of all plane classes used in the game, as listed on the Target Damage Table, and then determined their respective hit probabilities. See Chart 1, below.

**Chart 1**

<table>
<thead>
<tr>
<th>PLANE CLASS</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANE CLASS</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td>1</td>
<td>809</td>
<td>818</td>
<td>818</td>
<td>636</td>
</tr>
<tr>
<td>2</td>
<td>818</td>
<td>818</td>
<td>777</td>
<td>545</td>
</tr>
<tr>
<td>3</td>
<td>636</td>
<td>636</td>
<td>636</td>
<td>636</td>
</tr>
<tr>
<td>4</td>
<td>366</td>
<td>545</td>
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<td>366</td>
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<tr>
<td>5</td>
<td>545</td>
<td>555</td>
<td>555</td>
<td>555</td>
</tr>
<tr>
<td>6</td>
<td>555</td>
<td>564</td>
<td>564</td>
<td>273</td>
</tr>
<tr>
<td>Avg.</td>
<td>623</td>
<td>571</td>
<td>545</td>
<td>390</td>
</tr>
</tbody>
</table>

With an ace in play, these figures are apt to change. For example, an "A" class plane firing on an ace at a range of one must roll 4-12 in order to score a hit. This amounts to only 81.8% chance of inflicting damage, rather than the 90.9% chance recorded on Chart 1. The chart will also become amended with an ace firing instead of being fired upon. However, the figures should still be used as a general rule of thumb.

It is interesting to note here the relative weakness of the "D" class planes, i.e., the De Haviland 2, Nieuports 11 and 12, the Sopwith 1/2 Strutter, RBF's Be-2 and Re-8, and the LFG Roland C-2, even in relation to "C" class planes. It is also interesting to note that with the exception of the Roland C-2, all "D" class planes belong to the Allies.

Obviously, when these planes are involved in a dog-fight, or in a situation where they must fight to survive, they do relatively little damage. Their primary purpose, however, was not to engage the enemy in combat, but rather to scout enemy troop movements, dispositions, artillery, etc.

Which brings us to our second chart, average damage factors when scoring a hit. One must bear in mind the likelihood of the plane in question to inflict any damage at all on an enemy plane, re Chart 2:

**Chart 2**

<table>
<thead>
<tr>
<th>PLANE CLASS</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANE CLASS</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td>1</td>
<td>4.20</td>
<td>4.11</td>
<td>3.00</td>
<td>2.45</td>
</tr>
<tr>
<td>2</td>
<td>3.67</td>
<td>3.00</td>
<td>2.38</td>
<td>1.67</td>
</tr>
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<td>3</td>
<td>1.86</td>
<td>1.83</td>
<td>1.67</td>
<td>1.25</td>
</tr>
<tr>
<td>4</td>
<td>1.67</td>
<td>1.80</td>
<td>1.60</td>
<td>1.25</td>
</tr>
<tr>
<td>5</td>
<td>1.60</td>
<td>2.00</td>
<td>1.75</td>
<td>1.00</td>
</tr>
<tr>
<td>6</td>
<td>1.75</td>
<td>1.25</td>
<td>1.33</td>
<td>1.00</td>
</tr>
<tr>
<td>Avg.</td>
<td>2.49</td>
<td>2.37</td>
<td>1.98</td>
<td>1.48</td>
</tr>
</tbody>
</table>

In this case, as with Chart 1, the presence of an ace will sway the averages, but only slightly, so as not to change the basic computations.

It is amusing to note that in some instances in this chart, as you probably already have noticed, every plane class has one case where the average damage value increases instead of decreasing as the range grows greater, i.e., "A" class planes at range six in relation to range seven. This can be accounted for by the fact that as the distance expands, the number of times the plane can score a hit diminishes, but the total number of damage factors remains the same, or approximately the same, as the lesser distance.

Please note one important factor at this time. At a range of five, the lone "B" class plane, the RAF Se-5a, has an average damage factor, 13 greater than that of "A" class planes at the same range, and that at a range of six, both this plane and "C" class planes outweigh, so to speak, the "A"s, by .40 and by .15, respectively. Even "C" class planes at a range of seven have a higher average damage factor than the "B" class Se-5a.

And so it is at this moment that Chart 1 comes back to the idea, to use in conjunction with Chart 2. As mentioned, the plane in class "B" has a higher average damage factor at firing at a range of five and at a range of six than do "A" class planes.

As a glance at Chart 1 will prove, "A" class planes firing at ranges of five and six have a better chance of scoring a hit against the target plane than does the Se-5a.

My advice is that if you have a choice, go with the better average damage, as opposed to the better chance of scoring a hit. As it stands, "A" class planes do have a better chance of inflicting damage than the Se-5a does, but the edge is only 9.1% at a range of six, and only 9% at a range of five. The difference in average damage more than makes up for this, however.

Of course, the situation you are in at any given moment may warrant taking advantage of the better probability, and you may not have a choice to make regarding the use of the planes. Generally, however, it does seem to make more sense to gamble and go for more damage.

Chart 3 suddenly finds itself thrust into the limelight.

**Chart 3**

<table>
<thead>
<tr>
<th>PLANE CLASS</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANE CLASS</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td><strong>RANGE</strong></td>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
<td><strong>D</strong></td>
</tr>
<tr>
<td>1</td>
<td>028</td>
<td>056</td>
<td>083</td>
<td>111</td>
</tr>
<tr>
<td>2</td>
<td>056</td>
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<td>111</td>
<td>111</td>
</tr>
<tr>
<td>3</td>
<td>083</td>
<td>111</td>
<td>167</td>
<td>167</td>
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<tr>
<td>4</td>
<td>111</td>
<td>167</td>
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<td>167</td>
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<tr>
<td>5</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
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<tr>
<td>6</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
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<tr>
<td>7</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
</tr>
<tr>
<td>Avg.</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>167</td>
</tr>
</tbody>
</table>

Chart 3 deals with die roll frequency, showing the chance the gamer has when trying for a particular roll. This should be used in association with the Target Damage Table in order to ascertain your chances for obtaining a critical hit. As an example, "A" class planes at a range of three need a die roll of nine in order to score a critical hit. Chart 3 shows that there is an 11.1% chance of rolling a nine.

The presence of an ace is a simple enough factor to figure when computing your chances. Simply add or subtract one from the roll of the dice, as the case may be.

For greater realism and enjoyment of RICHTHOFEN'S WAR, I suggest that you incorporate the following optional rules when playing the game:

**Rule 1—Prevailing Wind.** This often was a factor during many of the key battles of World War I, and in fact played a role in practically any battle ever fought in the air during that era.

**Rule 2—Reaction Rule.** For my part, I wouldn't think of playing a game without using this rule. The initial reaction of the actual pilot often turned defeat into victory, and vice versa. Consider, if you will, the folly of a World War I pilot deliberating for even one minute as to which way to turn, dive, or climb. Consider, if you will, the folly of a World War I pilot deliberating for even one minute as to which way to turn, dive, or climb. Consider, if you will, the folly of a World War I pilot deliberating for even one minute as to which way to turn, dive, or climb.

**Rule 3—Angle of Attack.** This is a highly realistic rule which often takes away what amounts to a slight advantage for the attacking plane.

This analysis was developed in order to help you see, in a mathematical light, the subtleties involved in the game. It is hoped that this will help you in actual play.

As a game, RICHTHOFEN'S WAR provides what I feel is the ultimate challenge to a gamer's ability.
Game Theory and 1776

By J. Richard Jarvinen

The Tactical Results Matrix in 1776 has always had a fascinating appeal to me. Anyone who has had the thrill of attacking at 1-1 using an Enfilade Left (while the defender Refuses the Right) and then rolling a one knows exactly what I mean! Despite the fact that I've always felt I've had more than my share of luck with this system, I've often wondered if I was really using the Tactical Cards to my best advantage. Perhaps I've been selecting Frontal Assault too often and Recon in Force not enough. Obviously I want to play my cards in a way that yields the most favorable result. But the big Question was always hovering over the battle board: What were the best possible choices in order to maximize my chances of a favorable result? The structure of the Tactical Results Matrix (hereafter referred to as the TRM) and the manner in which the Tactical Cards are chosen suggest that this system could successfully be analyzed by game theory, that branch of mathematics that deals with the selection of the best available strategy in order to maximize one's winnings (or minimize one's losses) in a game, war, business endeavor, etc.

A small digression is necessary to define some terms for those readers who may not be familiar with game theory. A game refers to a set of rules and conventions for playing and a play refers to a particular possible realization of the rules. At the end of each play, each of the players receives (or loses) a payment, called the payoff. The matrix consisting of all possible results based on the strategies available is called the payoff matrix. The object of each player is to maximize his winnings, and the strategies available to each player are called the payoff matrix. The object of each player is to maximize his winnings, and the strategies available to each player are called the payoff matrix. A strategy is a set of numbers that represent the frequency with which each possible play is selected. The astute reader will have recognized that for our use each play represents the selection of two Tactical Cards (one by the Attacker, the other by the Defender), the payoff is the die roll adjustment on the TRM, and the payoff matrix is the TRM itself. In 1776 there are eight possible plays for each player; thus a strategy would consist of a set of eight non-negative numbers that add up to one.

One important theorem of game theory is that all games have at least one optimum solution. That is, there exists a strategy for each player that will maximize his winnings, and no other strategy can be better. So all I had to do was to pour the TRM into the computer, push the button, and wait for the magic answer. Unfortunately there was no such solution on TRM that did not readily lend itself to analysis. This was that dreaded nemesis of all attackers, the successful withdrawal! While a successful withdrawal has no effect on the current battle, it certainly has some influence on which Tactical Card you select. There are few things more frustrating in life than to have a Continental Army of 5,000 outnumbered three to one to have one's own devils slip from your grasp with minimal loss. So how do I allow for this elusive concept? Well, to keep things simple (to begin with, anyway), I don't make any allowances for it. I let the values on the TRM remain as they are and replace NC by the value zero. What this implies is that neither player puts any value whatever on a withdrawal. This is actually the case in many instances. The sole purpose of each player is to try to inflict the highest possible loss on his opponent, giving no thought to escape or retreat. The payoff matrix is now shown as Table I. The most significant feature of this matrix is that it is symmetric (for math freaks, symmetric implies that each value in row i, column j = the negative of the value in row j, column i). It is characteristic of all symmetric matrices that the average payoff (or value) to each player is zero, and furthermore, that the strategies for both players will be identical. Following is the result for the matrix of Table I, giving the percentage of the time that each strategy should be played (FA is Frontal Assault, RF is Recon in Force, EL is Enfilade Left, etc.). Underneath the table is the value of the game and the chance of getting a withdrawal using the given strategies.

A rather startling change has occurred due to the adjustment to the TRM. The Attacker no longer selects Refuse the Left or Refuse the Right, but instead picks Frontal Assaulsts and Recon in Force more often. The Defender also gives up on Refuse the Left or Right, but now selects Stand and Defend and Withdraws! The value of the game has shifted slightly in the defender's favor, the price you would expect to pay by using Frontal Assaults more often.

Now I decided to adjust the TRM by even more. I used values from minus three to minus ten, and one extreme case of minus twenty-four (either the Attacker is desperate to nail the Defender or the Defender is willing to sell his soul in order to escape). Following are the results using the values -4, -6, and -24:

The problem now becomes how to make successful Withdrawals "harmful" to the Attacker and "beneficial" to the Defender. One way is to simply adjust every case on the TRM where a successful Withdrawal occurs by some negative number. If you use -1, the bottom line would now be +1, +1, +1, +1, +1, +1, +1. This doesn't mean that you would use these values in practice. It just implies that a Recon in Force against a Withdrawal is not really worth +2 to the Attacker anymore. He would probably be willing to settle for +1 if he could have another attack. Obviously the more negative value you assign to a Withdrawal, the bigger the premium you associate with it. So, every place in the TRM that was red or NC had I subtracted from it. I then put this new adjusted TRM into the computer and pushed the button again. Surprise! The results were identical with Case I. Minus one was probably not enough of an adjustment. So this time I subtracted two from all the appropriate entries (see Table II), and had more luck:

This table says that each player should pick FA, EL, and ER 18% of the time (each), RF 27%, RL and RR 9%, and never pick SD or WD. (The purist will note that the odds only add up to 99 — this is because of the inevitable roundoff error). The value of the game is 0.0, as previously suspected, and the chance of a withdrawal via the Tactical Cards is also 0.0. So all you 1776ers who haven't been selecting Recon in Force had better take a hard look at the above statistics.

So much for the ideal situation. But now you ask, what if the Defender is trying to withdraw? Obviously that puts a premium on Withdrawals (unless the Attacker picks Frontal Assault, of course). The problem now becomes how to make successful Withdrawals "harmful" to the Attacker and "beneficial" to the Defender. One way is to simply adjust every case on the TRM where a successful Withdrawal occurs by some negative number. If you use -1, the bottom line would now be +3, +1, +1, +1, +1, +1. This doesn't mean that you would use these values in practice. It just implies that a Recon in Force against a Withdrawal is not really worth +2 to the Attacker anymore. He would probably be willing to settle for +1 if he could have another attack. Obviously the more negative value you assign to a Withdrawal, the bigger the premium you associate with it. So, every place in the TRM that was red or NC had I subtracted from it. I then put this new adjusted TRM into the computer and pushed the button again. Surprise! The results were identical with Case I. Minus one was probably not enough of an adjustment. So this time I subtracted two from all the appropriate entries (see Table II), and had more luck:
CASE IV  
(WD adj. = -6)  

<table>
<thead>
<tr>
<th>Att IV</th>
<th>Def IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>.52</td>
</tr>
<tr>
<td>RF</td>
<td>.30</td>
</tr>
<tr>
<td>EL</td>
<td>.09</td>
</tr>
<tr>
<td>ER</td>
<td>.05</td>
</tr>
<tr>
<td>RL</td>
<td>.00</td>
</tr>
<tr>
<td>RR</td>
<td>.00</td>
</tr>
<tr>
<td>SD</td>
<td>.00</td>
</tr>
<tr>
<td>WD</td>
<td>.00</td>
</tr>
</tbody>
</table>

Value = -0.74  
Suc. WD = 9.8%  

CASE V  
(WD adj. = -24)  

<table>
<thead>
<tr>
<th>Att V</th>
<th>Def V</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>.82</td>
</tr>
<tr>
<td>RF</td>
<td>.18</td>
</tr>
<tr>
<td>EL</td>
<td>.00</td>
</tr>
<tr>
<td>ER</td>
<td>.00</td>
</tr>
<tr>
<td>RL</td>
<td>.00</td>
</tr>
<tr>
<td>RR</td>
<td>.00</td>
</tr>
<tr>
<td>SD</td>
<td>.00</td>
</tr>
<tr>
<td>WD</td>
<td>.00</td>
</tr>
</tbody>
</table>

Value = -1.46  
Suc. WD = 1.9%  

Taken together, these tables show some interesting trends. As the "value" of the WD adjustment decreases, the value of the game slowly decreases, while the chance of a successful withdrawal via the Tactical Cards rapidly approaches zero. The attacker starts to rely more and more on Frontal Assaults, while the Defender is busily pulling out Enfilades, with only an occasional Withdrawal to keep the Attacker off balance. In the most extreme case, we would anticipate the attacker always picking Frontal Assaults, the Defender always picking Enfilades, and the value being exactly one and the chance of a Withdrawal being exactly zero. And I can assure you, that when the Attacker doesn't want the Defender to get away, and the Defender does want him to get away, you might as well forget the Tactical Cards and just subtract two from the die roll. Experience bears this out, but isn't it nice to know that theory agrees with you!

One interesting problem arises when the Attacker and Defender interpret the situation differently. For example, the Attacker may be using the strategy presented in Case II (he doesn't care too much if the Defender gets away, but the Defender misreads the Attacker's intentions and defends using the strategy in Case IV (the Attacker really wants to pulverize him). This type of problem comes under the subject of non-zero-sum games, a topic which is beyond the scope of this article, and undoubtedly beyond the ability of this author. However, I will admit that the advantage would generally lie with the person using the lower numbered strategy.

Using the strategies presented in this article should improve your chances for getting good results on the TRM, but I have no sympathy for those people who are playing against psychic opponents or who can't roll a number higher than a 2.

The other works somewhat like the tactical matrices in 1776 or CAESAR'S LEGIONS. This second table translates any overages from flat-odds into die-roll advantages. In the opening example, the thirteen extra factors are turned into a die roll modification that would make the battle equal to a 3-1 straight. One factor shouldn't be more important than the other forty-one put together. Such a table for STALINGRAD might look like the one in diagram A.

Such a system has inaccuracies of its own. Two factors are more important at 8-3 than at 22-10. A quick panacea for this is to express the excess as a factor of the attack or defending force, rather than a number of factors. The table would be divided into percent increments (1%-5%, 5.1-10%, 10.1-15%, etc.), each with a die roll addition. This has the drawback of players having to calculate percentages, but it is not all that difficult. Simply divide the part by the whole and multiply by 100. In the beginning example, 13-14x100=92.86%. A cheap pocket calculator should do away with pencil pushing, or a chart of combinations and percentages could be included in the game (something like the odds-reduction chart included with AH's old standardized CRT). This would look somewhat like figure B.

For variety, one could add a vertical column with combat odds. The die roll modification would differ slightly depending on the balance of forces. This would allow the excess-point table to take percentages into account. Gamblers among you might even like to roll a die to determine the exact change, out of different possibilities. This can enhance the uncertainty created by things like tactical matrices and command control.

I hope this Total Unit Effectiveness CRT (I get my jollies thinking up fancy names for things) helps you in your gaming, and that you no longer need to defolate yourself over that up-factoring unit that just couldn't make it. Okay, so I've run it up the flagpole. We'll see who salutes it.

---

**CASE IV**

<table>
<thead>
<tr>
<th>Att IV (WD adj. = -6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
</tr>
<tr>
<td>RF</td>
</tr>
<tr>
<td>EL</td>
</tr>
<tr>
<td>ER</td>
</tr>
<tr>
<td>RL</td>
</tr>
<tr>
<td>RR</td>
</tr>
<tr>
<td>SD</td>
</tr>
<tr>
<td>WD</td>
</tr>
</tbody>
</table>

**Value = -0.74**  
**Suc. WD = 9.8%**

**CASE V**  
(WD adj. = -24)  

<table>
<thead>
<tr>
<th>Att V</th>
<th>Def V</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>.82</td>
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<tr>
<td>RF</td>
<td>.18</td>
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<td>SD</td>
<td>.00</td>
</tr>
<tr>
<td>WD</td>
<td>.00</td>
</tr>
</tbody>
</table>

**Value = -1.46**  
**Suc. WD = 1.9%**

**THE LEFTOVERS**

by John Engberg

Picture the following game of STALINGRAD: you're the Germans, driving fast and hard through the Ukraine. You've given the Russians a bloody nose, but his lines are still collihesive. But you see an opportunity—smash one 5-7-4 and you can come around behind and cut off most of his front. Sure, he's behind a river and you can only attack from two hexes, but the four 8-8-6s are in easy reach and should carry the day. They move up. That's 32-14, ten more factors are needed for a 3-1. You spot a 5-5-4 and put him in the line. Five factors needed, but only enough room left for one more unit. You frantically search the board—nothing in reach bigger than a 4-4-4. That gives you only 41 factors, one shy of 3-1 odds. Now you either call off the attack and allow Ivan to reinforce; or risk a 2-1 shot, with the fumaking prospect of having at least 28 factors fly off or Valhalla on the wings of an A-elim. Situations like this cheat barbers out of millions of dollars every year.

Is there a better way? Let's see.

The title is derived from the fact that one often does not get battles that reduce to nice, even CRT odds (even with 3-2 columns and the like). Factors are left over. These factors fight and die like the rest, but are powerless to influence the battle. One obvious solution is to put more columns in the CRTs, but some fellow's still be left out. Carrying this to extremes, we can have a table that covers EVERY possible situation. You could figure out what the greatest possible strength defending a hex would be, and the greatest number of attackers that could be brought to bear, and check out everything in between. Such a CRT would be about the size of the New York phone directory and come in a separate package. A science fiction game with such a table would be an ancients game by the time I hope this comes out, but isn't it nice to have a board game that even smartest of the board game players could readily use.

One does not have to risk a hernia just to enjoy the hobby. I have devised a solution which only requires two tables. One is a basic flat-odds type:

**FIGURE A**

<table>
<thead>
<tr>
<th>odds</th>
<th>1-6</th>
<th>1-5</th>
<th>1-4</th>
<th>1-3</th>
<th>1-2</th>
<th>1-1</th>
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<tbody>
<tr>
<td>2</td>
<td>Ab2</td>
<td>Ab2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>D2</td>
</tr>
<tr>
<td>-1</td>
<td>AE</td>
<td>AE</td>
<td>AE</td>
<td>AE</td>
<td>Red</td>
<td>D2</td>
</tr>
</tbody>
</table>

**FIGURE B**

<table>
<thead>
<tr>
<th>90-99%</th>
<th>1-90%</th>
<th>10-14%</th>
<th>15-29%</th>
<th>30-39%</th>
<th>40-49%</th>
<th>50-59%</th>
<th>60-69%</th>
<th>70-79%</th>
<th>80-89%</th>
<th>90-99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>-2</td>
<td>-2</td>
<td>-3</td>
<td>-3</td>
<td>-3</td>
<td>-3</td>
</tr>
</tbody>
</table>

---

The other works somewhat like the tactical matrices in 1776 or CAESAR'S LEGIONS. This second table translates any overages from flat-odds into die-roll advantages. In the opening example, the thirteen extra factors are turned into a die roll modification that would make the battle equal to a 3-1 straight. One factor shouldn't be more important than the other forty-one put together. Such a table for STALINGRAD might look like the one in diagram A.

Such a system has inaccuracies of its own. Two factors are more important at 8-3 than at 22-10. A quick panacea for this is to express the excess as a factor of the attack or defending force, rather than a number of factors. The table would be divided into percent increments (1%-5%, 5.1-10%, 10.1-15%, etc.), each with a die roll addition. This has the drawback of players having to calculate percentages, but it is not all that difficult. Simply divide the part by the whole and multiply by 100. In the beginning example, 13-14x100=92.86%. A cheap pocket calculator should do away with pencil pushing, or a chart of combinations and percentages could be included in the game (something like the odds-reduction chart included with AH's old standardized CRT). This would look somewhat like figure B.

For variety, one could add a vertical column with combat odds. The die roll modification would differ slightly depending on the balance of forces. This would allow the excess-point table to take percentages into account. Gamblers among you might even like to roll a die to determine the exact change, out of different possibilities. This can enhance the uncertainty created by things like tactical matrices and command control.

I hope this Total Unit Effectiveness CRT (I get my jollies thinking up fancy names for things) helps you in your gaming, and that you no longer need to defolate yourself over that up-factoring unit that just couldn't make it. Okay, so I've run it up the flagpole. We'll see who salutes it.
BATTLES IN GERMANY, 1948
by Roy Easton

In 1948, Stalin sought to put pressure on the Western Allies by shutting off all of the land access routes to Berlin. The Allies responded by supplying Berlin completely through the air in the Berlin Airlift. These PANZER LEADER/PANZERBLITZ variant situations assume that the Air-Lift had failed and that the Allied leaders had decided to open the land routes to Berlin by force.

These situations use the PANZER LEADER boards and Allied units and the PANZERBLITZ Soviet units. The PANZER LEADER rules are used with the following modifications:

1. STACKING-Four Allied units may stack in a hex; three Soviet units may stack in a hex except for Soviet infantry units which can stack with only one other unit.
2. INDIRECT FIRE-No Soviet unit may use indirect fire; all Allied M and (H) units may use indirect fire.
3. RANGE-Soviet infantry units have a range of 2*.
4. ARMORED ENGINEER VEHICLES-Situation 25 introduces two new types of AVRE's (Armored Vehicle, Royal Engineers) and this rule covers their use.
   a. The AVRE-F units represent AVRE's carrying fascines (bundles of sticks). When this AVRE enters a stream hex, it may drop its fascine by expending an additional movement point. A "Fascine" counter is placed in this hex to indicate that the fascine has been placed in the stream. All tracked and half-tracked vehicles may now cross the stream on this hex by expending an additional 3 movement points but no more than 2 units may cross each fascine per turn. Up to 3 fascines may be dropped in a single hex and they may be crossed on the same turn that they are dropped. Each AVRE-F carries one fascine.
   b. The AVRE-B units represent AVRE's equipped with bulldozer blades. An AVRE-B may remove a "Wreck" from a Clear Terrain hex by remaining undispersed on that hex for one complete Movement Phase at the end of which the "Wreck" counter is removed from the Board. The same process is used to clear a "Wreck" from Woods hexes except that at the end of the Movement Phase, the "Wreck" is replaced by a "Wreck-R (removed)" counter which counts as a unit for stacking but does not inhibit movement (as along a road).
   c. One AVRE-B can remove a "Block" counter by remaining undispersed on that hex for 2 complete Movement Phases, at the end of which the "Block" counter is removed from the game. Two AVRE-B's can remove a "Block" if each one remains on that hex undispersed for one complete Movement Phase.
   d. One or more AVRE-B's can clear a Green hexside by remaining undispersed adjacent to that hexside for a total of 3 complete Movement Phases, at the end of which a "Green Side Cleared" counter is placed with the arrow pointing to the cleared side. All tracked and half-tracked vehicles may then cross this hexside by expending an additional 2 Movement Points.
   e. AVRE-B's can clear minefields by using the procedure described above for removing "Wrecks".

SITUATION 23

Germany, 1948: The Berlin Airlift has failed and President Truman has ordered the army to open sufficient land supply routes into Berlin to supply the city. The success of this attack by elements of the U.S. 2nd Armored Division depends on the speed with which the routes are opened and casualties are immaterial.

Available Units:

U.S.: Two Combat Commands each containing the following:

| 10 | 3 | 2 | 2 | 3 | 3 | 9 | 12 | 6 |

Soviet: Reinforced Guards Mechanized Rifle Brigade.

Note: Since the counter-mix does not provide sufficient counters for this situation, the player should purchase another set of Allied counters or make appropriate substitutions. Soviet mortars may not use indirect fire.

Available Units:

The U.S.-Soviet Zone Border runs south along Row U on Board A until it reaches the main river and then runs along the river to the South end of Board D.

Set-Up:

Soviet Player: Set up first anywhere east of the Border.
U.S. Player: Set up second anywhere West of the Border, move first. Each of the two Combat Commands must set-up on a different Board but there are no other restrictions on movement or firing.

Victory Conditions:

Victory is determined by the number of road exit hexes on the Eastern Edge of the Board controlled by the U.S. player at the end of the game. In order to control one of these hexes, the U.S. player must have been the last to move a unit through this hex and there must be no Soviet infantry or non-halftrack armored units within 2 hexes of the road exit hex on the last game turn.

Number of Hexes
Controlled by U.S.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Victory Level

Soviet Decisive
Soviet Tactical
Soviet Marginal
Draw
U.S. Marginal
U.S. Tactical
U.S. Decisive

SITUATION 24

Germany, 1948: As the U.S. Army drives on Berlin, the Soviets counterattack in the British Zone. A battlegroup of the 1st Battalion, Coldstream Guards, is ordered to delay the advance of a Soviet Tank Corps.

Available Units:
British:  

Soviet:  

Note: Use Sherman and M-4 counters with Comet values and M-10 and Achilles counters with Archer values.

Boards:  

Set-Up:  
British Player: Set up anything anywhere on the Board, move second.
Soviet Player: Move first, enter from any hex or hexes along Eastern edge of Board. All Soviet units must be on Board by the end of Turn 3. The British player may use Opportunity Fire on Turn 1.

Game Length: 15 Turns

Special Rule:
All British CAT attacks have their odds increased by one column, i.e., a 1:1 becomes a 2:1.

Victory Conditions:
Victory is determined by the number of Soviet tank units, (T-34/85, JS 111, SU-152, and SU-100) exited off the Western edge of the Board from any partial hex south of B-GG-6. Each exiting unit must use 1 Movement Point to exit the Board and may not return after exiting.

<table>
<thead>
<tr>
<th>Number of Units Exited</th>
<th>Victory Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>British Decisive</td>
</tr>
<tr>
<td>3-5</td>
<td>British Tactical</td>
</tr>
<tr>
<td>6-8</td>
<td>Draw</td>
</tr>
<tr>
<td>9-11</td>
<td>Soviet Marginal</td>
</tr>
<tr>
<td>12-15</td>
<td>Soviet Tactical</td>
</tr>
<tr>
<td>16-24</td>
<td>Soviet Decisive</td>
</tr>
</tbody>
</table>

**SITUATION 25**

Germany, 1948: As the Soviet counteroffensive surges through the British Zone, a hastily assembled force built around an armored regiment of Royal Engineers is ordered to attack the base of the Russian salient.

British:  

Soviet:  

For use with AVRE's

Boards:  

Set-Up:  
British Player: Set up anything anywhere on the Board.  
Soviet Player: Move first and enter anywhere along the Southern edge of the Board.

Game Length: 12 Turns

Victory Conditions:
The Soviets win if, at the end of the game, they can trace a line of continuous road hexes from the East to the West edges of the Board such that no hex along this line is within 2 hexes of a British non-Bren or halftrack unit. The British win by avoiding the Soviet Victory Conditions.

**THIRD REICH RULES**

The Second Edition of the Third Reich rules is now available for $2.00 plus 50c postage. These rules have not been rewritten. They are still in the original lengthy and somewhat ambiguous style. Those expecting a crystal clear revision will be disappointed, and should not order the revision.

What the second edition does have is a 5 page Appendix of Questions & Answers on play—many of which have appeared in the GENERAL previously. Marked in the margins of the rules themselves are 36 changes to the actual copy. All of the important changes have been published in the Design Analysis column of Vol. 13, No. 2 of the GENERAL, so that previous owners need not purchase a new set unnecessarily.

**PANZERBLITZ BOOKLETS**

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

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

Reprints include Larry McNamara's "The Pieces of Panzerblitz"—wield the best article ever to appear in the GENERAL. "Beyond Situation 13"—twelve additional scenarios by Robert Harmon; "Parablist"; "Panzeratomy"; "Blind Panzerblitz"; "Situation 93"; "Champion's Situations"; Panzerblitz Concealment"; and "Incremental Panzerblitz." Toppling it all off is a complete listing of all errata on the game published to date where the Opponents Wanted Page once ruled supreme.

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

Dear Sir,

I have some comments I'd like to pass on concerning the GENERAL and because of ALL in general. First, you've done an excellent job of being congratulated. The GENERAL has become a first class publication and I truly am amazed at the volume of new games that have been brought out in the past few years. I've received some of the classics of the classics when it was more like one or two new games a year. Thus brings me to my point of concern.

Perhaps Future Shock has hit the old line waiters. It used to be that you could keep up with all the new ALL games and games at least a little more than any other game. But now, there's so much on the market that you have to be very selective in what you're looking at. With the volume of new games being the lack of volume of old games, it's very difficult to keep up with the new. Although this isn't a specific issue about the GENERAL, it is a problem that needs to be addressed.

Yours sincerely,

[Signature]

Dear Sir,

I have purchased a new copy of your game TQRRR several months ago, but did not get a chance to play it until recently. Now that I've received the revised rules for TQRRR, I have made a concerted effort to learn and play it. Learning TQRRR did not require as much effort as I had expected. I was able to get a good understanding of the game in a short amount of time and was able to start playing it right away. It's a very enjoyable game and I'm looking forward to playing it more.

Yours sincerely,

[Signature]
THE GENERAL

Vol. 13, No. 4 of the GENERAL was rated at 3.28 by responding readers. The individual ratings based on our 1200 point maximum scoring system were:

- TOBRUK Combat Expansion ........... 245
- WAR AT SEA Series Replay ........... 201
- Taking the Offense in STALINGRAD ... 200
- The Gamer’s Code of Ethics .......... 168
- But What If ........................... 153
- Blind Free Kriegspiel .................. 98
- Avalon Hill Philosophy ............... 81
- Increasing Infantry firepower .......... 32
- Rest of Calculation .................... 24

DIPLOMACY captured TOP GAME OF THE YEAR honors in the annual competition hosted by the prestigious English magazine GAMES & PUZZLES. Other Avalon Hill games placing high in the British competition included KINGMAKER (5th) and SPEED CIRCUIT (19th). We will be reintroducing SPEED CIRCUIT to the American market this spring with improved rules and components.

We expect only two price increases in 1977. As of February 1st both WAR AT SEA and TACTICS IV will sell for $6.00 instead of the previous $5.00. Inflation marches on.

To make way for the switch of RUSSIAN CAMPAIGN to the retail line, STALINGRAD has been switched to Mail Order only status. You'll probably still see it on store shelves for months to come, but bulk shipments to retail outlets have stopped.

We no longer stock blank hexsheets (PANZERBLITZ hex size) without grid co-ordinates printed in each hex. All future orders for hex sheets of this size will be filled with sheets containing grid co-ordinates in each hex.

Reader Dave Glewwe informs us that the 1st Sioux Falls, SD wargame convention will be held April 23rd and 24th at the 11th St. YWCA. For more information write Dave at his 312 N. McKenzie, Luverne, MN 56156 address.

More and more full service wargaming centers are coming into existence to serve the growing wargaming community. One such establishment is HOBBY LAND at 343 Lincolnway West in South Bend, IN which sells Avalon Hill games and the GENERAL and then refers its customers to the local club headed by Mike Phoebus. Interested parties can contact Mike for more details at his 824 W. Colfax, South Bend, IN 46601 address.

Reader Richard Loomis of Scottsdale, AZ is already organizing his trip to ORIGINS Ill in New York . . . . by bus! Richard is looking into the possibility of a charter bus originating in Los Angeles for the cross country trip. Cost is estimated at $170 roundtrip but only if 38 people sign up for the charter. If interested, contact the "Flying Bus Service" at P.O. Box 1467, Scottsdale, AZ 85252. What a KINGMAKER game you could have on a Transcontinental bus trip!

Twin cities readers will be interested in the activities of THE OLD GUARD. This wargame club meets for board games every Sunday between 1 and 6 at the 6th Precinct Police Club Room at 2639 Nicollet Ave in Minneapolis. Further information is available from Membership Chairman Frank Manos at 722-1684.

Infiltrator's Report

Tom Show(right), Avalon Hill Vice President and FOOTBALL STRATEGY designer, congratulates Carl Slutter for winning Super Bowl IV.

Carl Slutter took top honors in the Avalon Hill STRATEGY League by besting Doug Burke's Cleveland entry 40-7 in Super Bowl IV for the most lop-sided play-off victory in the history of the league. Slutter's Dallas team ran up a 12-2 regular season record and then proceeded to the Super Bowl with a 39-13 victory over George Uhl's Falcons and a 22-17 win over Paul Queeney's Saints. Doug Burke finished the regular season with a 9-5 mark en route to play-off wins over the Bills of Dennis Yost 33-28 and Wes Coates' Raiders 24-7. Slutter won $100 plus possession of the league's rotating trophy for his mastery over the 28 team league.

More evidence of the rising acceptance of games as a new form of literary expression was the Game Day held by the Wyandotte Bacon Memorial Library in Michigan last December 4th. More and more libraries are turning to the circulation of games as a way of increasing public interest in their services. Among the many games which were eligible for two week "borrowing" at the Bacon Memorial Library are 1776 and TACTICS II.

TEAM ITHACA seems to be opening up a lead in the 1976 Avalon Hill Team Championships gamesmastered by Nicky Palmer of Denmark. Their most recent advances came as the result of a double win in WATERLOO against YOGWC. 1975 AH 500 finalist Pat McNevin was the victim.

Interest Group Baltimore and the Avalon Hill design offices have moved to 900 St. Paul St. in Baltimore. The gaming public is invited to attend the Saturday game sessions every weekend from 10 to 5. Half-price, damaged games will be available for sale at this location, but parts, magazines, and new game purchases must be made by mail for the time being.

In order to give readers a longer time to respond to the contests we will accept entries up to and including the day the next issue of the GENERAL is mailed. This means that the ten winners of credit vouchers for AH merchandise will not be announced until the second issue after each contest appears.

Only Robert Medrow of Rolla, MO found the correct solution to Contest No. 73 as listed in the last issue of the GENERAL. The rest of the solutions were graded on their probability of preventing the Russian invasion and attack to save Stalin. Rounding out the top 10 puzzle solvers were P. Devolpi of Losie, IL; P. Pirgusia, Houston, TX; J. Clemente, Houston, TX; K. Septon, Eugene, OR; J. Culpepper, APO, NY; G. Hill, New Castle, PA; J. Stahler, Silver Spring, MD; B. Scott, Cherry Hill, NJ, and R. Kolsih of Homer City, PA.

Following is the solution to Contest No. 74. An asterisk indicates that the unit was the southernmost of two "B" units in the same hex. Two asterisks indicate charging cavalry. The number following the dash in the Final Hex Facing and Units Attacked columns refers to the correct explanation in the Notes column.

<table>
<thead>
<tr>
<th>Unit Moved:</th>
<th>Hex</th>
<th>Facing:</th>
<th>Units Attacked:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agama Hypas</td>
<td>L5N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thessalon I Cav</td>
<td>L6NW**-1</td>
<td>Uxian Infantry-2</td>
<td></td>
</tr>
<tr>
<td>Macedonian I Arch</td>
<td>N8N*</td>
<td>2nd Chariots</td>
<td></td>
</tr>
<tr>
<td>Macedonian II Arch</td>
<td>O8N*</td>
<td>2nd Chariots (AV)-3</td>
<td></td>
</tr>
<tr>
<td>Greek II Phalanx</td>
<td>M7N</td>
<td>Uxian Infantry-2</td>
<td></td>
</tr>
<tr>
<td>Agrarianian I Jay</td>
<td>N7N*</td>
<td>1st Chariots</td>
<td></td>
</tr>
<tr>
<td>Agrarianian II Jay</td>
<td>N7N*</td>
<td>1st Chariots (AV)-3</td>
<td></td>
</tr>
<tr>
<td>Cretan Arch</td>
<td>O10SE-4</td>
<td>Persian HA (AV)</td>
<td></td>
</tr>
<tr>
<td>Balacrus Jay</td>
<td>N8NE-4</td>
<td>3rd Chariots</td>
<td></td>
</tr>
<tr>
<td>Thessalion II Cav</td>
<td>O8N**</td>
<td>3rd Chariots</td>
<td></td>
</tr>
<tr>
<td>Cav Lancers</td>
<td>M10**</td>
<td>5-3</td>
<td></td>
</tr>
<tr>
<td>Allied Horse</td>
<td>MBSW**</td>
<td>Albanian Inf, Mard Arch (AV)</td>
<td></td>
</tr>
<tr>
<td>Alexander</td>
<td>P10</td>
<td>Scythian Nomads, Dahae HA</td>
<td></td>
</tr>
</tbody>
</table>

CONTINUATION—(Contestants did not have to supply)

A. Now execute the AV against the Uxian infantry
B. Regardless of the results of its 1-1 attack the Royal Companions Cav I will hold its position.
C. Advances after AV's:
   (i) Thessalion I Cav to P19
   (ii) Indian Cav must retreat, cannot (5; is eliminated
   (iii) Thessalion II Cav to L7
   (iv) Lancers to MB
   (v) Allied Horse to L8
   (vi) 1st Sicilian Cav must retreat cannot (5; is eliminated

NOTES:
1. Moving through the Macedonian archers (question Y at the end of the rulebook).
2. Not executed yet—see continuation
3. Standing chariots halved against enemy missile fire
4. Skirmishers passing through fully stacked hexes
5. Must retreat because other unit in hex was eliminated