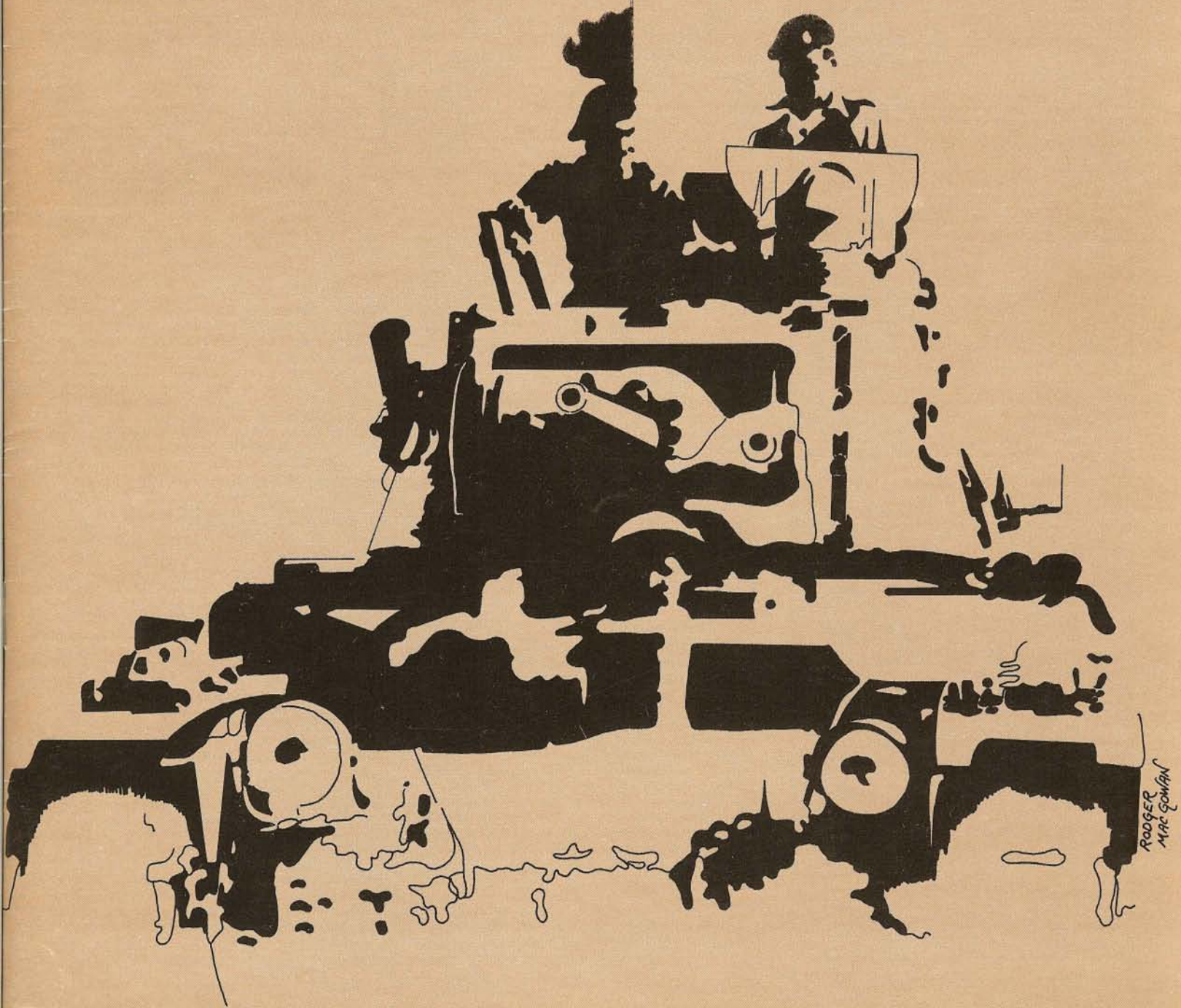


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GENERAL

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The AVALON HILL GENERAL

The Game Players Magazine

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

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Avalon Hill Philosophy Part 58

Communication seems to be where it's at in today's marketplace. Buyers want to know more than the traditional what and how much of classic advertisements. Now it's why, where, when and how as the consumer demands behind the scenes information on the product; whatever it may be. The most obvious example is the oil cartel which spends millions on television advertising—not to praise their products to an already addicted populace, but to convince their audience they are indeed performing a public service by finding new sources of energy and thus, incidentally, justifying high price increases. Whether you call it a survey, poll, feedback or whatever (to quote Archie), getting the word to and from the consumer is the height of fashion. Wargame companies have been quick to pick up this tack and communicate with their customers through all sorts of sophisticated question and answer devices on a regular basis. Consumer responses are all mashed into the form of an ultimate aggregate buyer, decked out in computerese, and painted black and white for public consumption. Invariably the message is the same and translated freely bears a striking resemblance to "what's good for General Motors, is good for the USA". Where have I heard that before?

All of this is a rather convoluted way of saying we are influenced by your letters. Like any corporation we receive hundreds of consumer comments every week. And like most corporations, 95% of them find their way to the circular file with little difficulty. They're all read, however (some are even answered), and we wouldn't be human if we didn't let at least some of them influence our thinking. One such provocative pen wielder is the inspiration/cause for this column and his frank view of the gaming scene is reproduced below in entirety. Printing this letter does not necessarily constitute agreement with the points raised, but rather recognizes that such viewpoints exist. Our detailed response is not intended to denigrate other viewpoints or even suggest that our way of doing things is necessarily any better. It is intended merely to show our viewpoint on the subjects involved. Doubtless there are those who will write this off as more "chest thumping" on our part, but that's the risk you take whenever you offer an opinion. Here's John Alsen's . . .

Dear Mr. Greenwood:

As usual, I eagerly awaited the most recent issue of the "General". This afternoon while reading it I remarked to my wife that had things gone differently I would have been heading eastwards to Baltimore to Origins II. She replied that there would be other chances in the future. I had to ask myself "Is there a future in the hobby of wargaming?"

If I interpret recent events in the hobby correctly I feel I will be enjoying another hobby with my sons ten years from now. The events which concern me most are the proliferation of wargame titles and the deterioration of the quality of these games. One could argue that one follows another. But my personal experience leads me to believe that the two are separate problems. I would like to plead my case to you.

First, the proliferation of new titles. The most obvious effect is the flooding of the marketplace. It is no longer possible for the hard core gamer to afford all the titles available (presuming hard core is synonymous with collector). Not only is expense a problem

but the gamer is hard pressed to make an intelligent decision on whether to purchase a prospective title or not. It is now impossible to judge a title on the basis of manufacturer and/or designer. And, this hobby of ours is not large enough to support a comprehensive periodical on ourselves. Lastly, there is a lack of qualified neutral reviewers. These statements could be subjects of separate essays in themselves and my statements are my conclusions.

Another effect of the proliferation of new games is the lack of opponents to play any title. These many games promote game-hopping. I even find myself putting away a title without sufficiently learning it. This is very easy to do when you know no one who is able to play your game. You may say I do not search out opponents. However, as a member of AHIKS and vice-president of the Ye Olde Guard Wargamers Club opponents are not hard to come by. I still find many titles which eventually catch more dust than other wargames. As a result I find many good titles disappearing due to a lack of players and lack of knowledge of which titles are worthwhile because of ineffective reviewers and the sheer weight of numbers.

Lastly, the numbers have contributed to the low quality of the games. Wargames are like novels. A good author rewrites his work several times. Yet, new wargames come out within six months of their being mentioned. This hardly leaves enough time to research, design, playtest and produce a quality boardgame. Do you agree?

The second item is the low quality of the games. As I said before this is a separate and distinctive problem. Surely, the mass of new games contributes to this. But, it is my opinion that the reason lies elsewhere. Two factors are readily apparent. First, the managements of the various producers of wargames seem totally oriented towards new products. Second, the designers and developers of the new titles are, as a result of the first factor, more concerned about deadlines and quantity rather than quality. Let me give my reasons.

The orientation towards new products are evident in the various house organs and in talking with employees of the various companies. MOVES, S&T and the GENERAL all lead off with a column stressing chest thumping and what new games are quickly coming out. Granted, it is nice to get the official word on the internal activities but why is there the obvious race to out do the other guy? I remember my second issue of the GENERAL. It emphasized the work behind the scenes as a result of the game RICHTHOFEN'S WAR. I believe this is the last such article to appear in any magazine on what preceded a game rather than what is to follow a game.

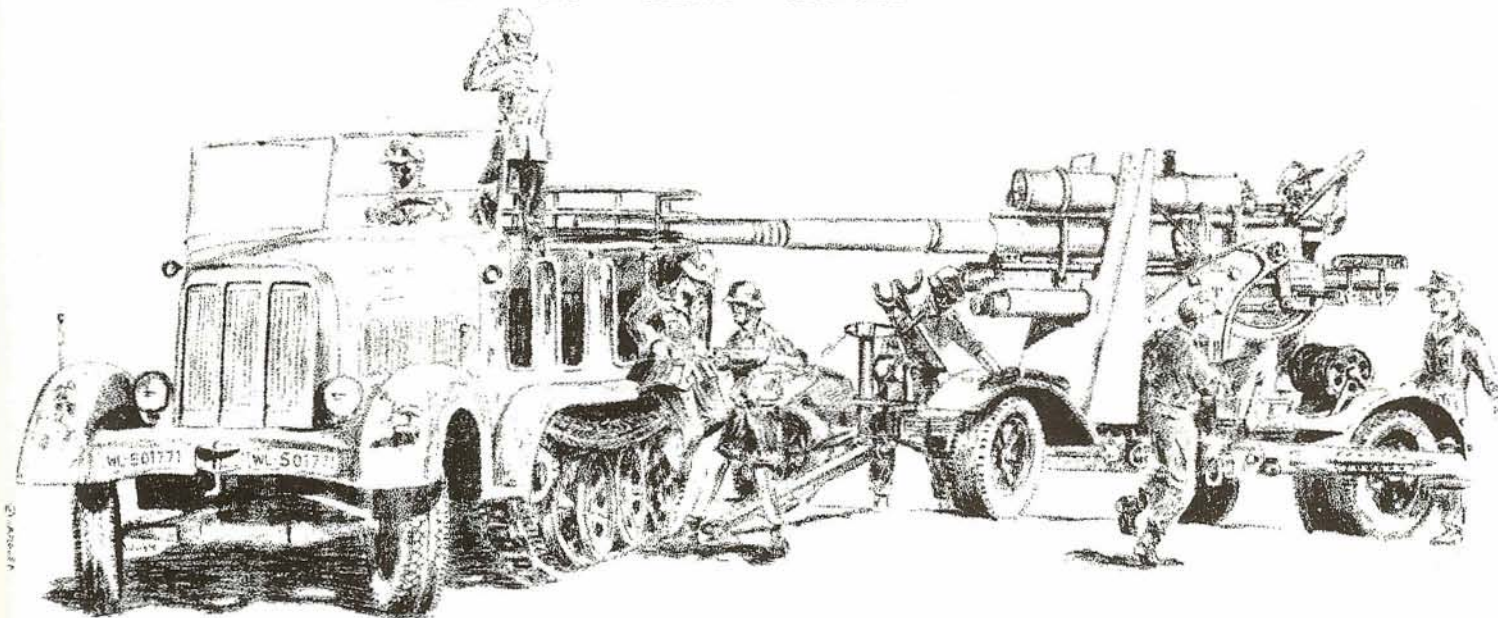
Wargame company employees also display this future orientation. In a conversation with Jim Cumbo of Rand/Morningside he could tell me definitely when the new titles would be out. But he could not be precise on whether or not the ambiguities of a previous title, HITLER'S LAST GAMBLE, would be corrected. In a conversation with Irad B. Hardy of SPI, he could not answer a question on PANZERARMEE AFRIKA, a game which he developed.

Because of the management's orientation, development and design of the games have suffered. Just sample some recent items: 1) Before the ink was dry on the rules of GDW's THEIR FINEST HOUR they had to rewrite the rules. 2) Why, in only my opponent's second game of THIRD REICH was he able to paralyze London while AH playtesters never thought of it? 3) As for SPI they had to immediately announce errata sheets for GLOBAL WAR and WW3. To be sure, these are a few of the most obvious errors of the last year or so. I realize that simulating a real event is hardly an exact science but I feel I am entitled to a certain degree of completeness when I put my ten dollars on the counter. Recently this has been a 50-50 proposition. Let the buyer beware.

. . . Cont'd. on Pg. 32, Col. 1

TOBRUK

COMBAT EXPANSION AND COMMENT by HAL HOCK



Since its release in July of 1975, *TOBRUK* has been surprisingly well received throughout the wargames community, although not without criticism. In general, players have welcomed the shot-for-shot, man-for-man realism of the game even when such realism tends to slow down play occasionally, as those who try to wade through scenarios Eight or Nine can attest, and most players welcome the truly innovative combat system as a refreshing change from the avalanche of games which have glutted the market in recent years. Some of the criticisms, however, are valid and well thought out and therefore deserve comment—not to refute them, but to explain further the assumptions and data behind the items to which they are directed. Perhaps by sharing these comments with all *GENERAL* readers, a better understanding of the game system may be achieved.

COMPLAINTS

Too Much Dice Rolling

The most common single complaint which reviewers and players alike have expressed concerns the amount of dice rolling necessary in the resolution of armor-armor combat. This was especially true before the inclusion of the AFV Initiation rule which forced players to wait until a target was within "effective range" before opening fire. There really is no solution to this problem within the shot-for-shot philosophy of the game. It has been suggested that, especially for the first scenarios where such advanced rules as Dueling and Ammunition Limits do not apply and round for round resolution is not required, a simplified combat system be used such as rolling once for each engagement and comparing the result to a required number for each target to damage it. Even in the early scenarios, however, just too much is lost in doing this. It would be difficult to allow for varying levels of damage (K, M, or F), for varying rates of fire between acquisition and continued engagement

of a target, for improbable but realistic battle results such as a crew abandoning a vehicle which is not burning, and above all, more confusion would be generated by including two completely different combat systems in the game than any benefit which might be gained in the long run. Round-by-round evaluation is simply too much a part of *TOBRUK* to be replaced or altered without bringing on unwanted problems. Finally, it can always be asked if extra dice rolling is too high a price to pay for the realism which it provides.

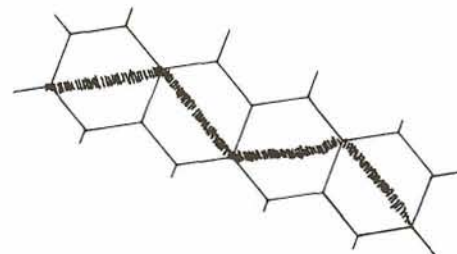
There is No Terrain

A number of critics of the game have noted that indeed the desert areas surrounding the port of Tobruk are not completely flat, but are broken by low ridges which could be used for cover by AFV's in the battle. Of course this is true, although most of these ridges are nowhere near as prominent as movie scenes often portray and are really difficult to even spot. The Undulating Cover optional rule is meant to simulate the common practice by both sides of searching for and obtaining cover behind these slight ridges and please note that, with patience, entire large units can usually find it during play.

Over and over again during design and playtest of *TOBRUK* and its predecessors it was found that any more noticeable terrain than this caused each scenario to devolve into a battle of possession waged over the feature. In each case, little was discovered by players of the true relative value of weapons, which is what the game is all about. The only possible solution was to reduce further the scale of the playing board to allow for open space and terrain to be mixed, but this solution brought about unresolvable problems in computing artillery effectiveness and tended to make the company-battalion unit scale of the game unrealistic. As before, its inclusion of the terrain was just not worth the cost.

But, there are undoubtedly those readers who find the above discussion hard to accept and for them the addition of prominent ridges can be tried.

A "ridge" may be penciled on the map as follows:

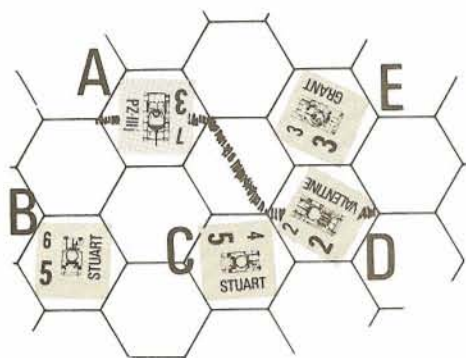


with the centerline indicating the crest. If desired, several of these formations may be spotted across the map but it is suggested that only one be initially used. When several are used it is suggested that their crestlines run roughly parallel. Their effect upon play sounds simple but at the scale of the mapboard may be overwhelming. Very simply, they affect:

- **Movement:** All vehicle units expend two movement points for every hex totally inside of a ridge outline which is entered during movement even if this movement is parallel to the crest. Personnel units may enter one ridge hex every turn and are considered in Assault cover state when doing so, but may never run into a ridge hex. No heavy weapon unit may be manhandled onto or through a ridge hex, although man-portable units may be carried as usual. Entrenchment may be placed on ridge hexes.

And they affect:

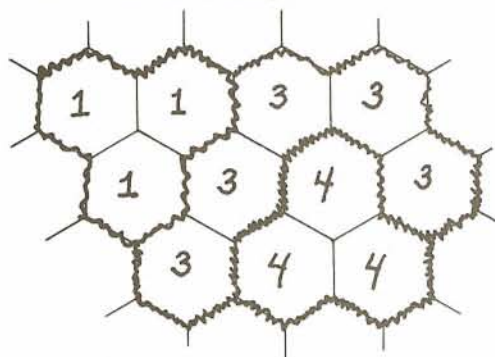
- **Combat:** Any AFV unit lying on a hex containing a crestline is considered to be in partial defilade from enemy units lying on the opposite side of the crest; that is, from units lying on hexes which do not contain crestline and are across the crestline from the hexside which the unit crossed to enter the crest hex. As an example:



AFV 'A' is in partial defilade from vehicles 'B' and 'C' but not from 'D' or 'E.' By definition, partial defilade means that a portion of the vehicle unit is below the crest and hits upon that portion during firing are ignored. For most AFV's, this portion is everything except the turret, gun mantle, and gun, but for a Grant tank wishing to use its 75 mm M2 weapon or the Semovente, this portion is the lower hull only. Moving from one side of a crestline to the other side may be done only in the movement portion of a turn and is considered as movement of one hex for combat purposes.

Non-AFV's lying behind a crestline on a crest hex as defined above and all units lying behind a crestline on other hexes are considered to be in full defilade and are assumed to be invisible from enemy view. Under very special circumstances when utilizing the camouflage optional rule (see below) this may mean that such units may be removed from the board.

As mentioned above, these rules are fairly simple to implement but their impact in the game may be decisive. As an alternative, a modification of the Undulating Cover rule may be used which has been shown to be effective in the past. This modification involves the penciling onto the board of regions of undulation varying only in their "roughness" as simulated by the required die roll for vehicles to find cover in them. As an example:



The above stretch of terrain on the board might represent an area of completely flat desert with the three marked regions requiring die rolls of 1; 1, 2, or 3; and 1, 2, 3, or 4 to find cover in them respectively. The size, location, and "roughness" of these regions could certainly be decided upon by mutual player consent before the game and properly set up can add greatly to most games. This Variable Undulation scheme probably represents the most accurate portrayal of the actual TOBRUK-GAZALA-BIR HACHEIM topography as depicted by the National Geographic studies of the area to which any interested reader is referred.

Finally, for those players who prefer to leave the TOBRUK playing board perfectly flat as originally configured, the photographs illustrating this article are presented for the purpose of showing that this may not be a bad idea after all . . .

The Rates of Fire are Unrealistic

Several individuals have commented that the rates of fire of some large caliber weapons in the game may be incorrect. Obviously, the actual rate of fire of any weapon is a function of many variables but to include these variables in the game would have been unreasonable. The more obvious influencing factors were considered wherever possible but subjective and highly varying factors had to be ignored. These included:

- Crew-to-crew differences in training
- Fatigue build-up during long engagements
- Weapon malfunctions
- Ammunition handling problems
- Varying times and states of acquisition

If any player feels that his understanding of these effects is sufficient for an alteration of the rates of fire used in the game to be made, he by all means may do so. No highly varying part of TOBRUK or its data, especially in areas such as rates of fire, morale, etc., is claimed to be foolproof or without error and players who feel that their analysis of some number is more realistic than that used in the game can certainly use their own data during play. It might be pointed out, however, that massive research did go into every rule in the game wherever possible and any alterations of these rules should be done with care. Chart A illustrates this point for the case at hand, that of weapon rates of fire:

CHART A

WEAPON RATES OF FIRE

Weapon	Published ROF's (rpm)	Game ROF's (Cont. rpm)	Comments
AXIS:			
7.92 ATR	6 - 15	10	Manual Feed
28/20 mm PAK	8 - 12	10	Manual Feed
20 mm BREDA	220-250 (cyclic)	30	120 rpm practical ROF against aircraft
47 mm M13/40	12 - 5	8	Cramped, uncomfortable two man turret hindered firing
47 mm ATG	7 - 14	14	Note that the published ROF's are "practical" numbers for varying terrain conditions with corresponding "theoretical" values which are much higher.
50 mm short	8 - 16	8	
50 mm long	8 - 16	8	
50 mm PAK	12 - 16	14	
75 mm L/18	4 - 8	4	Semovente was also cramped and uncomfortable
75 mm short	8 - 10	6	Figure of 8 rpm seemed high for support piece
76.2 mm (r)	10 - 15	6	The 10 - 15 range was for the ground-mounted ATG and seemed too high for the Marder III with only a two man guncrew
75 mm LIG	6 - 12	10	
88 mm FLAK	15 - 20	14	Game ROF slightly reduced due to dust (see below)
BRITISH:			
.55 cal ATR	10 - 15	14	
37 mm	15 - 20	12	Reduced in both Grant and Stuart turrets because of two man crew (commander in Grant directed both guns)
2 pdr ATG	20 - 22	22	Tripod platform and assumed dust-free position (see below) dictated very high practical ROF
2 pdr Tank gun	No Data Available	12	Nowhere in the available literature were the tank-mounted 2 pdr ROF's stated, so estimates were made
40 mm Bofors	120-140 (cyclic)	70	Very stable cruciform platform allowed full "practical" ROF to be realized in the ground role. Very high Royal Artillery standards of training contributed greatly.
6 pdr ATG	15 - 20	14	New weapon in Gazala battles with no prior training time reduced achievable ROF
75 mm(f) ATG	6 - 12	12	Some sources give a "burst" capability of 20 RPM
75 mm M2	No Data Available	6	Estimated
3" howitzer	No Data Available	6	Estimated
25 pdr Arty.	3 - 8	6	This rate could only be sustained for short times

In the above figures, note that in general ATG's were given full assessed ROF's in the game whereas AFV's were reduced. This was because it was assumed that ATG's were employed in prepared, fixed positions with anti-dust measures (oiling or watering areas of muzzle blast) in effect and therefore, no ROF reduction could be realistically expected except for the 88 whose muzzle blast was so large that any dust settling measures are assumed ineffective, while AFV's undoubtedly suffered from dust and exorbitant heat, which reduced ROF. Of interest, also note that no ROF figures appear for certain British weapons and in these cases careful estimates had to be made.

The Board is Not Geomorphic

Some people have noticed that in some scenarios the edge of the board acts as a significant "terrain" feature inasmuch as victory or loss may be determined by how many units cross it and therefore get away. There is no general solution to this problem because in most cases the passage of large numbers of friendly units across such a line so far behind enemy positions would indeed constitute a victory. In some cases, however, such as in Scenario 2, where the carriers may get away simply by crossing the board edge and therefore escape, continuing the battle beyond the board edge may be worthwhile. It was short-sighted not to design the board sections to be geomorphic to allow for this.

but a clumsy joining of any section to the edge in question probably will suffice for most cases and is recommended when both players concur.

The Movement Factors are Unrealistic

As in the case of rate of fire, considerable variation exists in the movement values used for vehicles in the game compared to published specifications for these vehicles. One additional constraint arose in the necessity to model vehicle rates in units of hexes per time period which really meant 75 meters per 30 seconds or 5.59 mph per hex. This required much averaging as the following table shows. As above, should any player feel that his assessment of these figures is better than those used in the game, there is absolutely no reason not to use his data during play. All figures are in miles per hour.

AFV	Maximum Road Speed	Cross Country Speed	Game Speed
BRITISH:			
Stuart	34 - 36	15 - 20	28
Crusader	28	12 - 15	22
Grant	22 - 26	10 - 20	17
Valentine	15	8	11
Matilda	15	6 - 8	11
AXIS:			
PZ III H, J	25	11 - 12	17
PZ IV, E	26	10 - 12	17
Marder III	26	9 - 11	17
M13/40	19 - 20	8 - 9	11
Semovente	20	7 - 8	11

Note that the game speed in general is higher than the purely cross-country figures and lower than the road rate. This was due to the assumed flatness and relatively solid surface over which most of the battles occurred. Additional items of information, such as the fact German tank attacks occurred at about 15 mph, were used to further rationalize the higher game speeds.

"Burst on Target" (BOT) is a Modern Term

And so it is, having been coined about 1954. The tactic of adjusting fire based upon observed hits, however, was universal as illustrated in the following passage from *Take These Men* by Cyril Joly:

"Driver, halt," I order. "Gunner, two-pounder—traverse left—on—tank—German Mark III—eight five zero yards. Fire." I watched Basset carefully turn the range-drum to the right range, saw him turn to his telescope and aim, noticed out of the corner of my eye that King was ready with the next round, and then the tank jolted slightly with the shock of the gun firing. Through the smoke and dust and the spurt of flame I watched intently through my binoculars the trace of the shot in flight. It curved upwards slightly and almost slowly, and then seemed to plunge swiftly towards the target. There was the unmistakable dull glow of a strike of steel on steel. "Hit, Basset! Good shot! Fire again," I called. Another shot and another hit, and I called, "Good shot; but the bastard won't brew." (The Mark III later brewed Joly's tank.)

Certain ammunitions such as the 28/20 mm PAK APCNR round mounted nose caps which emitted a flash upon impact to help in this sensing.

The Alternating Fire Procedure Causes Unrealistic Firing

Some people have claimed that the game procedure of alternating weapon for weapon fires produces unreasonable situations in which vehicles or weapons which have not fired emerge as prime targets within a fire turn. Although these situations should average out to provide both sides with equal bonus or loss, there is no reason why players cannot secretly record weapon-target pairings in writing at the end of movement, conduct the firing based upon these plans, and allow every unit to fire. This simultaneous resolution would, of course, be very costly in terms of time, but at mutual player consent might be worthwhile under some circumstances.

The Italian Morale is too High

Morale is the single most subjective area of the game inasmuch as no really hard data exists. The common visage of hoards of Italians surrendering

en masse to the British does not occur in any game scenario and this is no accident. The Italian units involved in all but Scenario 2 are drawn from the Italian XX Corps mobile divisions which were the pride of the Italian desert army. Rommel himself on many occasions highly praised the courage of these troops, and their weapons and supplies were always the best. Nonetheless, these morale estimates are no more chiseled in stone than are the ROF or speed figures and certainly any player can change them in play should he wish. The average Italian "pure infantry" unit would probably have a morale level of between 3/4 and 1/2 that used for game units and it is occasionally interesting to play Scenario 2, for example, using this reduced level.

There are Artwork Errors

Of course there are some artwork errors, but in general, the silhouettes are accurate down to the last knob. For purists who must know, obvious errors occur in the Stuart, Valentine, Crusader C.S., 2 pdr., 50 mm mortar, and Stuka counters.

There Was No Such Weapon as the 150 mm K18 in the Desert

The author has had an interesting exchange with one *TOBRUK* player who, through his own research, has concluded that no 150 mm K18 weapons existed in the Afrika Korps. As to whether the weapon itself existed there can be no doubt, but the question of whether it appeared in Rommel's Army Artillery (*Artilleriekommando 104*) remains unresolved. Its inclusion as such in the game was based upon the assessment of the British Official History, but this record is known to have occasionally erred and so any facts from readers with knowledge in this area would be appreciated.

QUESTIONS:

In addition to the above complaints, many questions have been posed to Avalon Hill by *TOBRUK* players. Below are listed the more commonly appearing of these inquiries.

Why does APCR ammunition produce lower casualties in vehicles which have been pierced?

The piercing core of APCR is composed of sintered tungsten carbide and is of smaller diameter than a

full-caliber round. Although when piercing very thick plates the APCR core will shatter like any shot and be highly lethal, this lethality still does not match that produced by APCBC rounds which explode inside the target. In addition, APCR cores passing through thinner plates in general will not shatter and may continue to fly straight through the target and out the other side. This phenomenon was often observed by gunners during the war and in such cases the lethality of the perforation was considerably reduced.

Can APCR ever be used against targets besides Matildas, Valentines and Grants?

During 1942, shortly after the Gazala battles a severe tungsten shortage in Germany forced Hitler to prohibit the further manufacture of tungsten-cored ammunition in all but the smallest calibers. But, even before this edict went into effect, tungsten ammunition was regarded as a luxury and the tactical doctrine for its use was very strictly enforced. This doctrine at first stated that only Matilda tanks were to be engaged with APCR and then only at very short ranges, but later the doctrine was expanded to cover use against any "heavy" tank. German field discipline being what it was at this time probably meant that this doctrine was carried out in the actual battle. However, APCR damage entries are made on the charts for the lighter British AFVs because it is assumed that APCR may be used against these targets whenever other AP ammo is exhausted.

The M13/40 tank was diesel powered. Why then is it so inflammable when pierced?

Most fires in AFVs occur not from stored fuel sources but from the ignition of stored ammunition or from fuel and lubricant spillage lying on the hull bottom under the fighting compartment floor. Both of these key sources of potential fires are very difficult to prevent in the field; the first being a function of the ammunition storage arrangement of the vehicle and the overload doctrine of the unit to which the vehicle belongs; and the second being a function of the maintenance standards set by the



vehicle crew. The Germans were very aware of these facts and strictly enforced a doctrine of no ammo overload (which there is record that some crews ignored) and of strict maintenance (which really does not completely prevent lubricant and spillage build-up enough to stop fires upon penetration). The Italians, however, and to a lesser extent the British, were not as aware of these problems. The M13/40 was especially vulnerable having a very complex (and therefore oily) engine—drive train—turret traverse setup and having a large number of rounds of ammo crammed within its confined space.

What is the real difference between Registrations, Concentrations, and Barrages?

These three terms are modern nomenclatures for general artillery tactics which have existed since the beginning of observer-directed fire during World War I. They refer to the amount of "shooting-in" (British term) which has been done by the firing battery in the case of Registrations and Concentrations, or the immediate call for high-intensity interdiction fires for the defense of a ground unit in the case of Barrage. Registrations involve the shooting-in of only one weapon (often called the registration piece) in a battery for close estimation by the FO of where the battery volley will probably land while Concentrations involve the shooting-in of the entire battery in this way for precise location. Barrages may be shot-in but their function is not necessarily to be precise but rather to be instant and lethal when needed by a unit hard-pressed on the defense. The term "barrage" has often been used incorrectly for other types of fire but the tactic is almost universal.

Why isn't it possible to shoot HE from direct-fire weapons out beyond the "12" dice roll range?

The rules are ambiguous but should reflect that the HE ranges in general were much greater than those for AP. The reason for the restriction is one of simplicity inasmuch as the "12" range for most of the weapons is pushing the limit of visibility anyway.

The rules state that AFVs can be made to "button up" and lose acquisition when under HE fire. Is there a bottom limit to the amount of fire necessary to cause this?

Yes. The shellfire should produce at least 30 fragmentation factors against the target to force button-up.

Can captured personnel be executed to obtain higher point talleys for completely destroyed units?

Absolutely not. Good Lord!

This last question illustrates that there were certain tacit assumptions in the Tobruk rulebook. Anyone attempting to defeat or short-circuit the rules system can easily do so. But then, if that's your motivation, why bother playing the game at all?

ERRORS AND OMISSIONS

- It is implied in the rules that a weapon unit may be destroyed by an overrunning AFV at any time and this is not necessarily true. If the weapon unit is in a hex which is undergoing smoke shell bombardment, it would be difficult to find and therefore it cannot be destroyed, although overrun of personnel can still occur normally.

- The GM hit entry on the Matilda II damage table for the 50 mm short (APCR) round should read in part $K/C2 \leq 2$ instead of $F/C2 \leq 2$ as it now does.

- Also on the Matilda II table, all front LH hits should have the "M" component of their entries replaced with a "C1" instead. This is because the Matilda does not have a front mounted transmission as was mistakenly calculated in the original charts. The "C1" result reflects the driver being rendered as a casualty and the rest of each entry is close enough.

- The *Weapon Hits ≤ 40 mm* rule in Scenario 8 is not correct as it currently reads. It should read that all AP hits at or below 40 mm in caliber and all HE hits at or below 20 mm in caliber are evaluated using the extra chart. Hits by 37 mm or 40 mm HE rounds on any weapon should be powerful enough to blow away the entire gun-shield and therefore be an immediate catastrophic kill of weapon and crew.

- In the 20 mm Breda entry on the Grant "R" column, it is stated in part that an $F(P3) = 7$ is scored. This should be, of course, be $F37(P3) \leq 7$ instead.

- The "12" column of the Area Impacted table of the PZ III H should read:

Front—GM
Flank—R
Rear—R

and the same column of the PZ IV E should read:

Front—GM
Flank—TUR
Rear—R

On both of these vehicles protective rails were overlooked when their turret ring vulnerabilities were originally evaluated.

- For those players who still have the earliest set of Damage Tables, the 'R' column on the PZ III H reads:

WEAPON FIRING	R
Boys ATR	$F \leq 4$
2 pdr.	$K/C2 \leq 10$ $F/C2(P3) \leq 15$
37mm M6	$K/C2$
40mm Bofors	$K/C2$
6 pdr.	$K/C3$
75mm (I)	$K/C3$
75mm M2	$K/C3$
25 pdr.	$K/C3$

- On the GRANT Damage Table, for the 50 mm long:

Flank—UH should read:
 $K/C3 \leq 15$
 $C3 (P4) \leq 20$

and Flank—LH should read:
 $K \leq 15$
 $M(P5) \leq 20$

- On the STUART Damage Table, for the 50 mm long APCR Flank—LH should read:

$K \leq 22$
 $(P4) \leq 28$

- In Rule VIII. B.2., it is stated that Forward Observers do not affect the morale of other units in any way and this is incorrect. They affect all units exactly as any other HQ units do.

NEW GAME UNITS

One *TOBRUK* reviewer summarized the feeling of many players upon opening the box by saying that his first reaction was that much of the game was missing. He was referring to the exclusion

from the game of all vehicles and weapons which have *limited combat value* and therefore would have served little in the game but to increase complexity. The most notable class of these units is the armored cars, but others could have been included which were in common use at Gazala but were not because the game was complex enough as it was.

For readers of *THE GENERAL*, however, who are supposedly dedicated enough to realism to require extra game options even at the cost of playability, listed below are the "marginal combatants" in the Gazala battles and rules for their use. Yes, others besides those listed did appear in very small numbers but until strong player response requests their inclusion, they will be ignored for now.

Armored Cars

Both sides in the desert war made extensive use of armored cars for *reconnaissance* purposes. Note they were not used very much for *combat* purposes because, compared to the main battle tanks and ATGs used by each side, the armored cars simply could not stand up. Speed alone cannot hope to compensate for the light armor and weak firepower of these vehicles—as inclusion of them in any game scenario or Firefight will show. For purists who choose to include the very complex "Camouflage" and "Visibility" Experimental Rules listed below, the inclusion of armored cars can make *TOBRUK* an even closer simulation of desert war.

In general, both sides operated armored cars separately from main battle elements and used them strictly for reconnaissance. Occasionally, there was no choice but to use them to fight the enemy's tanks—Scenario 5 in the game is a good example where an entire regiment of cars was trapped with the 150th Brigade—but losses in such encounters were usually unacceptable and so avoided. An interesting clash often developed when one side would send an armored car unit to repulse the recon of such a unit from the other side. The basic unit of the 8th Army was the Troop consisting of one scout car (machinegun armed) and three armored cars. Four of these Troops made a Squadron and three Squadrons a Regiment. As in the case of every other type, however, full-complement units were nonexistent in the battle and reduced or even scratch units were the norm.

The basic vehicles of these units at this time were the Humber Mark II, the Daimler Mark I and South African Marmon-Harrington Mark II.

Humber Mark II

This vehicle entered service with the British in 1941 and some were operational within the forces of smaller countries as late as the early 1960's. The car was fast and reliable, but the 15mm weapon for all its virtues was simply not powerful enough for effective combat. Realizing this, the Mark IV version of the car was up-armed with an American 37mm weapon later in the war.

Nomenclature:	Humber Armored Car Mk II
Weight:	7.1 tons
Maximum Road Speed:	45 mph
Flat Desert Speed:	33 mph
Maximum Armor:	15mm
Crew:	3; 2 man turret
Weapons:	1—15mm Besa, 1 Besa MMG
Use in Gazala	
Battles:	Fast recon
Comments:	Speed in reverse, 2 hexes per turn

Daimler Mark I

This car is conceded by many sources to have been the most advanced armored car of World War II. It appeared in North Africa just before the Gazala campaign and displayed such features as well-sloped hard armor, a complete reverse driving capability, and most important, a 2 pounder main armament which placed its strike capability into the same class as the Matilda and Valentine heavy tanks.

Nomenclature: Daimler 4x4 Armored Car
 Weight: 7.5 tons
 Maximum Road Speed: 50 mph
 Flat Desert Speed: 39 mph
 Maximum Armor: 16mm
 Crew: 3; 2 man turret
 Weapons: 1—2 pounder, 1 Besa MMG
 Use in Gazala
 Battles: Fast recon
 Comments: Full gearing allowed *full speed in reverse.*

Marmon-Herrington Mark II

This vehicle, in its four Marks, comprised the mainstay of South African armored car units throughout the war and was used by some British units. It was designed and built totally in the Union of South Africa with materials being imported from both Britain and the USA. Its most common version was the Mark II which proved to be a fast and reliable vehicle, but with only one Boy's anti-tank rifle and one Bren light machinegun its armament was far too light for combat with its German or Italian counterparts. For this reason, numerous captured weapons were mounted instead of the normal turret and soon at least one up-armed Marmon-Herrington was expected to be included in any unit of troop size or above.

Nomenclature: Armored Car, Marmon-Herrington MK-II
 Weight: 6 tons
 Maximum Road Speed: 50 mph
 Flat Desert Speed: 39 mph
 Maximum Armor: 15mm
 Crew: 4; 2 man turret
 Weapons: 1 Boys ATR, 1 Bren LMG
 Use in Gazala
 Battles: Fast recon
 Comments: Speed in reverse, 2 hexes per turn. Often up-armed (Boys and Bren still carried) with captured weapons. Usually every third or fourth vehicle was so armed with the Italian 20mm Breda being the most common weapon mounted.

Axis:

The basic armored car unit of the German forces at this time was the troop of three light (Sd Kfz 222) and 2 heavy (Sd. Kfz 231 8-wheel) cars. Three of these troops plus one of 9 light cars comprised the Recce *Abteilung* of a Panzer regiment but, like every other unit in the desert, this organization often changed. No data could be found concerning the Italian unit composition but it must be assumed to have been relatively the same. The basic vehicles of these units at this time were the Sd Kfz 222 and Sd Kfz 231 already mentioned, and the Italian Autoblinda AB40.

Sd. Kfz 222

This car was one of the most famed armored fighting vehicles of World War II. Produced throughout the war, it was found in all German forces essentially unchanged from its introduction to the war's end. Its 20 mm main armament could be used for both ground and air targets and placed the Sd. Kfz. 222 in good position when engaging British armored cars before the introduction of the Daimler. Some of these vehicles were given to the Chinese Nationalists.

Nomenclature: Le.Pz.Sp.Wg. (2cm) Sd. Kfz. 222
 Weight: 4.8 tons
 Maximum Road Speed: 50 mph
 Flat Desert Speed: 39 mph
 Maximum Armor: 14.5mm
 Crew: 3; 2 man turret
 Weapons: 20mm, KwK 30, 1 MG 34
 Use in Gazala
 Battles: Fast recon
 Comments: Good armor, weapon, speed and reliability. Very effective vehicle when used in proper role. Speed in reverse, 2 hexes per turn.

Sd. Kfz. 231 (8-wheel)

The '231' designation was given to two vehicles, one of 6 wheels and one of 8 wheels. The 6 wheel version was gradually replaced by the 8 wheel model although the earlier vehicle did see some combat experience early in the war. Few, if any, 6 wheel versions were used in the Gazala battles and beyond. The 8 wheel version was used throughout the war mounting progressively heavier armament finally to include the 75 mm PAK.

Nomenclature: S. Pz. Sp. Wg. (2cm) Sd. Kfz. 231 (8-Rad)
 Weight: 8.3 tons
 Maximum Road Speed: 53 mph
 Flat Desert Speed: 45 mph
 Maximum Armor: 18 mm
 Crew: 4; 2 man turret
 Weapons: 1—20 mm KwK 30, 1 MG 34
 Use in Gazala
 Battles: Fast recon
 Comments: Excellent companion to Sd. Kfz. 222 although limited in firepower. Heavy Armament provided later in war but vehicle was never well-balanced until introduction of the 234, 8 wheel series. Cross-country mobility exceeded that of even track-laying vehicles. Movement in reverse could be done at *full rate.*

Autoblinda AB 40

Rated by several sources as being the best Italian AFV and one of the best vehicles in the desert, this car and its AB41 successor were prominent throughout the desert war. Like most Italian wheeled vehicles, it excelled in reliability and cross-country performance and its 20 mm Breda main armament was better than most British vehicles' before the Daimler appeared.

Nomenclature: Fiat Autoblinda AB 40
 Weight: 7.5 tons
 Maximum Road Speed: 50 mph
 Flat Desert Speed: 39 mph
 Maximum Armor: 9 mm
 Crew: 4; 1 man turret
 Weapons: 1—20 mm Breda, 1 co-axial 8 mm Breda 38 MMG, 1 hull mounted (pointing over rear hull) Breda 38 MMG
 Use in Gazala
 Battles: Fast recon
 Comments: Excellent vehicle used well by Italians and respected by British. Light armor was slight handicap. Full speed in reverse.

Armed APC's

The Germans would often mount redundant weapons on APC's to provide extra firepower for those units being carried. The most common weapon mounted was the 37 mm PAK due to its steady replacement by the 50 mm PAK in Afrika Korps units during this period. Inasmuch as the 37 mm PAK was not very effective as an ATG, it was left out of the published game for reasons previously

ARMORED CARS

NOTES FOR USE OF ARMORED CARS IN THE GAME

Armored cars were used in the game exactly as are other AFV's. They are subject to the same movement and fire restrictions that tanks and self-propelled guns are with the exceptions that some may move at greater than one hex per turn in reverse (see above) and "rounds" fired by their main armament are actually automatic weapon bursts (except for the Daimler). The field of fire of every armored car turret is 360° and only one, the AB 40 has a hull machinegun and it fires over the vehicle's rear instead of its front. The Hit Probability Table entries and Damage Tables for the armored cars are on separate sheets.

Several additions need to be made in some of the optional and experimental rules for the inclusion of armored cars as detailed in the following table:

Car	Close Assault	Reliability (IV.G.2.)	Towing (E.C.3.)	Sizing (VII.B.1.)	Ammo Limits (E.D.2.)	Victory Points (Firefights)
Sd.Kfz. 222	As Marder	11	As Quad	As Stuart	36(APorHE)	6 2 6
Sd.Kfz. 231	As Tank	11	As Sd.Kfz. 251	As Pz III	36(APorHE)	8 2 8
AB 40	As Tank	10,12	As Sd.Kfz. 251	As Stuart	40(APorHE)	4 2 4
Humber	As Tank	11	As Sd.Kfz. 251	As Stuart	60(AP only)	6 2 8
Daimler	As Tank	11	As Sd.Kfz. 251	As Stuart	46(AP only)	8 2 10
M.H.Mk.II	As Tank	12	As Sd.Kfz. 250	As Stuart	240(APorHE)	5 2 7

Note that the quoted ammo limit for the Marmon-Herrington Mk. II only applies to vehicles which have been up-armed with 20 mm Breda weapons as mentioned previously.

Note that the cars are not vulnerable to fragmentation because all are assumed to mount tires of the bulletproof or "run-flat" type.

stated. As it remained in some units as a ground weapon (see below) and was mounted on a fair number of APC's, it will be included here.

The 250 and 251 series APC's both mounted the 37 mm PAK as the 250/10 and 251/10 models respectively. They were issued in theory to every platoon leader and company commander but nowhere near these levels of deployment were generally achieved. In the game, an allocation of perhaps one or two of these vehicles out of every ten APC's involved is probably about right for the Gazala timeframe. As an option, players may wish to designate these vehicles to carry the 28/20 mm PAK instead. These versions also were appearing during this time but not in the same numbers as the vehicles carrying the 37 mm weapon. Rules for the use of the armed APC's are exactly the same as those for the Marder. For simplicity sake, assume the main armaments of the vehicles may only be used by personnel being transported and assume a baseload of 30 rounds (AP, APCR or HE for the 37; APCNR or HE for the 28/20) may be carried in each. Optional Damage Tables for both the 250/10 and the 251/10 are presented separately as is the Hit Probability row for the 37 mm PAK.

Tracked AFV's

Several tanks and self-propelled guns which actually were used in the Gazala campaign by the Germans were purposely left out of the game, again for simplicity. However, readers might be interested and so they are included here. As for armored cars and armed APC's, Hit Probability Table entries and Damage Tables for these vehicles are included on separate pages.

Pz. Jag. 1B

This vehicle was the first SPG to be adopted by the German Army and a number were still in use in the desert during the Gazala battles. Using a Panzer I chassis, the Pz. Jag. 1B mounted the excellent Czech 47 mm ATG whose performance roughly equaled the 50 mm short. Yet, the vehicle was handicapped by very thin armor and no machine-guns. It did, however, serve well until superseded by the Marder. When used in the game, all Marder rules apply to the Pz. Jag. 1B as well except as noted below.

Nomenclature:	Panzer Jager 1B
Weight:	5.7 tons
Maximum Road Speed:	24 mph
Flat Desert Speed:	17 mph
Maximum Armor:	15 mm
Crew:	3; 2 man gun position
Weapons:	1—47 mm (t)
Use in Gazala	
Battles:	Tank destroyers
Comments:	Excellent Czech ATG jury-rigged onto Panzer I chassis. Very light armor and open top limited use but weapon could be effective.
Optional and	
Experimental Rules:	Reliability—11 Towing—As Sd. Kfz. 250 Sizing—As Stuart Ammo—74 rds (APCBC, APCR, or HE) Firefight V.P.'s—10 2 14

Pz II F

This vehicle was the standard light tank of the German Army throughout the war. Originally envisioned as a battle tank, the thin armor and weak armament soon forced all Pz II's to be used for recon and light combat only. However, the chassis was well designed and efficient and was used as the basis for many self-propelled guns throughout the war.

Nomenclature:	Panzerkampwagen II Model F
Weight:	10.5 tons
Maximum Road Speed:	25 mph
Flat Desert Speed:	17 mph
Maximum Armor:	35 mm
Crew:	3; 2 man turret
Weapons:	1—20 mm KwK, 1 MG 34 (turret)

Use in Gazala

Battles:	Recon tanks
Comments:	Excellent vehicle for recon only but heavier armor allowed more flexibility than with armored cars. A very few "Special" versions appeared in the desert mounting 37mm or 50mm weapons but little is known of them.

Optional and

Experimental Rules:	Reliability—11 Towing—As Marder Sizing—As Stuart Ammo—36 bursts (AP or HE) Firefight V.P.'s—9 3 9
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Pz. IV F2

This tank, the Panzer IV "Special" is listed as part of the Afrika Korps reserve at the beginning of the Gazala Battles in May of 1942. Over the next six months it developed into the prime weapon of the German forces but its use at Gazala appears to have been forestalled by ammunition shortage until the final attack on Bir Hacheim and beyond. It therefore should not be included in any Scenario before 8 and then included in very small numbers, if at all. The tank itself was described as "magnificent" by Rommel and mounted a German long barreled 75 mm weapon which was roughly equal to the Russian 76.2 mm piece on the Marder. Unlike the Marder, however, this vehicle was heavily armored all around and greatly eased supply problems by being an all German design. Modified late model Pz. IV's were used until very recently by Syrian forces and East German factories produced parts for them until the late 1960's!

Nomenclature:	Panzerkampwagen IV Model F2
Weight:	23.2 tons
Maximum Road Speed:	25 mph
Flat Desert Speed:	17 mph
Maximum Armor:	50 mm
Crew:	5, 3 man crew
Weapons:	1—75 mm L/43, 2 MG34MMG

Use in Gazala

Battles:	Main battle tank
Comments:	Best tank in desert before appearance of Churchill but Sherman was good match at El Alamein and beyond. Very powerful main armament coupled to well-armored and reliable chassis insured immediate success.

Optional and

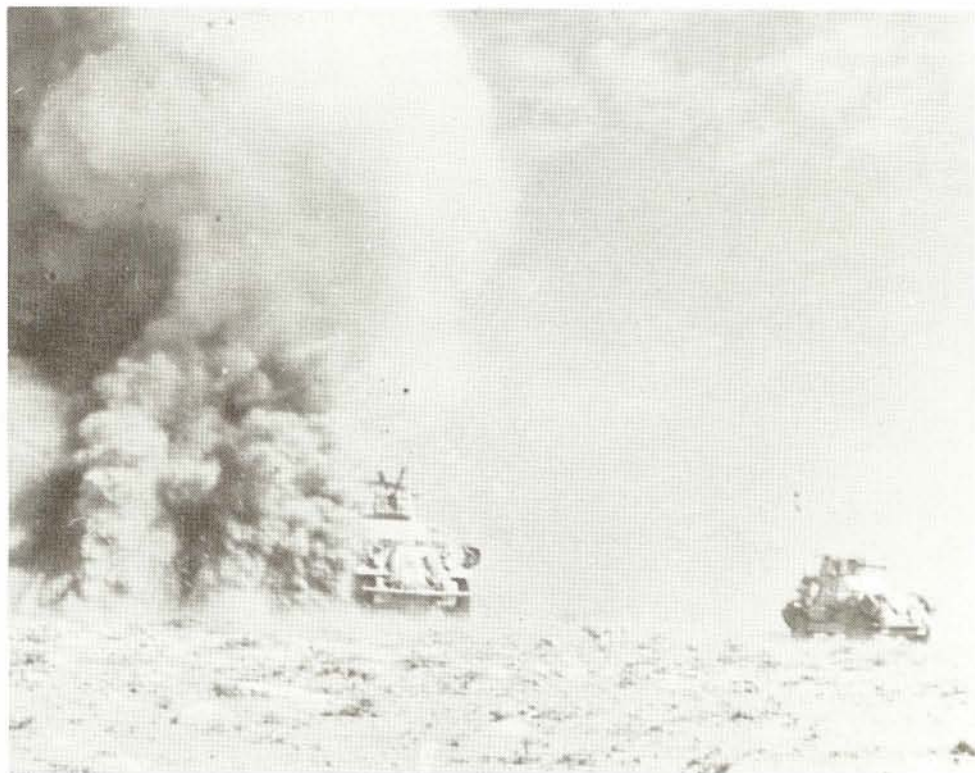
Experimental Rules:	Reliability—11 Towing—As Pz. IVE Sizing—As Pz. IVE Ammo—87 rounds (APCBC or HE) Firefight V.P.'s—34 3 40
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NEW WEAPONS

Several weapons which were widely used by the Germans or Italians at Gazala were left out of *TOBRUK* for various reasons. Like the armored cars and AFV's listed above, these weapons were only marginally effective as their inclusion in any game will show. Perhaps the only exception to this is the PAK 36 ground-mounted 76.2 mm Russian weapon, the same as on the Marder, which seems to have been deployed fairly widely throughout the Afrika Korps.

20 mm Soluthurn ATR

This weapon was the standard light infantry anti-tank weapon of the Italian forces in the desert. Unlike its German and British counterparts, however, the Soluthurn was cumbersome and heavy and really fitted into the class of a light ATG.



Nomenclature: 20 mm Soluthurn Anti-Tank Rifle
 Weight in Action: 120 pounds
 Crew: 1 man
 Ammunition: Armor piercing tracer
 Rate of Fire: 20 rpm
 Comments: Heavy semi-automatic small ATG probably attached to infantry companies in twos. Light enough to be moved by one man but size and bulk were in no way offset by limited extra performances above lighter ATR's. Refer below for use in game.

75 mm Italian AAA

This weapon was a medium velocity (1500 ft/sec) piece whose use in ground actions was only marginally successful but nonetheless widespread. The Germans would often place several of these weapons in positions with 88 mm FLAK guns and use them in the same way. Before the Alamein battles considerable numbers of these weapons were mounted on truck bodies for providing some mobility inasmuch as the normal mount had no mobility at all.

Nomenclature: Ansaldo 75 mm/26 AAA
 Weight in Action: 4.5 tons
 Crew: 7 men
 Ammunition: AP and HE
 Rate of Fire: 12 rpm
 Comments: Not very lethal in use as anti-tank gun but constantly employed in this role to bolster 88mm FLAK defenses. Lack of mobility and low rate of fire further limited use. Refer below for use in game.

76.2 mm Russian Anti-Tank Gun

Due to the massive German victories in Russia during 1941 and 1942 large numbers of these weapons and much ammunition was captured intact. With typical thrift, the German army immediately put the weapons back into use on all fronts and even modified them for improved performance. One such modified version appeared in Afrika with the Afrika Korps and was used extensively. For example, the organization plans for the 90th Light Division for the summer 1942 campaign lists no less than 56 modified 76.2 mm weapons distributed through the division's combat elements. How many of these weapons were mounted on self-propelled chassis as Marder III's is unknown, but some certainly must have been towed. It was probably an error to have left the towed version out of the original *TOBRUK* release.

CHART B

NOTES FOR USE OF NEW WEAPONS

All of the above listed new weapons conform to all normal game rules. Please note that for the new 20 mm FLAK weapons its Hit Probability Table ROF numbers are in terms of ten-round bursts and the fragmentation and Damage Table entries evaluated accordingly. Also note that the vulnera-

bilities of the Sd. Kfz. 10/4 and Sd. Kfz. 7/2 self-propelled FLAK weapons are assumed to be exactly as those of the Sd. Kfz. 7 vehicle now in the game. Finally, the new weapon data for game optional and experimental rules are summarized in Chart B:

Weapon	Towing	Sizing	Capture Equivalency	V.P.'s
20 mm Soluthurn	(N/A)	(N/A)	As Boys ATR	- 3 5
75 mm Italian AAA	As 88 mm FLAK	As 88 mm FLAK	As 75 mm (f) ATG	- 7 12
76.2 mm PAK 36 (r)	As 2 pdr. ATG	As 50 mm PAK	As 6 pdr.	-10 20
37 mm PAK 35.36	As 75 mm LIG	As 28/20 mm PAK	As 37 mm MG	- 5 12
20 mm FLAK 30	As 75 mm LIG	As 28/20 mm PAK	As Boys ATR	- 5 10
37 mm FLAK 36	As 25 pdr.	As 50 mm PAK	As 37 mm M6	- 8 14
150 mm SIG	As 25 pdr.	As 75 mm (f) ATG	(N/A, HE-S only)	-10 14

Nomenclature: 7.62 cm PAK 36 (r)
 Weight in Action: 3564 lbs.
 Crew: 8 men
 Ammunition: APCBC, APCR and HE
 Rate of Fire: 14 rpm
 Comments: Modified Russian Field/anti-tank gun. Low carriage, light-weight and hitting power made almost perfect combinations and caused the PAK 36 (r) to be used as prime equipment throughout war.

37 mm PAK 35/36

This weapon was the standard ATG in use by German forces until its replacement beginning in 1941. Inasmuch as thousands had been built by this time, however, no thought could be given to scrapping them and so they were used wherever their marginal utility could be realized. This meant that they could be found throughout German units being towed or mounted on any suitable chassis such as the 250 or 251 APC's (see above). In these configurations the PAK 35/36 served until the end of the war and so should have been included in the original release.

Nomenclature: 3.7 cm PAK 35/36
 Weight in Action: 970 lbs.
 Crew: 6 men
 Ammunition: APC, APCR and HE
 Rate of Fire: 14 rpm
 Comments: Standard ATG throughout war although small hitting power limited use after 1941. Later in war special hollow charge stick grenade provided to increase anti-armor effectiveness.

150 mm SIG

This weapon was the companion piece to the 75 mm LIG in German infantry regiments, being usually deployed in a ratio of two to every six 75 mm weapons in the regimental cannon company. Like the 75 mm it was attached whenever necessary to any unit requiring direct support and could provide very effective fire due to its large, heavy shell.

Nomenclature: 15 cm Schwere Infanterie Geschutz 33
 Weight in Action: 3360 lbs.
 Crew: 7 men
 Ammunition: HE, smoke
 Rate of Fire: 2 rpm
 Comments: Very lethal weapon for blasting down resistant targets at close range. Use in desert limited due to essential lack of resistant targets.

**20 mm FLAK 30 and Sd. Kfz. 10/4
 37 mm FLAK 36 and Sd. Kfz. 7/2**

World War II German units of all echelons were protected from air attack by FLAK weapons and supporting equipment which were usually organic to division. For example, the 90th Light Division had a total of 36 20-mm FLAK weapons, the 15th Panzer Division had 4 88-mm, 5 37-mm, and 16 20-mm FLAK weapons and so on. Although as always, the exact composition of any division FLAK element was never completely according to tables of organization and equipment, considerable effort was expended to assure that light coverage in the form of 20 mm guns, medium coverage through 37 mm weapons, and heavy 88 mm protection was usually available to all units in the desert. These weapons were often used to bolster the firepower of ground units and the 88 became legendary in this role. The 37 mm and 20 mm weapons were also often used for support and it was again probably an error to have left them out of the published version of the game. However, as players will undoubtedly notice if they do include them in play, their lack of protection and low hitting power severely curtail their use and so their inclusion should not radically change the outcome of any game.

Some effort was made throughout the war to provide these and other FLAK weapons with mobility through mounting on halftracks. In the case of the Sd. Kfz. 10/4 (for the 20 mm) and the Sd. Kfz. 7/2 (for the 37 mm) vehicles, this effort may have been counter-productive due to their vulnerability to rifle-caliber and shellfire inasmuch as they were unarmored. Use of the towed and self-propelled 37 mm and 20 mm FLAK weapons is explained below.

Nomenclature: 3.7 cm FLAK 36
 Weight in Action: 3400 lbs
 Maximum Road Speed: (towed)
 Flat Desert Speed: (towed)
 Crew: 7 men
 Ammunition: AP, HE
 Rate of Fire (practical): 60 rpm
 Comments: Excellent medium anti-aircraft weapon fully comparable to the Bofors (which the Germans also used). Use for ground engagements hindered by low power projectile and lack of crew protection.

Sd. Kfz. 7/2
 12.1 tons
 31 mph
 22 mph
 12 men
 (same)

Nomenclature: 2 cm FLAK 30
 Weight in Action: 906 lbs.
 Maximum Road Speed: (towed)
 Flat Desert Speed: (towed)
 Crew: 6 men
 Ammunition: AP, HE
 Rate of Fire (practical): 120 rpm
 Comments: Excellent light weapon superior to Breda and with no British counterpart. Very effective in anti-aircraft role but light hitting power prevented much use against ground targets.

Sd. Kfz. 10/4
 5.8 tons
 40 mph
 28 mph
 7 men
 (same)

NEW EXPERIMENTAL RULES

Many possibly interesting experimental rules were left out of the game on purpose due to the extra complexity they would have caused. For *GENERAL* readers, however, the extra complexity may be acceptable and so these rules are presented here. A word of warning; the inclusion of many of these rules, and especially the Camouflage and Visibility options, may make a full *TOBRUK* scenario far too complicated for the average player and so it is recommended they be employed only in selected firefight games at first.

MISCELLANEOUS RULES

Light Density Minefields and Lanes

The minefield counters used in the game represent very densely laid areas and this is why they are so difficult to cross. Often, however, time or availability of mines forced infantry units to lay fields of much less density which were still almost always marked but which could be crossed fairly safely. To put this into the game is simple and interesting. At the beginning of play, the defender is allowed a certain number of minefield counters varying in density at mutual player agreement. On the back of each counter the field density is penciled in the form of the die roll above which must be rolled for attempted passage of the hex to be successful. Each counter is then placed on the board by the defender with this number concealed until a passage is attempted.

Also, most minefields contained secret lanes through which the laying side could safely pass. To allow for this in the game simply assume that any friendly unit may pass through a friendly mined hex after stopping for one full turn before entering it.

Camouflage and Concealment

The camouflaging of weapons was critical to desert survival but due to its extreme complexity no rules were presented in the game to allow for it. For serious players, however, the inclusion of these rules will radically improve the overall realism of the game. Players may, during the initial set-up, conceal any large weapon in a weapon pit, or any ATR, MMG, or mortar in any hex containing entrenchments. The location of such concealed weapons must be recorded in secret and the weapon and crew may be removed from the board.

Exposure only occurs when the weapon fires or whenever any enemy unit comes within "spotting" range of its position. These ranges are:

ATR, MMG, or light mortar	1 hex
Medium mortars	2 hexes
20 mm FLAK, 28/20 PAK,	3 hexes
20 mm Breda, or 37 mm PAK	
47 mm (I) ATG, 50 mm PAK,	4 hexes
76.2 mm PAK	
75 mm LIG, 2 pdr. ATG, 37 mm FLAK	5 hexes
6 pdr. ATG, Bofors AAA, 150 mm SIG	6 hexes
25 pdr. Artillery, 75mm (F) ATG	8 hexes
88 mm FLAK, 75 mm AAA	10 hexes

In a similar way units behind optional crestlines may be removed from the board until spotted.

Visibility

As in the case of Camouflage, adding visibility to the game entails complexities that may be unacceptable to many players. Visibility did play a significant part in the desert battles.

To use, assume that no unit beyond visible range may be fired upon or identified. Players may use blank counters to cover units and thus hide their identities.

Scenario Number	1	2	3	4	5	6	7	8	9	Firefights
Visible Range (Hexes)	12	12	6	12	24	12	24	24	6	24

INFANTRY RULES

Crawling

Infantry units may approach a position at the Crawling movement rate and in that cover state. The rate is one hex per two turns and the cover state is the same as Stationary.

Morale Loss Under Artillery Fire

Personnel units undergoing artillery bombardment are naturally shaken. To simulate this in the game it is suggested that personnel being fired upon for effect with artillery or mortars at or below 105 mm in size lose one morale point per unit and those receiving above 105 mm fire for effect lose two points per unit.

Breaching the AT Ditch

Personnel units could breach AT ditchworks by blowing in their sides with explosives. To allow this common tactic in the game might be desirable. In play, assume that any infantry group of at least 20 men may blow in the walls of an AT trench hex (turning it into a hedgehog hex) by remaining for ten turns in the hex and not engaging in firing or Melee. After breaching, vehicles may move through the AT trench hex in the same manner as minefields.

WEAPON AND ARTILLERY RULES

Barrier Barrage

Often in the desert war even AFV units would be forced to stop in front of an extremely heavy artillery fire zone although the chances of their being damaged by it were remote. This event may be simulated in the game by assuming that any hex which has been subjected to 200 fragmentation factors or more of indirect artillery or mortar fire during the indirect phase of a turn may not be entered by any unit during the next movement phase.

Airburst 88 mm HE

The 88 mm FLAK weapon was the only gun on the board to possess large time-fuzed HE ammunition for the engagement of aircraft. Often, these rounds were used against ground targets set to explode in the air—an extremely lethal tactic. To allow this in the game simply assume that an 88 mm fire airburst HE against any target anywhere on the board after one turn of "ranging" rounds in which no damage is done. The airburst rounds produce as much fragmentation as the normal 88 mm HE round but they will reduce Full Cover to Good Cover for all units which are not in ACV's, bunkers or blockhouses, and they will not produce direct hits.

Dust Reduction of ROF

As mentioned previously, it was assumed in the game that all dug-in (in weapon pits) weapons were assumed to adopt anti-dust measures to prevent obscuration upon firing. When moved into the open, however, considerable dust would be raised by any large caliber weapon discharge and this may be reflected through a reduced ROF. In play assume that any weapon firing outside of a weapon pit has its ROF reduced by one-half, rounded down. This does not apply to AFV's, ATR's mortars or rifle caliber weapons.

Mortar OP's

When using the Camouflage and Visibility rules below and other occasions, situations may arise where mortar weapons would not be able to directly see a target. In these cases, allow any infantry HQ unit to act as a mortar forward observer for any friendly mortar. This is historically accurate for participants in the desert conflict.

Mortar Registrations

As in the case of artillery batteries, mortar crews, especially German, would often shoot-in registration points for fire. To simulate this, it is suggested that two or three registrations be allowed for each medium mortar in the game to be used exactly as those for artillery batteries.

AAA vs. Diving Stuka

In the current game no differentiation is made between firing with Bofors upon a diving Stuka and firing upon one in level flight and this is a simplification. A diving aircraft is a much easier target and to reflect this it is suggested that the required 2-dice roll for a kill on a Stuka executing an attack upon a unit within the 5-hex Bofors zone be increased to 2, 3, or 4. In a similar way, captured 20 mm Breda, 20 mm FLAK, 37 mm FLAK and 20 mm weapons on the Sd. Kfz. 222 armored car may be employed by the British player against Stukas. For simplicity, assume that all four of these weapons are employed identically to the Bofors for AA fire with the exception that the 20 mm weapons have an effective zone of only two hexes in radius instead of five.

ARMOR RULES

75 mm HEAT Ammunition

During the Gazala battles the Germans introduced hollow charge or HEAT rounds for use with the 75 mm short weapon on the Pz IV and with the 75 mm LIG. If used, it is suggested that very few rounds be allocated to each vehicle or weapon involved in a game. The Damage Tables for all AFV's do not include 75 mm HEAT entries so they are summarized in a special table.

Reduced ROF Beyond Effective Range

Whenever AFV's and ATG's engaged targets beyond their "effective range" (by definition in the game, beyond the range where an unadjusted Hit Probability Number of "8" or better is required), it was usual practice in the desert for both sides to sense the fall of shot to avoid wasting ammunition. To simulate this it is suggested that no target may be engaged (by AFV's or ATG's) beyond the unadjusted "8" range at higher than the firing weapon's initial ROF until the target is hit.

Field of Fire

This is a very strange sounding rule which may be of use in some scenarios. Its purpose is to prevent the running of personnel units from one state of full cover to another without being engaged by enemy units in the area. In this rule, any unit may indicate a straight line "field of fire" from itself through any hexes at the beginning of the movement phase of a turn. Any enemy units crossing or entering a hex containing part of the field of fire may be engaged by the firing unit at full acquisition ROF at whatever cover state exists within the hex crossed or entered. Naturally, units laying fields of fire in a turn may not fire except against enemy units crossing or entering the field.

Crew Intimidation

As in the case of personnel units, vehicle crews helpless in the face of overwhelming odds would often be forced to surrender. In this rule, this situation may be brought about for crews of *M- and F- killed* vehicles whenever their morale level is brought to zero exactly as in the case of Intimidation of Personnel.

Smoke Projectors

All AFV's in the game including the armed APC's and armored cars carry smoke projectors or candles for self defense. They were used in the real desert battles for providing a short smoke screen to allow the vehicles to retreat and this is how they may

be used in the game. Whenever a vehicle is forced to leave the board due to casualties or firepower damage, it may lay one smoke counter in any hex through which it moves to retreat from the board. The smoke may only be laid once, lasts two turns as artillery smoke, and affects play in the same way.

HE Hits on AFV's

In the standard game it was stated that the HE ammunition fired by the Crusader C. S. and 75 mm LIG weapons was ineffective except in achieving R or TR hits. In reality, however, this is an oversimplification. HE ammo from any weapon has some capability for damaging most AFV's. With the addition of the lighter armor this damage evaluation

becomes important and so will be presented here. All HE results listed in the following table are for each round hit or burst hit.

If players include most or all of the above-listed Experimental Rules, *TOBRUK* should represent a nearly complete representation of desert war as revealed in historical accounts.

HE HIT DAMAGE TABLE

Target	HE Round	FUH	FLH	FTUR	GM	SUH	SLH	STUR	RH	RTUR	R	(WH) TR	G
Humber	20mm	-	-	-	-	-	-	-	-	-	F	M	F
	28/20mm	-	-	-	-	-	-	-	-	-	F	M	F
	37mm	-	-	-	-	K/C2	K/C1	-	M(P3)	-	F(P3)	M	F
	47mm and above	K/C3	K/C1	K/C2	K/C2	K/C3	K/C1	K/C2	K	K/C2	K/C2	M	F
Daimler	20mm to 28/20mm	-	-	-	-	-	-	-	-	-	F(P2)	M	F
	37mm	-	-	-	-	K/C2	K/C1	-	M(P3)	-	F(P3)	M	F
	47mm	-	-	-	-	-	-	-	-	-	-	-	-
	and above	K/C3	K/C1	K/C2	K/C2	K/C3	K/C1	K/C2	K	K/C2	K/C2	M	F
M.H. MK. II	20mm to 28/20mm	-	-	-	-	-	-	-	-	-	F	M	F
	37mm	-	-	-	-	-	-	-	-	-	F(P2)	M	F
	47mm	-	-	-	-	-	-	-	-	-	-	-	-
	and above	K/C4	K/C2	K/C2	K/C2	K/C4	K/C2	K/C2	K	K/C2	K/C2	M	F
M3 Honey	20mm	-	-	-	-	-	-	-	-	-	F	M	F
	37 to 50mm	-	-	-	-	-	M	-	-	-	F(P2)	M	F
	75 to 88mm	-	M	F	F	K/C2	K/C1	-	K	-	K/C2	M	F
	150mm	C2(P4)	M(P2)	F(C2)	F	K/C2	K/C2	K/C2	K	K/C2	K/C2	M	F
Crusader	20mm	-	-	-	-	-	-	-	-	-	F	M	F
	37 to 50mm	-	-	-	-	-	M(P2)	-	-	-	F(P2)	M	F
	75 to 88mm	-	M	F	F	-	K/C2	K/C3	-	-	K/C3	M	F
	150mm	K/C2	K/C2	F	F	M	K/C2	K/C2	K	K/C2	K/C2	M	F
Grant	20mm	-	-	-	-	-	-	-	-	-	F37	-	-
	37 to 50mm	-	-	-	-	-	-	-	-	-	F37(P2)	-	F75
	75 to 88mm	-	-	F37	F75	-	M	-	-	-	K/C3	M	F75
	150mm	-	M	F37	F75	C2(P3)	(P4)	F37	-	F37	K/C3	M	F75
Matilda	20mm	-	-	-	-	-	-	-	-	-	-	-	F
	37 to 50mm	-	-	-	-	-	-	-	-	-	F	-	F
	75 to 88mm	-	-	F	F	-	-	-	-	-	F/C2	M	F
	150mm	-	M	F	F	-	-	-	-	-	K/C3	M	F
Valentine	20mm	-	-	-	-	-	-	-	-	-	-	-	F
	37 to 50mm	-	-	-	-	-	-	-	-	-	F	-	F
	75 to 88mm	-	-	F	F	-	M	-	-	-	F/C2	M	F
	150mm	-	M	F	F	-	M	-	-	-	K/C2	M	F
Sd.Kfz. 250/10	20 - 37mm	-	-	-	-	-	M	-	-	-	F/C2	-	M
	75mm or 3"	K/C3	K	F/C2	-	K/C3	K/C1	F/C2	F/C2	F/C2	-	M	F
Sd.Kfz. 251/10	(as Sd.Kfz. 250/10)	-	-	-	-	-	-	-	-	-	-	-	-
Sd.Kfz. 222	20 - 37mm	-	-	-	-	-	-	-	M(P2)	-	-	M	-
	75mm or 3"	K/C3	K/C1	F/C2	-	K/C3	K/C1	F/C2	K	F/C2	-	M	-
Sd.Kfz. 231	20 - 37mm	-	-	-	-	-	-	-	-	-	-	M	-
	75mm or 3"	K/C3	-	F/C2	F/C2	K/C3	K/C1	F/C2	K	F/C2	-	M	-
Pz.Jag. 1B	20 - 37mm	-	-	-	-	-	-	-	-	F/C2	F/C2	M	F
	75mm or 3"	K/C1	K/C1	K/C2	-	K/C3	K/C1	K/C2	K	K/C2	F/C2	M	F
Pz. II F	20 - 37mm	-	-	-	-	-	-	-	-	-	F	-	-
	75mm or 3"	-	M	F	F	K/C3	K/C1	K/C2	K	K/C2	F/C2	M	-
Marder III	20 - 37mm	-	-	-	-	-	-	-	-	-	F	M	-
	75mm or 3"	-	M	K/C2	-	K/C3	K/C1	K/C2	K	K/C2	K/C2	M	F
PZ. III H or J	20 - 37mm	-	-	-	-	-	-	-	-	-	F	-	-
	75mm or 3"	-	-	F	F	-	M	-	-	-	F/C2	M	F
Pz. IV E	20 - 37mm	-	-	-	-	-	-	-	-	-	F	-	-
	75mm or 3"	-	-	F	F	-	M	F/C2	K	F/C2	F/C2	M	F
Pz. IV F2	20 - 37mm	-	-	-	-	-	-	-	-	-	F	-	-
	75mm or 3"	-	-	F	F	-	M	-	K	-	F/C2	M	F
AB40	20 - 37mm	-	-	-	-	-	-	-	-	-	-	M	-
	75mm or 3"	K/C4	K/C3	K/C1	F	K/C4	K/C2	K/C1	K	K/C1	-	M	-
M13/40	20 - 37mm	-	-	-	-	-	-	-	-	-	F	-	-
	75mm or 3"	-	-	F	F	K/C2	K/C1	K/C2	K	K/C2	K/C2	M	-
Semovente	20 - 37mm	-	-	-	-	-	-	-	-	-	-	-	-
	75mm or 3"	K/C3	-	-	F	K/C3	K/C1	-	K	-	-	M	F

TAKING THE OFFENSE IN STALINGRAD

By Joseph A. Angiolillo, Jr.

Although *STALINGRAD* has been thoroughly discussed in many past issues of the *GENERAL*, one aspect of the game lacks a thorough summary. There have been articles on German strategy; there have been articles on Russian strategy; on historical variants, design analysis, and a summary of defensive techniques. But only a few articles have even eluded to the numerous offensive techniques available to the astute attacker when playing Stalingrad. Many players call these "offensive tactics" or "dirty tricks". I call them a summary of experience and using the rules to the best advantage.

Probably the best way to introduce offensive techniques is through an analysis of the Combat Results Table. But probability is boring to many people and several articles have already been written analyzing the CRT. The results of this analysis stress 3-1 or better attacks with 1-3 soak-offs. 3-1 or better attacks guarantee the attacker will take the position. 1-3 soak-offs guarantee the best chance for the least loss to the attacker. Unfortunately, the more *STALINGRAD* becomes analyzed, the more ways the defender will find ways to prevent a German from using the 3-1, 1-3 strategy. Obviously, the 3-1, 1-3 strategy will work against beginning players but the more *STALINGRAD* becomes a "tournament" game at the conventions, the more you will find that your opponent is an intermediate level or expert *STALINGRAD* player.

In effect, the attacker is looking for three results on the Combat Results Table. He wants to take an enemy position, eliminate enemy units, and minimize his own losses. Based on these objectives there is a priority of results that he must strive for. In order they are DELim, DBack 2 or Exchange, ABack 2, and AElim. A strict analysis of just the CRT does not take into account the actual situation on the mapboard. In effect, by properly attacking, the offensive player will find that he can change many DBack 2 results into DELim results, or ABack 2 results into DBack 2 results (effectively an attacker advance). The trick is where to find the weakness in the defense. The purpose of this article, then, will be to put some punch back into the offense, to turn a result that gives no advantage to the attacker, into a result that gives the advantage to the attacker. Admittedly, each of these techniques can be stopped. But in many instances, by threatening everywhere, the attacker can force the defender into a weak position and then capitalize on it.

CHANGING DBACK 2's INTO DELIM'S

1. USING THE ADVANCE

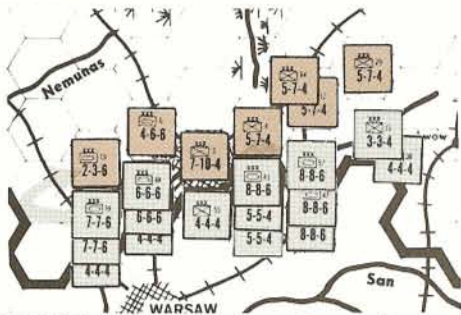


FIGURE #1a—In this opening set-up position two units are poorly positioned: the 5-7-4 next to Brest-Litovsk should be attacked at 3-1, the 2-3-6 should be attacked at 3-1 or 5-1 (with a 1-3 soak-off against the 4-6-6). Appropriate soak-offs are made against the 7-10-4 and 3 5-7-4's. Note that although 1-3 is the best possible soak-off in terms of loss ratio, the German should not risk 5-5-4's unless he has to—they are very valuable units. Note that the 8-8-6 with the 2 5-5-4's will advance after combat against the 5-7-4. Similarly the 2 7-7-6's will advance after combat against the 2-3-6. In effect Brest-Litovsk must be surrounded.

There are four ways (that I have found so far) to take advantage of DBack results. Almost any player worth anything knows the first way: to use a 3-1 or better attack against a doubled position, advance after combat, and surround enemy units. The surrounded units are then either attacked at 3-1 or better odds or must counterattack in their turn at poor odds. Figure #1a shows an example of part of a novice player's opening Russian set-up. Not only has he left the German player 3-1's but he has also assured the loss of Brest by giving the German player an advance after combat. Normally, players of this quality are not found in conventions after the second round. So this situation will rarely occur. Figure #1b is similar to a recent contest in the *GENERAL* and is a good example of utilizing the advance after combat in conjunction with other attacks to take Moscow. Experienced players should be able to recognize the weakness of this situation immediately.



FIGURE #1b—In this position the sequence of attacks is critical. Two 3-1's are made against the 4-6-4 and 2-3-6 in hex S33. The 3-1 against the 4-6-4 from hex S32 is made first so that it will retreat leaving only the 2-3-6 in the hex. After the 2-3-6 is eliminated or retreated by the attack from hex R33, the 8-8-6 and 6-6-6 advance. A 1-3 soak-off from hex T32 is made against hex T33. Units on hex U32 attack the 5-7-4 on hex U33 at 3-1, retreating it so that the attack against the 2-3-6 on U33, a 5-1 from units on hexes V33 and V32 will allow the advance of 2 7-7-6's from V33 and a 4-4-4 from V32.

2. USING THE PIN

A variation of the advance after combat is the pin. In effect this technique is a single attack that will surround an enemy unit: by retreating it properly, then advancing after combat. Figure #2a shows the standard second turn defense of the northern Nemunas used by many intermediate Russian players. It is 3-1 proof but not impentetrable. By taking a small risk (10 factors) and using the pin attack, a 1-2 becomes as effective as a 1-1 in eliminating the 7-10-4. Later in the game, as the



FIGURE #2a—In this position the 7-10-4 is retreated into Germany if a DB2 result is rolled. Thus with the roll of a 1 or 2 the Nemunas is broken. A 5 or 6 is an AElim but 3 or 4 will not change anything. Note that the DB2 is more effective using this attack than an outright 1-2 since the 7-10-4 is pinned. The 7-10-4 is retreated to hex T16 and the attacking units advance.

Russian player loses units, he will become hard-pressed in either the north or south. In many games the situation as pictured in figure #2b occurs. Again the pin is used to turn a DBack 2 into a DELim. The Russian unit is retreated to the hex indicated. German units advance and the Russian unit must counterattack at poor odds in its turn, resulting in its elimination.

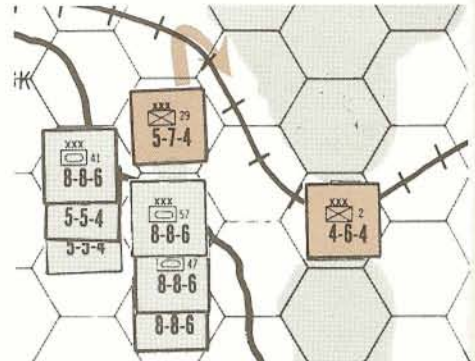


FIGURE #2b—In this position the 5-7-4 is attacked at 3-1 and retreated to hex MM22 by the retreat path indicated in the illustration. German units then advance after combat and the Russian unit is eliminated in its combat phase.

3. USING THE WEATHER

One of the most dramatic methods of changing a DBack 2 into a DELim when playing the Russians is to use the weather. Nothing is more enjoyable than retreating a German unit onto Lake Ladoga during a snow game-turn and watching it drown if the lake thaws next turn. Admittedly, the best time to use the weather attack is during snow in March. April is a sure thaw turn and the unit will drown. Even an attack in February is useful because of the probability that the lakes will thaw in March. The situation illustrated in figure #3 occurred in a PBM game and is a perfect illustration of how to use the weather attack.



FIGURE #3—In this position the 5-5-4 is attacked at 3-1. If it retreats it is retreated to hex H31 and will not be able to reach Leningrad if the weather is poor (snow). If the weather changes to mud or clear the unit drowns, eliminating it.

4. USING POOR TERRAIN; STRATEGIC ELIMINATION

The last method of changing a DBack 2 into a DELim is very subtle. A player must understand that by pushing a unit into the "boondocks" that he has effectively strategically eliminated the unit. The poor terrain attack uses mountains, swamps, and the sea. The retreated units are either eliminated next turn, isolated, or rendered useless because of their position. Figure #4a renders the Russian unit useless by retreating it into the Crimea, though it is

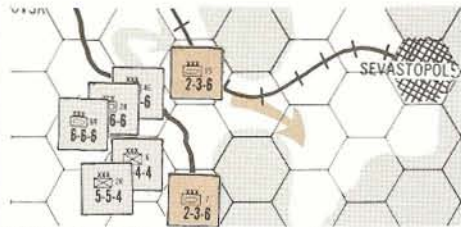


FIGURE #4a—In this position the 2-3-6 on hex MM21 is retreated into the Crimea if a DB2 result is rolled. Note that a 3-1 will always eliminate the unit because it is strategically eliminated by a DB2 result. Since 2-3-6's are valuable for replacements, the DB2 result may even be preferable to a DElim.

sorely needed in the south. Figure #4b isolates the Russian unit by retreating it into the mountains in Hungary. And figure #4c uses the Pripet Marshes to prevent the 7-10-4 from reaching Minsk and preventing a 3-1 on the city next turn.

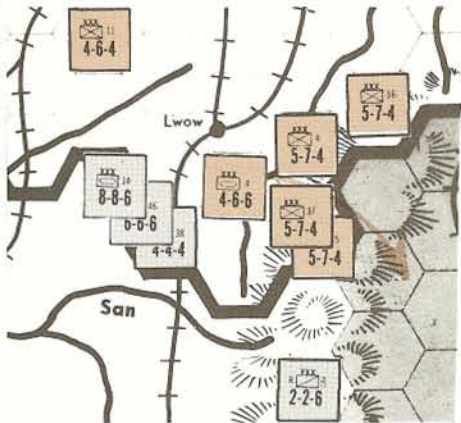


FIGURE #4b—In this position the 4-6-6 on hex FF12 is attacked at 3-1 from hex EE12 and if a DB2 result is rolled, it is retreated to hex HH10, strategically eliminating it. If the German player attacked from hex FF11, he could attain better odds against the 4-6-6 but could not strategically eliminate the unit and would also have to soak-off against other Russian units.

Note that all of these techniques can be used with low odds attacks, effectively changing 1-2's into 1-1's since a DBack 2 becomes as useful as a DElim. The only difference is that the attacker risks less factors in an AElim.

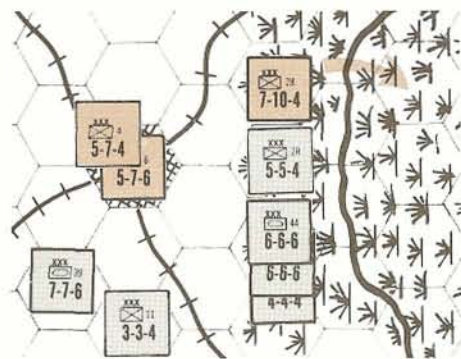


FIGURE #4c—In this position the 7-10-4 is needed next turn to defend Minsk (preventing a 3-1 by placing the 2 5-7-4's on hex W22 and a 2-3-6 on hex U22) and is attacked at 1-2 from hex Z20. A 1 or 2 will prevent the 7-10-4 from reaching Minsk next turn. Only a 5 or 6 will result in the elimination of the 5-5-4.

CHANGING ABACK 2's INTO DBACK 2's
5. USING OVERSTACKING

The only technique that I know of that will change ABack 2's into DBack 2's (gain terrain) was explained in an early issue of the *GENERAL*. The illustration in that article rarely occurs now since good players understand the technique and have compensated for it in their opening set-up. The most useful application of the overstacking attack usually occurs during the first winter when Russian mobility is lacking and there are few Russian units available to counterattack. Figure #5a uses the

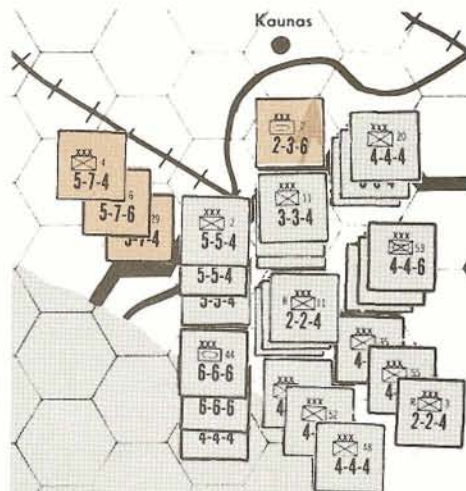


FIGURE #5a—In this position the German player wishes to assault hex S18 on turn 2 at 3-1. Since most Russian players (and the one in this example is no exception) have the closest 7-10-4 at Brest-Litovsk, the 2-3-6 is first eliminated at 7-1 and the 3 5-7-4's are attacked at 3 1-3's. Surviving German units must be retreated to hex U18, preventing the 7-10-4 from reaching S18 on the upcoming Russian move.

overstacking principle on the opening set-up to prevent a 7-10-4 from reaching S18 on turn #2. The position can then be assaulted at 3-1 next turn. Figure #5b uses the overstacking principle on turn #2 to isolate the north from much needed reinforcements on turn #3. The Nemunas can then be assaulted, giving the Germans the advantage of breaking the river early. Figure #5c uses the overstacking attack to lengthen the Russian line during the first winter. Because of the reduced mobility the Germans will surely gain momentum.



FIGURE #5b—This attack is often used in conjunction with the attack shown in figure #2a. The possibilities of crushing the Russian line in the north are very promising using the two attacks. Note that the AB2 forces the 2-2-4 to cut off reinforcements from Brest-Litovsk. A 1-2 is often employed since a die roll of 1,2,3 or 4 is a good result for the German. Note that the automatic elimination of the 2-3-6 is saved until after the 1-2 is rolled.

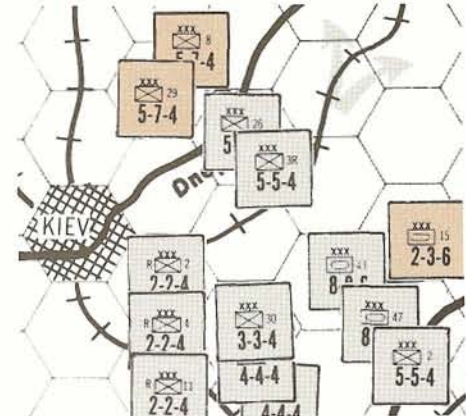


FIGURE #5c—In this position the Russian player is stymied by the weather—he lacks mobility because of the winter. The German player attacks the 2 5-7-4's at 1-3 each. A die roll of 1,2,3 or 4 will cause the Russian player to retreat the units behind Russian lines. Note that the 2-3-6 is attacked at an automatic elimination after the other two attacks are made.

In all of these examples the attacker stacks hexes three high when he could be retreated behind his lines. Units must then be retreated "forward" to obey the stacking restrictions. The sequence of attacks is almost always critical. And numerous low odds attacks against the same position are better than one low odds attack to assure the highest probability that at least one attack will succeed. In effect 1-3's became as good as 1-2's and 1-2's are as good as 1-1's.

CHANGING EXCHANGES INTO ADVANCES
6. USING EXCHANGE ATTACK FACTORS AND 1-1's

Previously mentioned in Vol. 2 No. 5, p. 5 of the *GENERAL*, 1-1's can be used to break river lines, mountain ranges, and city positions. The attacks are riskier than 1-2's but offer many more rewards if they work. The technique involves attacking a hex of a river line at 1-1 with just the right units available for exchange. The remaining units can then advance after combat. Figure #6 illustrates the advance after 1-1 principle. Note that one large 1-1 is made, not 2 small 1-1's since the reason for the attack is to advance after combat. Probability favors the single attack since the Russian player would be able to counterattack at basic odds if only one attack succeeded, still holding the river line.

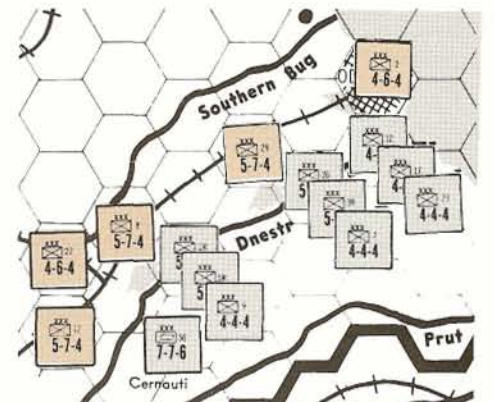


FIGURE #6—In the following position the German player has chosen to take three 1-1's to break the Dnestr. The most effective 1-1 is the one against III7 since it forces the Russian to counterattack to hold the Southern Bug. Note that in each attack exactly the correct units are used so that in the event of an exchange, the remaining units will advance after combat (the circled units are removed with an exchange result). Results of 1,2 or 3 will achieve the the German objective. Only a 5 or 6 will result in the German loss of all attacking units.

LESSENING YOUR LOSSES

7. USING 1-2's IN THE OPEN

Since exchanges benefit the Germans when they attack, 1-2's against a non-doubled position (in the open) can be used in an attempt to eliminate Russian units and/or take terrain. Against two 4-6-4's or 4-6-6's the German player could attack with a 2-2-4 and a 4-4-4. In an exchange the Russian player must lose both units (twelve defense factors) while the German player loses six defense factors. Against two 5-7-4's, a 3-3-4 and a 4-4-4 will give the same effect. Against three 4-6-4's, nine attack factors are needed. Note that the same effect is *not* achieved with ten factors attacking two 5-7-4's and a 4-6-4. Obviously, 1-2's are risky but when you need to take risks to eliminate Russian units, 1-2's in the open are sometimes the best attack.

8. USING 1-1's IN THE OPEN

A variation of attack #7 is the 1-1 attack in the open, using just the right units for an exchange. Against two Russian 4-6-4's, the German should attack with three 4-4-4's. An exchange will not only take the position, but also give a beneficial loss ratio to the German (eight defense factors to twelve). The same effect occurs when two 5-7-4's are attacked by two 5-5-4's and a 4-4-4. Any stack in the open that is

stronger than this, however, is usually too strong to be attacked at 1-1 from one hex. The German player will need to use his valuable panzer corps in the attack and infantry is more expendable because of the greater threat offered by the German panzers.

Obviously 1-1's in the open risk more factors than 1-2's but the presence of a DELim on the table makes the attack more profitable if it succeeds. The more important concept for the German player to understand is that he should only take "selective" risky attacks. They should only be used to maintain the momentum. In this way the German player does not lose the game because he fights against the laws of probability as well as his Russian opponent.

USING THE INDIRECT APPROACH

Of the eight attacks mentioned in this article, attacks #7 and #8 can least often be prevented by the Russian player. The only way that the Russian player can prevent these attacks would be to sacrifice units or allow numerous 3-1's against his position. Allowing 1-2's and 1-1's in the open is much safer.

Often times the Russian player will make a minor error, giving the German player a chance to use one of the other attacks that have been mentioned. However, just blind luck that the Russian player will err is no way to play the game. A good German player will force the Russian player into a position where he will give up one of the attacks, or he must retreat. This forcing of the issue is the purpose of the indirect approach.

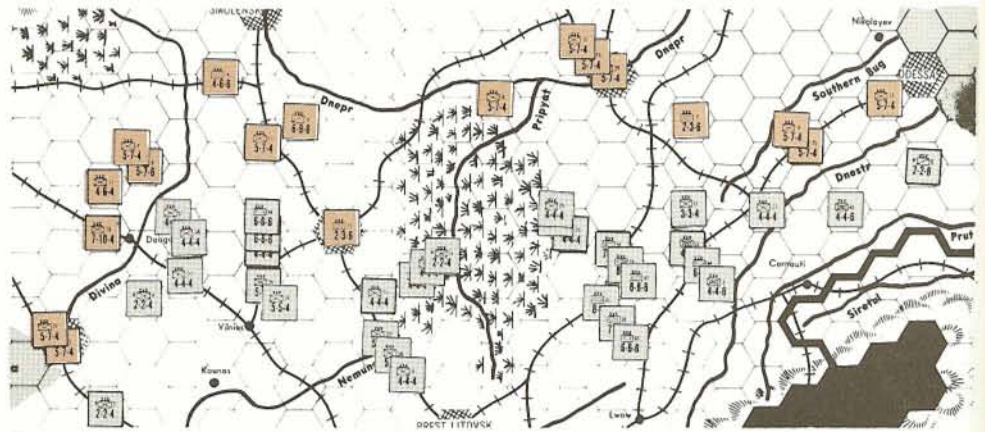
Many articles have been written on the indirect approach, but few examples have been included in *STALINGRAD* articles. In a nut shell, the indirect approach stresses German panzer corps in a centralized position where they can attack as many positions as possible on the next turn. Thus killer packs are needed, behind the lines whenever they are not being used for a specific attack. A "good" killer panzer army would include four 8-8-6's, three 6-6-6's, and two 5-5-4's. This combination of units can successfully attack (at 3-1) a single doubled 5-7-4 from two hexes, a doubled 6-9-6 from three hexes (with one soak-off), or a doubled 7-10-4 from three hexes (with no soak-offs). Not only is the combination of units perfect for the attack, but it is also perfect for the exchange. Thus the indirect approach stresses centralized panzer reserves and counting combat factors.

Another aspect of the indirect approach involves certain "key" hexes on the mapboard. Hex Y24 can only be "3-1 proofed" using both 7-10-4's—otherwise the river line can be broken. This fact leaves fewer strong units for the Russian player to use to defend in the south during later stages of the game. Hex AA22 is an excellent position to place three 8-8-6's or two 8-8-6's and a 5-5-4. The stack can pivot either north or south if need be.

An example of the use of the indirect approach is included in figure #7, the Russian position that must be destroyed. The entire mapboard is shown because the indirect approach involves all the Russian units, not simply a sector of the front. By properly positioning German units and studying the position from north to south, a German move can be made to force a position where attack #5 will be used to stretch the Russian line next turn. Figure #8 shows the resulting Russian move. It is strong but predictable and forceable. The result of the indirect approach is a gain in momentum: it forces the Russian player to weaken his position or retreat.

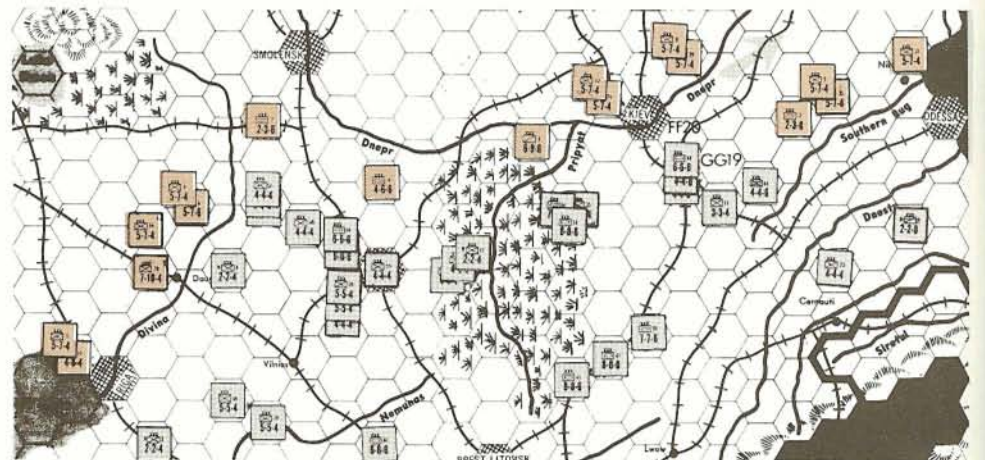
WHEN TO TAKE RISKS

The final point of this article is to discuss when the German player must take risks to win the game. Obviously, if the Russian player is a novice, the German player will never have to take risks. He can win the game by surrounding units and attacking at 3-1 or better with 1-3 soak-offs. More often than not



COMMENT ON FIGURES #7 and #8—The purpose of the indirect approach is to threaten 3-1 attacks on the next turn and, therefore, take ground. The position listed in figure #7 is the position after the Russian September 1941 move. Mud was rolled for October 1941 and snow is the weather for November. Figure #8 shows the German October 1941 move and the resulting Russian move. Units were placed in the north to perform three missions, every unit was moved to the position shown for a purpose: to threaten a 3-1, attack an enemy unit, or penetrate terrain. As a result units were forced to pull

back from Riga. The defense along the Divina was predictable and forced the Dniepr defense shown in figure #8. And the objective of the move was to make a pair of 1-2's against hex FF22 so as to change any AB2's into retreats into Russian terrain by stacking hexes FF20 and GG19 to the limit. Note that the move had far reaching results and gives the German a good chance to break the Dniepr in November—a roll of 1,2,3 or 4 in either 1-2 attack would be a German success. The actual German November move is not shown but the power of the indirect approach is.



the Russian player will prevent 3-1 attacks by properly positioning his units, sacrificing only one or two 2-3-6's per turn.

Now the German player is faced with a problem. When should he take risky attacks—1-2's, 1-1's, and 2-1's? Obviously, these attacks must be made just at the right moment, and not too often, just enough to maintain the momentum. Experienced players say that the more you play the more you learn when to take risks. Even though you may think this is passing the buck, it's the truth. There are some guidelines, however.

You can obviously take risks early and make or break the game early, but a more effective method is to attack a few, selective, positions during the first few turns, before the Russians get reinforcements—1-2's and/or 1-1's in the open; and a few, very few, 1-2's or 1-1's or (ech!) 2-1's to break river lines or city defense lines. The best time to take risks is during the first winter when the Russian player lacks the mobility to sufficiently plug up holes in the line. And the most important turns in the game are February and March of 1942 when the weather changes. An effective break in the Russian line during those turns will win the game for the Germans. Due to the change in the weather and the fact that the Germans move first. The Russians have no mobility to plug up holes and the Germans have all the mobility to exploit them.

AREA TOP TEN

Rank	Name	Times On List	Rating	Previous Rank
1.	R. Chiang	3	EGL2031	1
2.	T. Oleson	4	HO1913	2
3.	R. Wood	1	CD11801	—
4.	C. Todoroff	2	CF11763	3
5.	S. Heinowski	2	CD11744	4
6.	G. Kilbride	1	CDG1697	—
7.	D. Barker	2	CEG1596	7
8.	S. Packwood	2	CEA1592	5
9.	J. LeJeune	3	CDE1579	6
10.	B. Beardsley	1	CCD1540	—

The above players represent the 10 highest verified (11+ rated games) of the 3,000 member AREA pool. Players with an opponent qualifier less than C were not calculated among the top player ratings.

The "Times on List" statistic is considered as "Consecutive" times on list. If a player slips out of the Top 10 for any length of time his next appearance is considered as his first.



BLIND FREE KRIEGSPIEL

By Chris Crawford

The enjoyment of most wargames can be greatly increased by "blinding" them—that is, forcing each gamer to play the game with very limited knowledge of his opponent's dispositions and movements. This can be easily arranged by separating the two players by a screen and having each one play on his own mapboard, play being regulated by an umpire. Many players have at one time or another experimented with various forms of blindgaming. The general idea in most versions I have seen is always the same: players use the standard game rules with only such modifications as are necessary to blind the game. At the beginning of his turn a player is told the positions of any enemy units that he can see. He then moves and fights according to the normal rules with umpire interference only when he blunders into an unseen enemy unit. A frequently played blindgame is SNIPER!, whose sighting rules are readily adaptable to blinding.

Blindgames offer far more excitement and realism than standard games. You cannot appreciate the special terror of a blindgame until you sit down behind the dividing screen and let your imagination go to work. The enemy lurks behind every tree and rock. You're never quite sure what he's up to, and you keep nervously checking your flanks and rear. I've derived great sadistic pleasure from blindgames with beginners by frantically shutting my biggest and meanest tank unit all over the battlefield, presenting my opponent with brief and tantalizing glimpses. The tactic accomplishes little of immediate military value, but the groans of confusion and frustration are hilarious.

The greatest enjoyment of blindgames only comes after you have played a few and you realize that your opponent is every bit as blind as you are. This realization opens up a whole realm of new possibilities. Tactics that are idiotic in regular games offer opportunities for victory in a blindgame. You can try to sneak around your opponent's flank, or you can attempt a sudden coup de main on a critical position. You can feint in one direction while thrusting in another; you can even attempt a pure bluff. All of these stratagems can work in a blindgame.

More importantly, only a blindgame can successfully simulate one of the most important and most neglected aspects of military operations—the fog of war. Few gamers seem to realize the crucial role played by limited intelligence in real warfare. Let us consider, for example, the two pillars of modern military operations: the blitzkrieg armored offensive and the mobile defense. No wargame I have seen even begins to adequately simulate these operations. Try to pull off "Sichelschnitt" in *FRANCE 1940*—it doesn't work. Try to encircle your opponent's forces in *WAR IN THE EAST*—it can't be done against a competent player.

Wargames have failed to simulate the blitzkrieg and mobile defense because both of these operations are built around limited intelligence factors. The blitzkrieg has three stages: 1) the secret massing of troops at the *schwerpunkt*; 2) the destruction of the enemy line at the *schwerpunkt*; and 3) the lunge by armored forces from the *schwerpunkt* deep into the enemy's rear areas. In the most successful blitzkriegs this lunge has always been a straight ahead, to-hell-with-the-flanks affair. Obviously, a blitzkrieg couldn't get off the ground in a full intelligence game; the defender would see the build-up and reinforce the threatened sector. Even if the attacker could breach the line (a very rare occurrence in most games), he wouldn't dare lunge his armor forward. The defender, knowing his exact dispositions, could easily crush the breakthrough.

Similarly, the mobile defense is a pointless exercise in full intelligence wargames. Theoretically, the mobile defense requires the existence of armored reserves which can swing against the exposed flanks of a developing penetration and cave it in while it is still vulnerable. The battle's outcome is normally determined by speed—can the attacker complete his breakthrough and bring infantry into the flanks before the defender's armored reserves arrive? The Wehrmacht of 1943/44 was consistently quicker than its Russian opponent, and thus was frequently able to defeat Russian penetrations, despite its numerical inferiority. Only when they had no mobile reserves left did their mobile defense fail. All of this cannot be simulated in a full intelligence game because the attacker would not lunge his tanks forward unless he knew that the defender would not be capable of cutting them off. Why should he stick his neck into a noose? The same thing applies to the defender. Why bother having reserves when you know exactly what the enemy is capable of doing. Stuff that armor into the line where it'll do some good. It's terribly unrealistic, but it's standard practice in full intelligence games.

Blindgames offer one other possibility which, so far as I know, has not been explored by many gamers. Every blindgame requires an umpire; this umpire must be intimately familiar with the rules of the game and is probably a very skilled player himself. Yet the umpire's responsibilities in a blindgame are limited to checking sighting and spotting, and resolving combat. His vast talents are being wasted. Should we not utilize these talents by giving the umpire more decision-making responsibility? I propose that we permit the umpire to make the rules rather than merely apply them. I propose that we allow him to determine on a case-by-case basis combat results, terrain effects, supply, morale, movement, and all the other factors normally laid out in the rules.

The idea of allowing an umpire to apply his military judgment to a situation rather than merely enforcing somebody else's rules is not new. A hundred years ago military wargames were debating the relative merits of free kriegspiel versus rigid kriegspiel. Rigid kriegspiel, the predominant system at the time, utilizes a large and complex set of rules which regulate all aspects of play. The umpire's role in such a game is merely to apply the rules. Rigid kriegspiel requires lengthy calculations and suffers from a lack of realism because no finite set of rules can truly simulate reality. Free kriegspiel is an effort to solve both of these limitations. In free kriegspiel, players are allowed to attempt any action they think reasonable; the umpire then determines the result of that attempt by applying his judgement to the situation.

Most players will immediately recognize that all of the commercial wargames currently on the market are rigid kriegspiel games. They have an absolute set of rules which are complicated and not particularly realistic. I am proposing that players bring free kriegspiel into civilian gaming.

There are objections to free kriegspiel. Free kriegspiel is arbitrary; important decisions are made at the whim of an umpire. Free kriegspiel is unpredictable in that the player does not know what the umpire will do; the player does not know the capabilities of his own units or even the rules that the umpire is using! A lot of players are put off by these uncertainties. They feel that they should know

everything about their own units as well as the exact rules that the umpire is using. After all, how can they play the game if they don't know the rules beforehand?

This insistence on knowing all is common to many wargamers. While freely admitting that the fog of war prevents them from knowing the dispositions of their enemy, they will steadfastly deny that the same fog of war applies to their own people. These players should study military history more closely; most military operations have been plagued by frequent errors and misunderstandings *within* the respective armies. Many a general has lamented that getting his own troops under control was harder than fighting the enemy. A classic example of this internal fog of war is provided by Napoleon's Waterloo campaign. The invention of the radio went a long way to decrease the internal fog of war but the gains so made were for the most part nullified by the expansion of the combat zone, the decreasing density of troops on the battlefield, and the increasing speed afforded to battles by motorization.

The fog of war is so pervasive that a commander cannot even know the capabilities of his own units with certainty. How can he be sure that his tanks can march precisely 8 hexes every day? The road might be cratered, or the crews might be tired, or maybe the fuel won't get up to the tanks on schedule. Once the unit gets into combat, there's no telling how hard it will fight. The same men who were demons yesterday might be lethargic today. Who can tell? Certainly not the guy who writes the rules.

Ultimately, the argument over how much a player should know boils down to a philosophical difference over the purposes of wargames. I tend to view a wargame as an enjoyable way to simulate history with a friend. Many players, however, treat wargames as a battle of wits between opponents. If I may digress for a moment, I would suggest that those who hold wargames to be tests of intellect bely their inexperience. In a serious match, the outcome of a game is usually decided by experience with the game-system rather than intellect. When equally experienced players meet, the outcome is usually decided by minor slips. I have played too many wargames to attach any significance to winning. Despite this, there will always be a sizable group of people who play to win. These people will never appreciate free kriegspiel because it strips victory of any objective significance. Players whose main interest lies in having an enjoyable, intriguing, and realistic game will find the above objections insignificant. Indeed, the loose atmosphere of a free kriegspiel game encourages players to stop worrying about winning and to concentrate on good playing.

There do exist strong arguments in support of free kriegspiel. Foremost among these is the aforementioned realism argument—the blindness of free kriegspiel games vastly improves the realism of the simulation. But free kriegspiel provides realism over and above that provided by blindness. The open-ended nature of free kriegspiel permits the umpire to simulate reality as closely as he wishes. Minor details normally overlooked in regular games can make themselves felt in free kriegspiel. Crews can tire, one woods hex can be more thickly wooded than another, traffic jams can develop—the list of possibilities is endless. Furthermore, these minor details can be had without an extensive set of rules; the umpire applies them as they crop up. Thus, what is "dirt" to a regular game can be "color" to a free kriegspiel game. Furthermore, free kriegspiel offers more room for variance than a rigid game. The umpire can juggle combat strengths, movement

rates, or anything else he deems appropriate. Under these circumstances the game becomes less locked in; a player cannot rest assured that 3-1 surrounded is a sure kill. There's always the nagging possibility of something going wrong, and that keeps players honest.

Another big advantage of free kriegspiel lies in what it lacks—rules. Rules that don't exist don't have to be studied and memorized. It normally takes me 3-5 hours to familiarize myself with a particular set of rules and perhaps another 10 hours to master them. That's a big time investment! With free kriegspiel, that investment is unnecessary; a player can concentrate on playing the games rather than reading the rules. Furthermore, the elimination of rules destroys what is in my opinion the bane of wargaming—rules nitpicking. Have you ever suffered an embarrassingly crushing defeat because your opponent used a clever trick based on an obscure rule? I've had it happen to me and I've done it to others and it's a pile of feces. Even in games in which victory is not determined by a rules fluke, the character of play is too frequently dominated by nuances of the rules. Free kriegspiel stops the rules-strangulation of game-playing by eliminating the rules themselves.

A parallel advantage of free kriegspiel is its elimination of victory conditions. How many times has good play been warped by a desire to satisfy an entirely artificial set of victory conditions? I don't know, but the very existence of a small set of victory conditions is enough to ruin the utility of an otherwise pleasant game. My solution is to throw the rascals out entirely. Who needs victory conditions? Play for the fun of it, and evaluate your own performance, or discuss mistakes with the umpire after the game. If you simply can't have a game without a winner, let the umpire select the player who did best.

OK, let's say that you're willing to try free kriegspiel. How do you go about it? First you have to organize a player/referee pool. This is a group of players who will work together in learning how to make free kriegspiel work. Obviously the absolute minimum size is three players, but I have found a pool of 5 persons to be optimal. You then select a game around which you will focus your initial efforts. We used *PANZER LEADER* for tactical games. You start off by playing standard blind-games to familiarize everybody with the problems and techniques of blindgaming. Once this is accomplished, you begin to open up the games by permitting the umpire to bend the rules on occasion. Specifically, the umpire could alter the movement allowance of a unit to reflect fatigue, morale, or panic; he could change the column on the combat results table; or he could alter the die roll when resolving combat. The principal pitfall here is the umpire's eagerness to wield his new power in creative and exotic ways. The best example of this that I know of is Mike Shepley's "Roving Nomad" rule in *AFRIKA KORPS*, according to which my supply units were suddenly pillaged by roving nomads from the scorched sands of the Sahara. The umpires must exercise self-control during this stage. The cute tricks must be avoided in favor of the more conservative variations. As experience mounts, and the group develops a common wisdom, more latitude can be taken by the umpires. Soon you reach a stage where you are using the original game rules as a starting point, but the umpire is free to modify any aspect of the game at any time. A problem which might crop up at this time involves simple differences of opinion. I well remember the Germanomaniac who held the Tiger II to be invincible in tank-to-tank combat and was furious when I destroyed one with a Sherman. My feeling on this problem is that the umpire must not be

challenged or questioned during a game. After the game is over all three persons should discuss questionable rulings. Even then, you must accept the occasional fluke. Sometimes in combat things happen which shouldn't happen. Those are the breaks.

Eventually you reach the most advanced stage of free kriegspiel, in which you completely dispense with the standard rules. The umpire makes up a scenario, individually briefs each player on his situation and mission, and regulates the game. Players are free to attempt anything they want; the umpire determines the outcome. At this stage the aforementioned problem involving the player's desire to know more than the umpire is willing to tell can become severe. The natural tension associated with a blindgame can make some people testy, and friction with the umpire is a common occurrence during this stage. The only solution I have found is the adoption of the absolute rule: "The umpire is *always* right, so don't argue with him." Eventually the problem irons itself out; after a player has experienced the frustrations of umpiring he tends to be nicer to his umpires.

A special problem arises from every umpire's nice-guy instincts. Nobody should ever get plastered in a game like this so if one fellow is losing, give him a few reinforcements and maybe throw those decisions his way to even things out. Golly, this really is a sweet gesture but it makes very bland games—nobody can win. I remember a game in which my armor overran a weak position and raced halfway across the board to seize most of my victory objective—all on the first turn! The rest of the game saw me pulverizing the enemy infantry clinging to the remnants of the objective. I threw everything I had at them and inflicted huge casualties, but never enough to finish them and secure the objective. The umpire should have allowed the game to end quickly and had us start over.

The choice of a game for free kriegspiel should be made carefully, for an initial disaster will color all future efforts. Those unfamiliar with blindgaming should probably start with tactical games. These games have low unit counts (a great aid to the novice umpire) and benefit enormously from the blind treatment. Free kriegspiel can be most profitably applied to the platoon level games. The unit density is still within the capabilities of the fledgling umpire and the games have enormous potential with the free kriegspiel treatment. The complexities inherent to tactical combat may prove difficult, but an umpire who uses the game's own rules as a reference point can normally feel quite safe. Operational level games are difficult for an umpire to run blind because of the high unit density but fortunately the mechanics of an operational situation are easily grasped. With careful work an operational game can be successful under free kriegspiel.

I shall close this article with two minor notes on mechanics. First, inasmuch as any blinded game requires two sets of boards and counters, there exists the possibility of counters from different games being mixed together. The culprit here is the umpire, who rushes to board A while still clutching counters from board B. He lays them down, forgets from where they came, and you've got problems. This mess is easily avoided by forbidding the umpire to pick up counters. Let him point.

Another problem is silence. All three participants need to be aware of the fact that the conversations between umpire and player contain valuable information for the other player. The novice umpire must be particularly careful to word his conversations so that they carry no significant military information. It infuriates a player to have his brilliant plans given away by a blabbermouth umpire.



PANZERBLITZ BOOKLETS

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

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

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

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

WE WANT YOU . . .

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

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

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



HPT SUPPLEMENT

TYPE OF UNIT FIRING	CEIN	GUN	AMMO	RDf	FRAG	TUR	HULL	RANGE IN HEXES																																		
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Number Mk. II	3	15mm Bsa	AP	2	5	1a	1b	2	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Qaimir Mk. I	3	2 pdr	AP	2	5	1a	1b	2	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Marron-Herrington	4	Boys ATR	AP-HE	5	15	1	1a	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Sd. Kfz. 222	3	20mm KwK	AP-HE	2	6	5**	1a	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Sd. Kfz. 231	4	20mm KwK	AP-HE	2	6	5	1a	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
AB 40	4	20mm Breda	AP-HE	5	15	4	1c	2	2	2	3	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Pz. Jag. 1B	3	47mm (l)	AP-HE	1	4	10	1a	2	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pz. II F	3	20mm KwK	AP-HE	2	6	5	1a	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Pz. IV F2	5	75mm Bsa	AP-HE	1	3	24	1a	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

* If desired, the 15mm Bsa may be used against soft targets at 5 fragmentation factor per burst even though it only fires AP.
** Note that all 20mm weapons are stated for 4, 5, or 10 round bursts.

WEAPON UNITS	TYPE	AMMO	RDf	FRAG	FOF	RANGE IN HEXES																																		
20mm Solothorn	1	ATR	AP-HE	5	10	380	2	2	3	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
20mm FLAK	6	AAA	AP-HE	8	12	10	380	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
37mm PAK	6	ATG	AP-HE	4	7	2	180	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
37mm FLAK	7	AAA	AP-HE	20	30	2	380	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
75mm Italian	7	AAA	AP-HE	3	6	13	380	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
76.2mm (l)	8	ATG	AP-HE	3	7	27	180	2	2	3	3	4	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
150mm SIG	7	Arty	HE-S	0	1	58	100	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

TARGET VEHICLE
Pz IV F2

AREA IMPACTED:

DICE ROLL	2	3	4	5	6	7	8	9	10	11	12
Front	G	GM	TUR	TR	LH	UH	UH	UH	UH	GM	GM
Flank	G	TR	TR	LH	LH	UH	UH	UH	UH	TR	TR
Rear	TR	TUR	TR	H	H	H	TR	TR	TR	TR	TR

WEAPON FIRING	FRONT				FLANK				REAR			
UH	LH	TUR	GM	UH	LH	TUR	H	TUR	H	GM	TR	
Boys ATR	-	-	-	-	-	-	-	-	-	F/C3	F/C2	M/C3
15mm Bsa	-	-	-	-	-	-	-	-	-	F/C3	M/C2	M/C2
20mm Breda	-	-	-	-	-	F/C1P3	K/C3	F/C1P3	F/C1P3	F/C11	F/C9	M/C9
2 pdr	C1P1	M1P1	F/C2P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F/C2P1	F	M
37mm M6	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F/C2P1	F	M
40mm Bofors	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
6 pdr	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
75mm M2 or 75mm (l)	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
25 pdr	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	

TARGET VEHICLE
Pz II F

AREA IMPACTED:

DICE ROLL	2	3	4	5	6	7	8	9	10	11	12
Front	GM	TUR	TR	UH	UH	LH	TR	UH	UH	GM	GM
Flank	TR	TR	UH	UH	UH	UH	UH	UH	UH	TR	TR
Rear	H	H	TR	TR	H	H	TR	TR	TR	TR	TR

WEAPON FIRING	FRONT				FLANK				REAR			
UH	LH	TUR	GM	UH	LH	TUR	H	TUR	H	GM	TR	
Boys ATR	-	-	-	-	C1P1	F1P1	M1P1	F1C1	F1C2	F5	M5	
15mm Bsa	-	-	-	-	C1P2	F2P1	M2P1	F2C1	F2C2	F7	M7	
20mm Breda	C1P1	M1P1	F/C1P1	-	K/C1	K/C2	K/C2	K/C2	K/C2	F/C1P1	M	
37mm M6	K/C1	M1P1	F/C1P1	-	K/C1	K/C2	K/C2	K/C2	K/C2	F/C1P1	M	
40mm Bofors	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
6 pdr	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
75mm M2 or 75mm (l)	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	
25 pdr	K/C2	M1P1	F/C1P1	-	K/C2	K/C1	K/C2	K/C2	K/C2	F	M	

TARGET VEHICLE
Sd. Kfz. 222 (armored car)

AREA IMPACTED:

DICE ROLL	2	3	4	5	6	7	8	9	10	11	12
Front	TR	TR	UH	UH	LH	TR	UH	UH	UH	GM	GM
Flank	TR	TR	UH	UH	UH	UH	UH	UH	UH	TR	TR
Rear	H	H	UH	UH	H	H	UH	UH	UH	H	H

WEAPON FIRING	FRONT				FLANK				REAR			
UH	LH	TUR	GM	UH	LH	TUR	H	TUR	H	GM	TR	
Boys ATR	C1P1	F2P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
15mm Bsa	C1P1	F2P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
20mm Breda	K/C1	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
37 to 40mm	K/C1	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
6 pdr. and above	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	

TARGET VEHICLE
Pz. Jag. 1B

AREA IMPACTED:

DICE ROLL	2	3	4	5	6	7	8	9	10	11	12
Front	G	TR	TR	UH	UH	UH	UH	UH	UH	UH	UH
Flank	G	LH	TR	LH	UH	UH	UH	UH	UH	UH	UH
Rear	H	TR	TR	H	UH	UH	UH	UH	UH	UH	UH

WEAPON FIRING	FRONT				FLANK				REAR			
UH	LH	TUR	GM	UH	LH	TUR	H	TUR	H	GM	TR	
Boys ATR	C1P1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	
15mm Bsa	C1P1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	
20mm Breda	K/C1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	
37mm M6	K/C1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	
40mm Bofors	K/C1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	
6 pdr. and above	K/C1	M1P1	F/C1	-	C1P1	F2P1	M2P1	F/C1	F/C2	F/C3	M/C3	

TARGET VEHICLE
Sd. Kfz. 231 (armored car)

AREA IMPACTED:

DICE ROLL	2	3	4	5	6	7	8	9	10	11	12
Front	TUR	LH	LH	UH	UH	UH	UH	UH	UH	GM	GM
Flank	TR	TR	UH	UH	UH	UH	UH	UH	UH	TR	TR
Rear	H	TR	TR	H	UH	UH	UH	UH	UH	H	H

WEAPON FIRING	FRONT				FLANK				REAR			
UH	LH	TUR	GM	UH	LH	TUR	H	TUR	H	GM	TR	
Boys ATR	C1P1	F2P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
15mm Bsa	C1P1	F2P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
20mm Breda	K/C1	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
37mm M6	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
40mm Bofors	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
6 pdr.	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
75mm M2 or 75mm (l)	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1	F/C1P1	F/C1P1	-	M	
25 pdr.	K/C2	M1P1	F/C1P1	-	C1P1	F2P1	M2P1					



WAR AT SEA

GERMANS: Richard Hamblen
 BRITISH: Mick Uhl
 COMMENTARY: Don Greenwood



Don Greenwood performed the development chores for WAR AT SEA and between pre-publication testing and post-publication ignominy at the hands of his wife has probably logged virtually dozens of WAR AT SEA games.

BRITISH TURN 1 –

At first glance the preponderance of British ships would indicate an easy win for His Majesty's navy. Yet, analysis of the starting forces reveals that the British can guarantee parity in only 3 of the 6 board areas. This gives the Axis player an average of +2.5 POC on the first turn. By my reckoning the British can afford to give up only four areas total (not counting the Med or Baltic) throughout the game and still expect to win. Any more errant rendering of POC will probably doom the British to defeat. My choices on the first turn are threefold: 1.) to defend solidly three areas, and in the next turn try to enforce a blockade by controlling both the Barents and North Sea in force, thus granting the Axis a sizable first turn lead. 2.) Try to take the Mediterranean, in which case the Germans will be forced to make more daring excursions into the Atlantic to compensate for the point loss, or 3.) take 4 areas and risk being knocked out of one in the first turn.

The first choice is the safest as the Germans would be foolish to risk a major defeat to their fleet when there are plenty POC to pick up at no risk. The drawback is that it gives the Axis an early POC lead without risking a single piece. This in turn allows him to build up his fleet for greater strike potential later in the game, and thus makes it easier for him to gain the extra two or three areas he needs to insure victory. The second choice is very risky as the British can suffer severe damage at the hands of the Italian fleet which is landlocked inside the Mediterranean anyway and can be practically ignored if pursuing a strictly Atlantic strategy. It does have the advantage of practically forcing the Italian fleet to do battle at poor odds where a major British victory may result in 2 POC for the Mediterranean every turn of the game. It also tends to force the issue with the Italian cruisers which will be unable to move through a British controlled Mediterranean on turn 2. The third choice gives the British a POC advantage if unopposed and virtually forces the Germans to come out and chance harmful attrition of his fleet. This is the major reason for using this strategy as even attrition of forces is much in my favor. Even if I lose the battle I will not be much worse in the points column than if I just protected three areas. If I am able to knock out 2 or more ships, I'll have severely limited future German possibilities. In many ways the number of ships contending for an area is more important than the relative strength of those ships. Generally speaking, eight 1-1-7's are much more likely to win a battle than two 4-9-6's as the German battleships can fire on only two targets per round

of combat. Thus my strategy early in the game will be to destroy as many of the German ships as I can. Should he come out I will concentrate on his light ships with surface gunfire and his big ships with my air attacks. If he gains an advantage in the first round of combat I'll attempt to disengage. I can't lose any more POC than if I hold three areas, and if he chooses not to risk combat I'll have gained maximum POC on the first turn.

GERMAN TURN 1 –

To a certain extent, this game will be a test of the "Fuzzy Wuzzy Formula" method of calculating the real combat value of units in a game. This method was explained in an earlier *GENERAL* (Vol. 13, No. 3) with a specific explanation of its application to *WAR AT SEA*; as the German player I plan to rely on it heavily when deciding whether to come out and fight.

The British are trying to box the German fleet in; when the British try this (especially on the first turn), the paramount German concern must be to maintain the mobility of the German fleet – the British can safely defend two areas, so the Germans must maneuver so as to be able to threaten three.

Assuming reasonably even losses, the British will always be able to maintain superiority in two areas throughout the game, but they will have to stretch to defend three. Consequently, the keystone of German policy must be to threaten at least three areas each turn. This British setup on the first turn is therefore extremely threatening; they are threatening to box the German fleet in from turn 1, before the Germans have France as an alternate base. As a result the Germans must maneuver so as to free themselves; breaking this British blockade is the first matter of importance. (This ignores the Mediterranean, where the British dare not venture until they have made careful preparations to overcome the powerful Italians.)

To break the British blockade the Germans must either escape to the South Atlantic – winning the battle there – or win in either the North Sea or Barents. The South Atlantic scheme suffers because it will split the German fleet – the powerful *Bismarck* and *Tirpitz* will be blockaded in Germany as they enter the game, and the German fleet will be unable to reunite except in the North Sea under the guns of an alerted and superior British fleet. The Barents, on the other hand, is a fortunate area in which to fight due to the German air coverage there offsetting Allied carrier strikes.

The only other consideration – trying to gain the upperhand in ship kill ratio – is not tempting to the Germans, since their fleet is weak in killing ability before the arrival of the big battleships. They do have to be careful of getting into an even attrition battle, however, in which the British would pull ahead in ship-kill ratio.

Examining the Fuzzy Wuzzy numbers for the British deployment, the British are weakest in the Barents – thanks to the failure of the *Queen Elizabeth* to make it there – in both battle-winning and killing ability. Attacking there, the Germans should have a 3:2 advantage in both – with the added advantage that as the battle turns against the British the Germans should be able to pick off stragglers and increase the British loss.

So we strike in the Barents! For such a crucial battle, the free point in the Baltic will be ignored – the whole fleet will sail, with U-boats in the van. This gives up something in the strategic U-boat war – statistically, probability dictates the U-boats will take casualties without even remaining in the area, but every additional chance for victory is worth taking when the whole fleet is at stake. The U-boats would probably be ineffective in any area, given the British set-up; if they weren't needed to help the fleet, their best bet would be to just wait and build up strength this turn. But they are needed.

The Italians have split to hold the Mediterranean and offer the fewest targets to the inevitable British airstrike; the point being to prevent attack of more than two of the more mobile cruisers.

Battle Strategy – The U-boats will be committed to rid the Barents of the *Ark Royal* before air strikes are launched. The German airstrikes will be used to hit the main British battle line in hopes of disabling a major surface vessel. 3:2 odds is no guarantee of success, after all! We will ignore the *Ark Royal* during our airstrikes and during the first round of surface combat. We want to sink the *Ark Royal* in the interests of the U-boat war, not spare her with some silly "disabled" that drives her back to port after having done all the damage she can.

BATTLE OF THE BARENTS SEA –

ASW: The British have 9 dice rolls and manage to sink 1 U-boat and disable the other two.

AIRSTRIKES: The *Ark Royal* contingent hits *Gneisenau*, *Scharnhorst*, and *Blucher*; disabling the former. The German land based air attacks the *Hood*, *Renown*, and *Repulse*; sending the latter back to Britain.

SURFACE COMBAT:

Attacker –	Target –	Fire –	Results –
Hood	Scharnhorst	5,5,3,1	Disabled
Renown	Blucher	5,4,1	Disabled
3 cruisers	Hipper	4,4,3	–
Scharnhorst	Hood	6,6,1	4 hits
Spee	Hood	2,3	–
Blucher	Renown	6,3	Sunk
Scheer	Renown	5,2	–
Lutzow	Renown	3	–
Hipper	Sussex	1	–

The British, finding themselves on the wrong end of a 7+4 firepower ratio disengage in two

best to wait a turn before attempting to retake the Barents. I'll have most of my reinforcements in by turn 3 and will be ready to retake either the Med or the Barents.

GERMAN TURN 2 -

The British are contesting only two areas that the German fleet can get to, and in both the British would have superiority in both battle-winning and ship-killing ability. The Germans can not afford to sortie into such strength and will be content with the open areas for this turn. Even the South Atlantic is defended enough to make Italian cruiser sorties and U-boat attacks unattractive; the U-boats will build strength and the Italian fleet will split to minimize the effects of the British air strike.

The British attack against the old Italian battleships portends British incursion into the Mediterranean in the near future. POC: +2 Axis; Total: +3 Axis.

AIRSTRIKES: The British land based air attacks the *Fiume*, *Giulio Cesare* and *Caio Duilio* with no effect.

NEUTRAL COMMENTARY - There is little to criticize. The German would be a fool to venture against this stacked defense and the British player is quite correct in waiting until turn 3 before entering the Barents. However, the arrival of his third turn reinforcements is more than offset by the German's gain of the *Tirpitz* and another U-boat. The important gains are the availability of the Russian port and the possibility of a sortie by the Russian Baltic fleet. The loss of 3 fast ships in the Barents last turn will hurt when the inevitable swing north must take place.

I can't believe that the British player is seriously considering contesting control of the Mediterranean after his first turn. The only time to even contemplate that is during the 4th turn after 3 very successful air attacks. With no punches thrown, this turn is a draw.

BRITISH TURN 3 -

I've split my blockade force into 3 areas, one being the Barents rather than the Med to take advantage of the *Okt. Revolucia*. I can get a maximum of +4 POC if he doesn't enter the Baltic so I'm sure he'll send at least two ships there. This still gives me the Barents and +1 POC for the turn. The German can't get much stronger while I can. He may wait a turn for full U-boat potential but I doubt it as not utilizing the German fleet while at full strength is wasteful. He may well decide to wait a turn until the Baltic is cleared. I've tried to distribute my strength so that if he does attack, the Barents will be his first choice and if successful he'll gain the minimum point advantage.

GERMAN TURN 3 -

My strength ratio is at its most favorable point and as the British are trying to contest the Barents this could well be the turn of decision. The British get as much to the Barents as probability would lead one to expect. The loss of the *Barham* leaves him with 19 attack factors out of a probability of 18.5.

The British strength is evenly divided between the three areas I can reach with the German fleet. With no long-term advantage to be gained in the North Atlantic, that area is not attractive, so the German choice lies between

the Barents and the North Sea. The British are weaker in the Barents, and their faster ships are at stake to boot; that is the place to attack. The Germans have almost a 2:1 advantage in battle-winning ability and about 3:2 advantage in ship-killing. The U-boats would almost certainly be wasted in the Barents - too many ASW points - and there's a better use for them anyway. This looks like a good turn to go after the South Atlantic with U-boats and the Italian cruisers; the odds are better than 3:2 against an Italian win, but victory will pay big dividends. In addition, a U-boat should survive to deprive the British of Control of the South Atlantic and enable the Italians to escape later - possibly to the North Atlantic.

Once more with a crucial battle at stake I'll have to give up the Baltic. I want to minimize the effect of the British air attack in the Med by giving him only one weak ship to attack. Admittedly, this leaves the unfortunate possibility that he can return all the Italians to port and rob me of my POC for the Med but the odds of this happening are about 170 - 1. The preservation of the Italian fleet is worth the risk; I am now actively pursuing a strategy of maintaining a favorable ship-kill ratio.

BATTLE IN THE SOUTH ATLANTIC -

ASW: The British have 9 ASW rolls but succeed in eliminating only 1 U-boat. The three remaining subs fire twice on the *Ramillies* and once on the *Courageous* with no effect.

AIRSTRIKES: Planes from the *Courageous* & *Eagle* attack 3 Italian cruisers, sinking the *Zara*.

SURFACE COMBAT:

Attacker -	Target -	Fire -	Result -
Ramillies	Pola	6,6,5,2	Sunk
Norfolk	Gorizia	4	-
Dorsetshire	Fiume	2	-
Fiume	Dorsetshire	6	Sunk
Pola, Gorizia	Norfolk	3,3	-

The Italians disengage and are not pursued by their slower adversaries.

SECOND BATTLE OF THE BARENTS -

AIRSTRIKES: Planes from the *Formidable* and *Victorious* have remarkable success attacking the 4 largest German vessels and administer 2 hits on the *Bismarck*, 4 on the *Tirpitz* and 2 on the *Scharnhorst*. The Norwegian based Luftwaffe does almost as well attacking the *Duke of York*, *King George*, and *Prince of Wales* scoring 2 and 5 hits respectively on the latter vessels.

SURFACE COMBAT:

Attacker -	Target -	Fire -	Result -
King George	Blucher	5,5,4,4	Disabled
Repulse	Prinz Eugen	6,4,2	Sunk
Exeter, Suffolk	Hipper	5,1,1	Disabled
Prince of Wales	Duke of York	5,5,4,4,3	Disabled
Cumberland	Gneisenau	5,5,4,4,3	Disabled
Devonshire	Scharnhorst	1	-
Gneisenau, Scheer	King George	2,4,4,4,6	Sunk
Tirpitz	Repulse	1,4,4,6	Sunk
Lutzow		5,6	-
Bismarck	Duke of York	2,4,5,6	Sunk
Scharnhorst		3,4,6	-
Prinz Eugen	Suffolk	5	Sunk
Blucher	Cumberland	3	-
Hipper	Devonshire	4	Disabled

The British carriers and cruisers disengage and leave the crippled *Prince of Wales* to her fate. The Germans, all fast ships disabled, can only pursue the *Prince of Wales*. The badly damaged *Scharnhorst* does not pursue. The *Prince of Wales* goes down before the massed fire of 12 German volleys but scores an additional 5 hits on the *Tirpitz* for a total of 9.

MEDITERRANEAN AIRSTRIKE: British land based air attacks the three Italian battleships at sea and scores two hits on the *Littorio*.

GERMAN POST BATTLE COMMENTS -

The exchange of airstrikes weakens my ability to win the battle - my odds drop to just over 3:2 - but, strangely enough, my ship killing ability is increased relative to the British. After the British 1st round it is clear that the carriers will get away. To attack the extra carrier I would have to attack every British ship of the line - and *Prince of Wales* might escape, disabled. I would rather guarantee the battle and concentrate on crippling British surface strength.

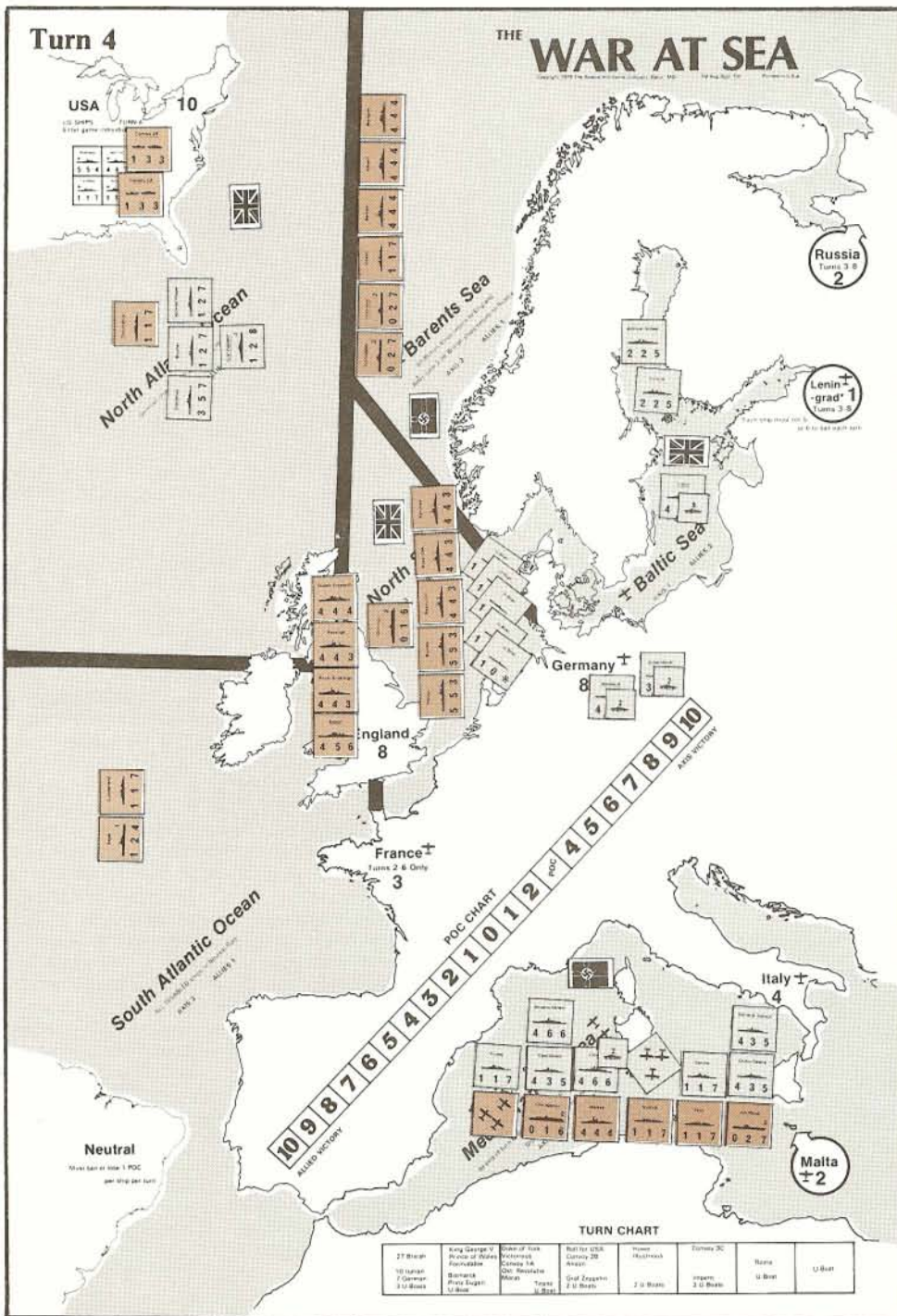
He has disengaged as I expected. I don't want to risk the *Scharnhorst* in pursuit, but he'd have to get very lucky to sink the *Tirpitz* (a 2.5% chance), so she will pursue - and perhaps draw away fire that might well sink a pocket battleship. POC: O; Total +3 Axis.

NEUTRAL COMMENTARY -

Despite the stand-off in POC, this turn has been a disaster for the British. Six of their fastest vessels were lost including 3 prize battleships. The Axis losses (2 Italian, 1 German cruiser) are insignificant in comparison. Although the British have maintained their carrier (and thus ASW) strength, they are fast losing the ability to stand up to the German in a surface battle. The 13 hits of accumulated damage may crimp the German style for awhile but will not prevent the Germans from fielding an almost perfect fleet on turn 5 - in plenty of time to contest the passage of 2 of the vital Murmansk convoys.

The British have only themselves to blame for their misfortune as their disposition invited disaster even had the *Barham* arrived on station in the Barents. A much safer move would have been to abandon the North Atlantic and reinforce the Barents with all the cruisers and three 4-4-4's. Those 4's which failed to make station this turn could have been harbored in Russia and been guaranteed in the Barents for all future turns, releasing some of the faster ships for duty elsewhere. The *Ark Royal* should reinforce the North Sea with the *Resolution* and *Royal Oak* dispatched to the South Atlantic. This gives the British a decisive edge in all 3 areas and completes the German blockade. Even if the Germans sortie to France they are still blockaded and the British need fear only subs in the North Atlantic on turn 4. Discouraging an encounter on Turn 3 makes sense as the Germans are practically at the zenith of their strength while the British can still look forward to substantial fleet gains and Allied support. To finish the above placement I would withdraw the *Octabrsk Revolucia* from the Baltic. The German has no easy targets - why give him one.

This move gives the German 3 more POC for a POC lead of 6. But this is the last turn that he will be given an area free. He will have to fight for the rest at even or worse odds. If the convoys get through they should provide a narrow victory. If the German enters into a major battle and loses, the victory could be more pronounced. Continually giving the German his choice of available battle sites in hopes of extracting even



– but in ship killing ability the British would be almost equal. I'm doing too well to let the ship-kill ratio slip away from me by even attrition. It is fortunate that he moved the convoy back to the US.

So it looks like the Germans will have to plan on moving into the Atlantic this turn, which means that steps will have to be taken to prevent being blockaded in whatever port I return to. I'll have to return to France and use the U-boats to free the South Atlantic, or I'll have to return to Germany and send the U-boats to the Barents. Since my large German ships will have to repair in Germany anyway, I'd have to split my fleet with the big ships blockaded in Germany. On the other hand, freeing the Barents will give me fewer POC. Furthermore, the Barents might be able to fight off the U-boat attack, with luck, while the

U-boats should strengthen the Italian cruisers enough to control the South Atlantic. There are three areas I can free – South Atlantic, North Sea, or Barents. The U-boats will probably succeed in any of these areas, but the British are strongest in the Barents and the North Sea is always a more desirable target. I could try for the South Atlantic but with the Italian cruisers so weak I could easily fail to pick up the POC anyway; and I want the Italians to seal the doom of the Mediterranean fleet anyway. Relying on the South Atlantic would mean that my sortie fleet would have to return to France to be free – and then the German fleet would be split, since the big ships must repair in Germany. It is far better to free the North Sea: then with my fast sortie ships in France I can threaten FOUR areas next turn, with a nearly intact fleet.

Attacking his fast ships is beginning to pay dividends. The failure of most of the British fleet to make it to the Mediterranean, gives me a chance to nail him to the wall. All Italian ships will sail for this fight – damaged, cruisers, whatever. For my sortie I want only fast ships; otherwise, somebody might get turned back to Germany and tempt him into bombing, possibly delaying my repairs. They'll return to France. With *Tirpitz* eating up enormous amounts of repair, only two ships can repair in Germany this turn so we'll deprive him of any third target and move into the Baltic in force. The German side is getting the best of all worlds: repairs, unified fleet, able to threaten four areas, killing more British ships, and lots of POC.

ASW: The British have 8 ASW rolls in the North Sea and manage to sink two subs. The 3 survivors attack the *Glorious* and manage to damage her with 1 hit.

AIRSTRIKES: Planes from the *Graf Zeppelin* put an early end to the battle in the North Atlantic, disabling the *Dorsetshire*. In the Mediterranean, planes prove less decisive. A combination of carrier and land-based air attack all 7 Italian vessels and manage only to disable the *Fiume*. German land based air does the same to the *Norfolk* after attacking the lone 3 British surface vessels.

SURFACE COMBAT –

Attacker –	Target –	Fire –	Results –
Veneto, Duilo	Courageous	6,6,5,4,1,4,1,2	Sunk
Littorio	Malaya	6,4,4,2	4 hits
Cavour, Cesare	Ark Royal	6,6,5,1,6,5,2,2	Sunk
Gorizia	Kent	6	1 hit
Malaya	Veneto	6,5,4,2	Disabled
Kent	Gorizia	4	–

The second round of combat comes swiftly to a close as the crippled *Malaya* and *Kent* are sunk by the massed fire of 4 Italian battleships.

GERMAN POST BATTLE COMMENTS –

In the Med I wanted to get his aircraft carriers for sure before they could run; there was no way I could lose the battle after the air strikes, and the slow ships could be exterminated at will.

In the North Sea I wanted to cut down his area of parity, his ASW capability, so I went after the carrier, with some results.

In the North Atlantic my primary concern was to avoid losses or even damage, since the battle was in the bag and the cruiser is not that important; thus I used the airstrike instead of waiting to blow him apart; he got away but I didn't have to risk taking fire.

POC: Axis +4; Total: Axis +7

NEUTRAL COMMENTARY –

The results of the turn pretty much speak for themselves; four more British ships have been lost with no loss to the Axis. At this rate, it's just a matter of time before Axis ships put to sea hunting for targets! The British have lost 13 ships to 2 for the Germans and is 7 POC behind. When the Americans and Russians fail to answer the bell for turn 5 the British player gives up the ghost and concedes. With the combination of ship losses and POC gain this turn the German has rendered the knockout punch.

The German coup de gras is first rate. More POC could conceivably have been gained by moving into the S. Atlantic with U-boats and Italian cruisers, but the actual Axis move is better in the long run.

THE REST OF THE CALCULATION

by Robert Beyma

I have seen many games of *WAR AT SEA* and although a few are won outright in the early going it is relatively rare to see one conceded before the 8th turn. That is not to say that the British play was all that atrocious but rather that a combination of mistakes and dice rolls did him in. I have seen him play far stronger games of *WAS* on other occasions, however, including several in which he bested me.

Although the course of events preceding Turn 4 forced him into taking drastic measures I can not agree with the strategy pursued on this final turn. The very thing which gave the German his initial edge; i.e. inability of a slow ship to arrive at a posted station, cost the British again. Apparently one lesson was not enough. If you can't afford to lose a ship prior to battle when at parity with an opponent, it follows logically that you can hardly stand to risk 5 when you're decidedly weaker than him. The attempt to move into the Med cost the British a full third of their killing power tied up at British docks while Axis forces had a field day.

I can not see, even assuming optimum travel die rolls, the wisdom of putting an inferior force into the Med. Sending two carriers to the Med is a waste of airpower and pure folly in any case to rely so heavily on airstrikes when failure costs you the carrier. I maintain that the British player's best chance lay in attempting to hold the 4 westernmost areas with roughly equal forces and gambling that he could luck out and win a major battle with inferior forces. The odds were definitely against him but a chance for victory remained if he could get the convoys through. The move to the Med was akin to calculated suicide.

The German player's summation tells much of the story: "I think the British player lost because of the way his ship-kill ratio went, particularly with regard to his fast ships. When the time came to maneuver, he was forced to gamble on deploying slower ships - and he lost. At that point the game broke. Turn 4 was the obvious killer but in a subtler way the British lost on turn 3 when he lost the heart of his fast ships - and in a way his doom was foretold with the loss of those few crucial ships on turn 1 - ships that could have turned the tide on turn 3."

In all fairness, there's a part of the story that remains untold and which undeniably plays a major role in any *WAR AT SEA* game. - LUCK. An extremely cursory examination of the dice rolls was made to determine just how fair lady luck was in this instance. By admission this study is hardly proof positive of the overall luck factor of the game. No attempt was made to count 4's which became 5's, or 5's which became hits for undamaged German ships. Neither was any attempt made to study the success rate of ships moving through two areas - or the relative value of hits once rolled or hits wasted against an already sunk target. What we did do is total the number of dice rolled for each side during combat and calculated the number of 5's and 6's rolled. This study revealed 17 "5's" and 15 "6's" rolled by the British in 97 rolls which is slightly above average luck for 5's and slightly below average for hits. The Germans, on the other hand, rolled 17 "5's" and 25 "6's" in 95 die rolls, or a whopping 26.3% hit roll average when only 16.7 can be expected. The disabled results were also slightly above average for the Axis player.

This study can hardly take credit away from the German for the victory for his was definitely the superior game. However, it becomes a little easier to understand how the game degenerated into a rout given the German's average roll.

The *THIRD REICH* combat results table bears some interesting analysis. The 2-1 is probably the most important attack in the game. While not a guaranteed victory, it is so close to one that most players take 2-1's for granted along their paths of conquest. The numerous counterattacks make analysis a bit more complicated than on conventional CRT's. We will be primarily concerned with the probability of victory and the expected attacker losses. The defender will always be eliminated except on an A-Elim roll.

First, let us examine the probability of each possible result. The initial iteration (the first attacker roll followed by the first defender roll) produces the following results:

P(full exchange)	=	1/6	=	1/6
P(CA exchange)	=	1/3 * 1/3 + 1/6 * 1/3	=	1/6
P(A-Elim)	=	1/6 * 1/6	=	1/36
P(D-Elim)	=	1/3 + 1/3 * 1/2 + 1/6 * 1/6	=	19/36
P(no result)	=	1/3 * 1/6 + 1/6 * 1/3	=	1/9

When you get a no result, you must go through a second iteration and so on. Mathematically this becomes

$$P(\text{total}) = P(\text{initial}) [1 + 1/9 + 1/81 + \dots + 1/9^m]$$

This expression reduces to $P(\text{total}) = 1.125 P(\text{initial})$. Therefore, the actual probabilities become:

P(full exchange)	=	1/6 x 1.125	=	.1875
P(CA exchange)	=	1/6 x 1.125	=	.1875
P(A-Elim)	=	1/36 x 1.125	=	.03125
P(D-Elim)	=	19/36 x 1.125	=	<u>.59375</u>
				1.00000

Thus, the actual probability of losing a 2-1 becomes 1/32 and not 1/36 as one might initially expect. Hence we see why the 2-1 is so often taken for granted.

The next step is to determine the expected losses. Actually, this is quite easy to do once the probabilities have been calculated. Merely figure up how many BRP's you would lose on each type of result.

a= losses on a full exchange
b= losses on a CA exchange
c= losses on an A-Elim

$$\text{Expected Losses} = .1875 (a+b) + .03125 (c)$$

An interesting feature is that the full exchange result will usually contribute more to the expected losses than the A-Elim.

The 3-1 is a guaranteed attack with about 35% less expected losses than the 2-1. The probabilities of each result and the expected losses can be computed in a similar manner to the 2-1. These results are:

P(full exchange)	=	.1714
P(CA exchange)	=	.1143
P(D-Elim)	=	<u>.7143</u>
		1.0000

$$\text{Expected Losses} = .1714 (a) + .1143 (b)$$

While the 3-1 is clearly superior to the 2-1, the offensive player in *THIRD REICH* can rarely afford the luxury of 3-1's on his major attacks. Limited resources, too few hexes from which to attack, and enemy defensive air will usually limit the major attacks to 2-1 or even 1-1.

The 1-1 attack is a bit more difficult to analyze because the CA odds may vary depending on the factors involved. Usually the CA will be at 1-2 or less since the defender is nearly always at least doubled on defense. This almost invariably produces a victory for the attacker. The rough spot on the 1-1 is that there is at least a 1/6 chance of an A-Elim. Full exchanges, a 1/3 chance, tend to be very costly. Be careful to include an extra piece in your 1-1's so that you will have a piece left over to advance into the hex. This leaves about a 5/6 chance of winning the terrain. Not a bad chance but expect a lot more losses than on 2-1's and 3-1's.

Let's use the Polish defense problem presented in contest #69 (Vol. 12, No. 4) as an example for our computations. Against this defense an initial 2-1 attack may be made against Warsaw. The attacking force will consist of two 3-3 infantry units plus 18 air factors. The two Polish air units are counteraired. For optimum results a 5-1 against an adjacent 1-3 is set up. This attack will only have to be made if both 3-3's are lost in a full exchange. An armor unit could then exploit into an unoccupied Warsaw.

$$P(\text{victory}) = 1 - P(\text{A-Elim}) = 1 - .03125 = .96875$$

$$\text{Expected Losses} = .1875(24+6) + .03125(60) + .1875 (1/6 \cdot 3) = 7.59$$

These results are slightly less favorable than the solution featured in the magazine because of the increased accuracy of the calculations due to the iterations.

Let's also examine a slightly different defense. Move the 1-3 from Brest-Litovsk to the hex northeast of Warsaw. The optimum method of attacking this defense is to 2-1 the 2-3 and to attack Warsaw with a 3-1 exploitation attack. Note that the 3-1 attack will not be made if the 2-1 fails. The best tactical disposition is a 4-6 + 4 air factors against the 2-3 and (3) 4-6's and 12 air factors against Warsaw at 3-1.

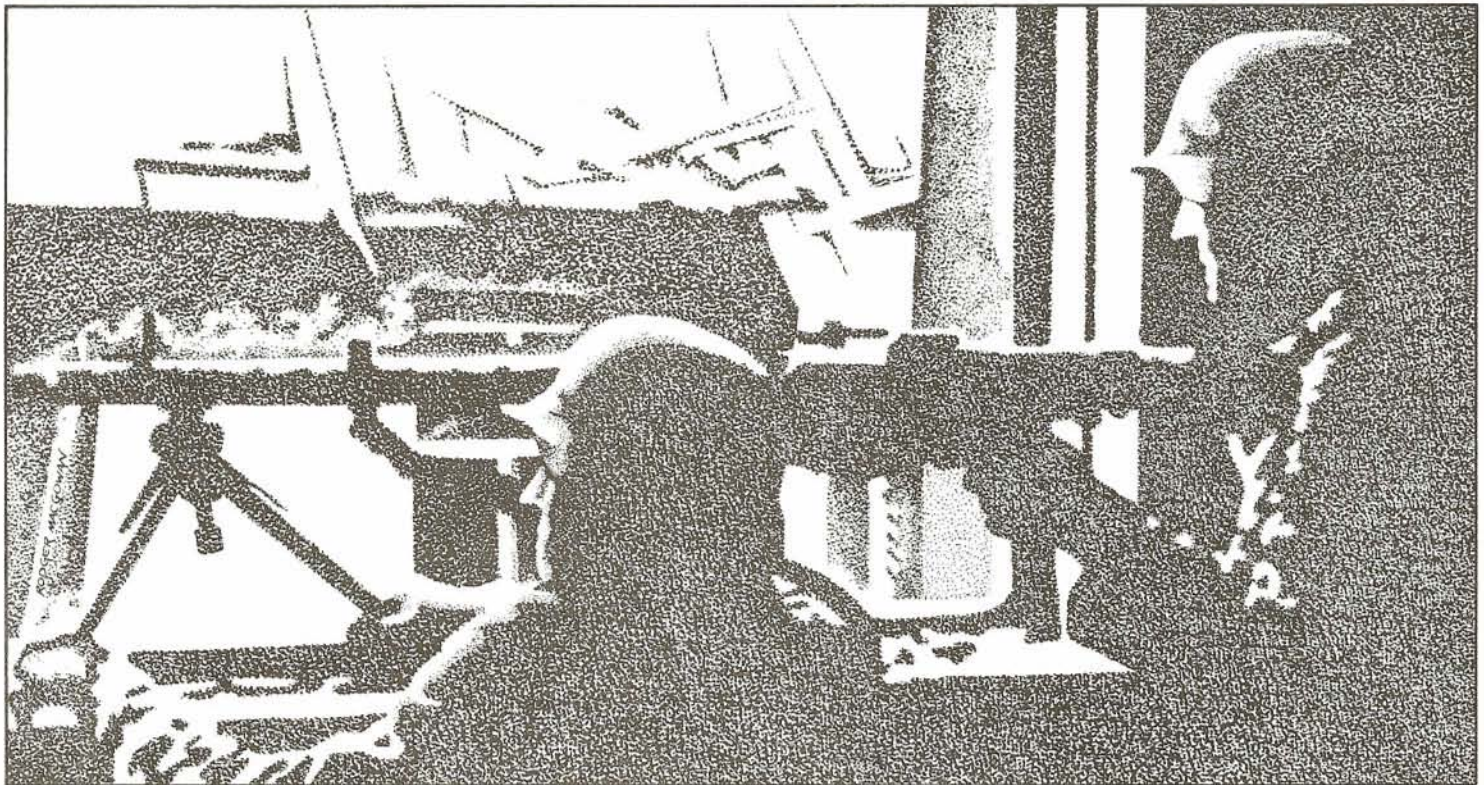
$$P(\text{victory}) = .96875 \text{ (or } 31/32)$$

$$\text{Expected Losses} = .1875(12+6) + .03125(20) + .96875 [1.1714(16) + .1143(8)] = 7.54$$

The results are consistent with the contest solution. However, there is more to these calculations than one might have thought. While the back door approach is 0.05 BRP cheaper for the Germans it does have two advantages. First, it forces commitment of the German armor to the east if Poland is to be conquered on turn 1. Second, the probability of no German losses in taking Poland is reduced. The moral is that there are frequently other considerations besides expected BRP losses.

I hope that I have given some insight into analyzing the *THIRD REICH* combat results table. While one does not normally stop a game to make precise calculations, players can develop a feel for the risk and expected losses inherent in a certain line of play. The 2-1 is the attack to use to get the job done. 3-1's are nice when you can afford them. 1-1's are not bad but save them for really important situations when you cannot get a 2-1.





BUT WHAT IF . . .

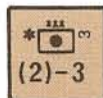
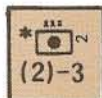
By Richard Hamblen

RUSSIAN CAMPAIGN VARIANTS

I. ARTILLERY CORPS: add the following units to the game:

RUSSIAN
available '43

GERMAN:
available '45



available '44

available '43

These units are not reinforcements—they can be taken as replacements, starting with their dates of availability. When taken as replacements each unit counts as an armored guards unit.

When defending these units use their combat factor normally (the number in parentheses).

When **ATTACKING**, in addition to attacking with their combat factors these units **ALSO** increase the odds of the attack. Each attacking artillery unit raises the odds one level—i.e. a 5-1 becomes a 6-1. More than one artillery unit can attack the same target, raising the odds one level for each artillery unit; however, if the German artillery unit and Stuka attack the same target(s), the combat odds are increased only 3 levels—the effect of the artillery unit is lost.

Artillery units move and attack like infantry units of their respective armies, attacking units in their ZOC on both impulses.

SPECIAL: The Russian player can make an automatic victory attack if the attack includes an artillery unit.

II. SEA TRANSPORT

There is no limit to the number of invasions each side can make in the Black Sea during the game.

Once any sea movement fails (i.e., the transported unit is “sunk” without landing), that side may not use **ANY** sea movement on that sea for the remainder of the game.

III. ALTERNATIVE STRATEGIC SCENARIOS

Any or all of the following variations can be instituted in a game of *RUSSIAN CAMPAIGN*. Set up the game and proceed normally until the game turn indicated in each variation—at that point the indicated player may choose whether to trigger that variation.

THE MEDITERRANEAN DISTRACTION

Hitler decides not to invade the Balkans. The Greek and Crete campaigns do not happen; Italy remains tied up in Albania, Balkan politics are less favorable to the Germans, and the British, undistracted by the Greek campaign, are able to concentrate on Rommel.

After the Russian setup but before the German setup the German player decides whether to employ this section. If he does:

1. The game starts with the March/April 1941 turn. The German player sets up and then rolls for weather normally, but if “snow” is rolled Axis units are **NOT** halved because of supply—the “first winter” mentioned in the supply rules is always the winter starting in late 1941/early 1942. (If the players agree beforehand, they may use the historical weather—Mud.)

2. Rumania and Hungary are neutral and cannot be entered by Axis nor Russian units. Neither side can trace supply through either country.

Rumanian and Hungarian units become available as listed on the German OB chart, but they must stay within their respective countries, at least one hex away from any border. The Axis player may

move them normally, subject to the above limitations.

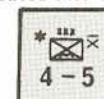
As long as Rumania remains neutral, the Axis player may not use Sea Movement in the Black Sea, and the Russian player does not have to roll for his sea movement—Russian Sea Movement automatically succeeds. Also, as long as Rumania is neutral the Axis player does not get any replacements for the Rumanian oil well.

Rumania and Hungary enter the war immediately as soon as the Axis player controls all three Black Sea ports. At that point all the above restrictions disappear, and units may enter/leave Hungary and Rumania normally.

3. Remove all Italian units from the game.

4. All German units must set up in Poland and can attack only the appropriate military districts on the first impulse. The German 11th, 30th and 54th infantry corps (formerly in “Rumania”) are not restricted and may attack any Russian units they can get to on the first impulse.

5. The German Fleiegerkorps is not wrecked at Crete and the Germans do not discontinue their parachute training. The following units are introduced into the game:



exchange for any 3-4 in play May 1943



available at start

a. German paratroop units may drop during the first impulse of any clear weather turn; they may drop into any non-woods, non-mountain hex within 8 hexes of a German Army Group HQ. On the turn they drop they must start the turn off the board—they may move off the west edge of the board by rail, sea or normal movement, and they may be kept off the board as a potential threat. They may be dropped repeatedly.

b. German paratroop units may land in enemy ZOC.

c. German paratroop units may land on top of enemy units! In this case they attack only the stack they land on top of—while in the same hex with Russian units their ZOC does not extend into adjacent hexes and they do not have to attack adjacent Russian units. However, if they do land on top of Russian units, all those Russian units must be eliminated or retreated out of that hex—if in the same hex with Russian units at the beginning of a *second* impulse, a paratroop unit is immediately destroyed.

d. German paratroops have to trace supply like other Axis units.

e. Paratroop units can never be replaced.

f. At the start, the German parachute unit may set up in Poland or off the board.

6. The Russian player doubles all Archangel replacement rolls.

7. For purposes of determining victory, both players control Budapest as long as Rumania is neutral.

THE RUSSIAN REACTION

Stalin decides whether to bring the Siberian Army west to defend against the Germans. Reinforcements arrive earlier, but with Siberia stripped of troops the Japanese are tempted to attack . . .

1. At the start of his March/April 1941 turn the Russian player must decide whether to bring the Siberian Army in early or not. He cannot later change his mind. If there is no March/April 1941 turn—i.e., if the German player did not activate “THE MEDITERRANEAN DISTRACTION” above—then the Russian player cannot activate this section.

2. All Russian reinforcements listed as arriving on the East edge during 1941 arrive one full turn earlier than scheduled.

3. If the Russian player activates this section then the German player can activate “THE JAPANESE GAMBIT,” below.

THE ITALIAN SELLOUT

Hitler decides not to send the Afrika Korps to bolster Mussolini’s feeble war effort. Italy withdraws from the war and the British commit their forces to “roundup”—the 1942 invasion of Europe.

1. Immediately before the German May 1941 impulse the German player decides to abandon the African project and commit Rommel to the Eastern Front.

2. The following unit appears as a reinforcement in July 1941:



GERMAN:

3. Two German panzer corps must move off the west edge of the board in May 1942 or the German player loses the game. These are in addition to the SS panzer corps (or substitutes) that must leave the game later.

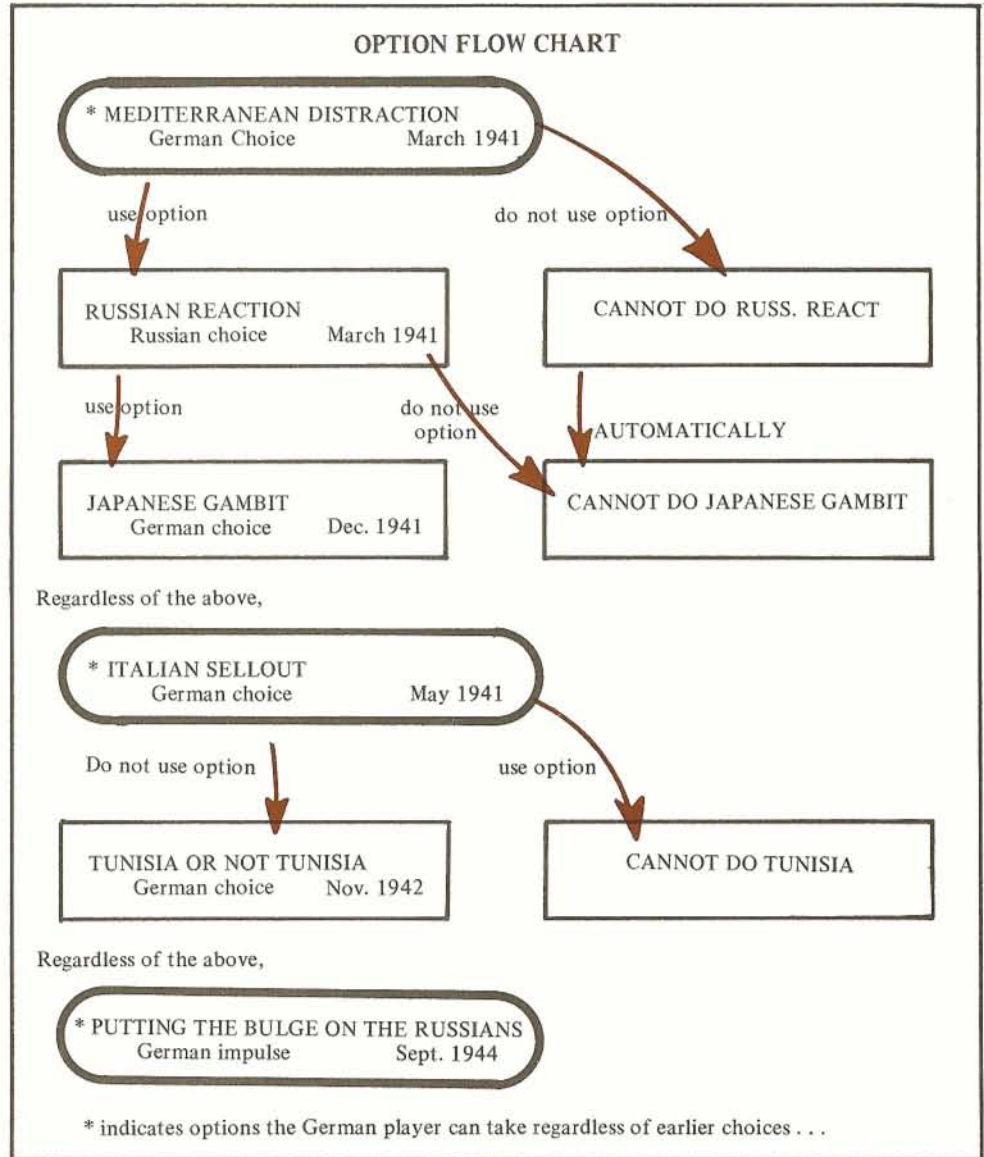
4. All Italian units are removed from the game.

5. The Russian player gets to roll a die for extra replacements each turn that he controls at least one Black Sea port. This starts in September 1941 and is in addition to the Archangel die roll.

6. The German player gets replacements for the Rumanian oil field even if Rumania is neutral.

THE JAPANESE GAMBIT

With the Siberian Army sent west, the Japanese are tempted to attack Russia. Japanese formations are diverted from southeast Asia for the attack, and the British holding the Indian subcontinent are able to concentrate on establishing a Russian supply line through Persia and the Caspian.



1. This section can be activated only if the Russian player has activated “THE RUSSIAN REACTION” above. The German player decides before his December 1941 impulse whether the Japanese will attack Russia.

2. Starting in December 1941 the Russian player must send one of his replacement units to Siberia each time he gets replacements. These units are kept in a separate pile; they are not surrendered but may not be taken as replacements again. If the Russian player is not able to divert one of his arriving replacements he loses the game.

3. As soon as he has sent 40 factors to Siberia the Russian player need not send any more. He can send more if he wishes; however, he may never send more than one replacement unit per turn (and only replacement units may be sent).

4. As soon as the Russian player has sent 60 factors to Siberia, on his next turn he may start bringing the Siberian units back. These units are brought back one unit per turn and appear as replacements. He may continue to bring them back until all have returned; he need never send units to Siberia again even if he dips below the 40 factors.

5. A British supply line is established through the Caspian. The Russians get an extra replacement die roll every turn they control Astrakhan, starting in May 1943.

TUNISIA OR NOT TUNISIA

Hitler decides to abandon the Mediterranean

when the Allies land in Afrika. German forces are evacuated or not committed; but the Allies are not tied up in the Mediterranean and are free to execute “Bolero,” the 1943 invasion of Europe.

1. This section cannot be activated if the Germans activated “THE ITALIAN SELLOUT” above. The German player decides before his November 1942 impulse.

2. All Italian units are removed from the game.

3. The Herman Goering panzer corps appears as a reinforcement in January 1943.

4. The two SS panzer corps must be removed in May of 1943 (instead of 1944).

5. The German player gets an extra armored replacement in 1943.

PUTTING THE BULGE ON THE RUSSIANS

Hitler decides to employ his scraped-up reserves against Russia instead of against the Allies in the Ardennes.

1. The German player chooses whether to implement this before his September 1944 turn.

2. All panzer corps withdrawn earlier in the game appear as reinforcements on the October 1944 impulse. If not already in play, the Herman Goering corps also appears.

3. On his November 1944 turn the German player gets to take replacements.

4. The German player must win, or he loses. A draw counts as a Russian win.



THE GAMER'S CODE OF ETHICS

All is Fair in Love and Wargaming

by Jimmie Long

I started wargaming back in 1960, when "war" was just another word, when *GETTYSBURG* and *TACTICS II* were still just games. After sixteen years and a couple hundred opponents, it sometimes appears that, while wargamers are decent enough people, like any other group sharing a common interest, I wouldn't want my sister to marry one.

That highly tempered competitive edge shows itself across the table altogether too often, not so much a burning desire to win as it is a determination not to lose. The figures suggest that most wargames are played solitaire because of the difficulty finding opponents. I submit that the difficulty finding opponents is very much a matter of not wanting to find them, of being unable to stomach some of the behaviors we've all seen.

While conscious cheating is extremely rare, so are manners and courtesy equally scarce. Too often a wargame becomes more a matter of intimidation and attempting to establish a sort of moral superiority over your opponent than a test of opposing strategy and tactics. Moral and psychological factors are crucial in the real thing, and crucial in a good simulation, but they don't make for a very fun game. A certain amount of decorum is required in all relationships—even an orgy has a few conventions—so, for the sake of conversation, I'd like to suggest a few common sense notions to bridge the behavioral gap between simulations for blood and games for fun, just enough to blunt the disagreeable edge on our competitive spirits.

SOLITAIRE GAMES: Who cares? Go ahead and roll until you get that D-ELIM. The main problem with solitaire games is that they're so prevalent. Slightly inaccurate readings or interpretations of the rules become strong habits and convictions. The inevitable result is a disagreement during a face-to-face game. We owe it to each other to accurately know the rules as issued, as well as the official revisions. If you bend or ignore certain rules during solitaire play, at least be aware of what you're doing.

AMONG FRIENDS FOR FUN: You and the guy next door have a couple of hours to kill before the ballgame on TV, so you trot out good old *STALINGRAD*. This is not the time to get all excited, not while the enemy is taking all of two minutes to make his moves and is just as involved in shooting the bull as he is in shooting your counters.

AMONG FRIENDS FOR BLOOD: Your consideration here should be at a maximum. Friends get mad, sure, but they also get hurt. Losing an opponent is one thing, but losing a friend isn't worth it. A serious game against a friend should be treated as tournament play—be careful.

AMONG STRANGERS FOR FUN: I seriously doubt there is such a thing.

AMONG STRANGERS FOR BLOOD: Let it out in degrees. I favor reciprocating aggression. If my opponent does something tacky, so do I. If he does it again, I do it twice. Let your conscience be your guide, but let your conscience be suitably near-sighted.

MAIL GAMES: Common courtesy requires that your moves be made quickly and accurately. Also, think long and hard before agreeing to a

PBM—it represents an enormous investment in time and energy. Be sure you will stick it out to an agreeable conclusion.

TOURNAMENT GAMES: Formal play should be characterized by a high level of professionalism, if that's what you want to call it. Know the rules intimately. Play your own game and play it well, ignoring as long as possible the antics of your opponent. Just don't forget that the lessons of Fischer vs. Spassky were not lost on many wargamers.

SACRIFICING VIRGINS: The gap between even a novice wargamer and somebody playing their first few games is astounding. Simulation games are so far removed from what most people are used to that there's almost no transfer of whatever the beginner learned from other games—well, here's a gameboard, on a table, and there's a die which I suppose we'll sooner or later roll, and that's about it. Make sure the rules are reasonably clear to the beginner, and don't trounce him too thoroughly or too quickly. Also, be certain to explain and demonstrate the technique of "soaking off". This second nature gaming tactic looks very suspicious and very illegal to the uninitiated.

Dice throwing *can* approach the status of an art. Out of the hundred or so rolls in a game, three or four well-chosen creative tosses can prove decisive. When playing for blood or in a tournament, it would be considerate for opponents to shake the dice in a cup. This is somewhat a bother, but the question of artful throws does not arise.

The expenditure of movement points during complicated or critical maneuvers should be counted out loud, factor by factor, so that no doubt of legality should exist after completion of the move. This courtesy seems appropriate in any face to face game.

It is always proper to question a move if you feel a rule has been violated or misunderstood. Challenge in a civilized manner, such as "I'm not certain about that last move . . . could we check the rules?" Something like "Not a chance, turkey . . . back it up there" is not particularly civilized, but is often appropriate.

In general, I would not think it proper to concede defeat in a close game. In *STALINGRAD*, if all your German armor is wiped out by the second turn, by all means throw in the towel while there's time to start another game. But don't quit when the game is half over and it's just 60-40 that you'll lose. A wargaming victory must be earned to be satisfying; don't deprive your opponent of either the pleasure of winning or the responsibility of earning his victory.

For the sake of saving time, offer to claim a certain victory rather than play it out to the last excruciating moment. Its really a drag to wait around four turns while some nut brings up all his troops so the final attack will be made at 9-1 instead of 7-1.

Finally, Avalon Hill literature repeatedly suggests that disputes be settled by a friendly roll of the die. I agree. Get on with the game. Leave debate to the post-mortem where everybody concerned can fully exercise their 20/20 hindsight. However, just make sure that the "friendly roll of the die" is made from a cup.

A.H. PHILOSOPHY . . . Cont'd. from Pg. 32

wargame industry predicated to a very large extent on mail order sales to a small, prolific body of hard core enthusiasts. Without retail distribution to attract fringe buyers, these companies must depend solely and repeatedly on the hard core for their revenue. Their only new customers are those brought into the hard core by contact with AH or SPI. Even the latter depends a great deal on direct mail order sales. While we could exist quite nicely on retail alone, others have to publish more and more games for sale to their smaller audiences. They have no choice—it is publish or perish. Older games do not generate enough revenue to keep them going; after they've reached the saturation point with the hard core they cease to function as sources of revenue and often are discontinued or phased out relatively early in their potential life span. This is all over simplified of course but should suffice for readers to draw their own conclusions.

I can sympathize with Dave Isby when it comes to answering off the cuff questions on games he designed. My gaming these days as a professional whatchamacallit is limited almost solely to playtesting and evaluation of new games. By the time I've finished my development chores on a game I have probably played it 50 times. Generally speaking I don't want to play it again right away (*WAS* is an exception). In other words, I can't say with any degree of certainty that I could answer every question that arises on games I've worked on either. Continued playtests and a few passing years tend to cloud one's recollections of another game's rules. It is little short of unrealistic to expect a designer to address a problem he hasn't thought about in years, just because you played the game last night. If you disagree, try working out a calculus problem for old time's sake—after all—you learned it back in the twelfth grade didn't you? Fair is fair.

"Whose publication is not unreasonably biased towards itself?" Do you realize you just contributed to our "chest thumping"? Of course we are biased. We wouldn't be worth much if we didn't think our stuff was the best, but we try to be objective and not stand in the way of others doing their own thing. I don't think the hobby will self-destruct. I do believe it is undergoing some very fundamental changes. I believe we will see continued polarization of consumer support and that those enthusiasts who emphasize playing games over replaying simulations will find a stronger than ever hobby under the AH banner. This is why we emphasize customer service so much. We don't sell you a game and then forget about you. We provide free opponents wanted advertising, announcements of interest to the hobby as a whole, tournaments, AREA ratings, and a comprehensive study of the games themselves in the *GENERAL*. None of these features make money. All serve the wargamer.

That's our opinion—what's yours?



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 3/8" hexes printed on the back. The pads are useful for designing your own games, making hex overlays for actual maps, or generally sketching moves and/or concepts. The pads are available from the parts department for \$1.00 plus postage.



INCREASING INFANTRY FIREPOWER

SPECIAL PANZERBLITZ INFANTRY TACTICS RULES

by Norman Beveridge, Jr.

The following rules should work equally well in both *PANZERBLITZ* and *PANZER LEADER*. Treat them as Optional rules and use them when you like.

(1) **BARRAGE FIRE:** Most 'H' and 'M' weapons may use barrage fire. This attack occurs in the direct fire phase, and in all ways counts as a direct fire attack, except as modified herein. This attack can also occur in the opportunity fire phase. 'H' and 'M' units may also employ barrage fire in the direct fire mode. Flak units may not use barrage fire (see list of these units with the special CRT).

(a) A player may use barrage fire against any hex, including vacant hexes, as long as the attack units satisfy all LOS/LOF limitations. Place a barrage marker in any hex so attacked.

(b) Units in a hex attacked by barrage fire are affected individually. Total the attacking factors, taking into account all TEC and WEC effects for each defending unit individually, and compute the odds as usual. Note that all attacking factors count against each defender individually.

(c) Resolve all barrage attacks on the barrage CRT. In addition to any effects from that CRT, all units in a hex containing a barrage marker lose 1/2 of their movement points, except for units with movement of 1. Any unit, friendly or enemy, passing through a barrage hex, loses 1 movement point. The barrage marker remains in the hex until the end of the enemy turn.

(d) Soft (non-armored) units in a barrage hex may not attack in any way. They may defend normally, but may not use opportunity fire.

(e) In addition to WEC and TEC effects, units using barrage fire get the following bonuses:

WEAPON	Multiply Attack Factor By:
'M' under 100mm	5
'M' over 100mm	2
'H'	3
'H'	1

Thus a German 81mm mortar using barrage fire would attack with 15 attack factors, before WEC and TEC effects.

(2) **SWEEPING FIRE:** Units with 'I' class weapons may use sweeping fire. This may occur in the direct fire phase, and in all ways counts as a direct fire attack, except as modified herein. This attack may also occur in the opportunity fire phase. Flak units listed on the special CRT may also employ sweeping fire.

(a) A sweeping fire attack may be directed against any hex (except towns) which contains soft (non-armored) targets, as long as the attacking units satisfy all LOS/LOF rules.

(b) Soft units in the hex receive the attack in any manner, singly or in combination, just as in a regular direct fire attack. All WEC and TEC effects apply, and each defending unit may defend only once. Armored units are unaffected by sweeping fire.

(c) Resolve these attacks on the Sweeping Fire CRT.

(d) In addition to WEC and TEC effects, units get the following bonuses:

UNITS	Multiply Attack Factor By:
Russian Infantry	2
German Infantry	4
Other Infantry	3
All other types	5

Thus a German submachine gun unit could use sweeping fire to attack with 24 factors.

(e) Infantry units may use sweeping fire up to their maximum firing ranges, but the bonus only applies to short ranges. Submachinegun infantry units get the bonus only at 1 hex range, while all other infantry units get the bonus at either 1 or 2 hex range. All other 'I' class units, and the flak units, may use sweeping fire and get the bonus up to their maximum range.

(3) **INFANTRY QUICK MARCH:** All Infantry units may use quick march. Units employing this rule get a movement bonus.

(a) Units may use this in two ways:
 (1) by ending the move with a CAT attack, or
 (2) strictly as a movement bonus.

(b) Units using quick march as a movement bonus only may double their movement rate on any given turn. On the following turn, the unit must return to its normal rate. For scenarios lasting more than ten turns (one hour), units can quick march only five times every twenty turns (two hours). Optionally, the unit may elect to triple its movement rate, but in this case it would end its turn dispersed. In addition, any unit using triple movement may not move at all for two turns following the movement; it may attack, though.

(c) Units using quick march to make a CAT attack may double their movement rate. In the following turn, the unit must occupy the defender's hex if possible. If not, the unit may not move at all. Either way, the unit may not move in the second turn after the CAT. It may attack, though.


(d) Note that except in the case of dispersal, rules (b) and (c) above do not in any way restrict the unit's ability to attack, only to move.

(e) Any unit using quick march has its defensive factor halved (round down) for opportunity fire.

(f) Units using quick march to CAT may not use the road movement rate.

(g) Units may not quick march through heavy forest hex sides, or through slope, gully, river, or swamp hexes.

(h) Units which participate in CAT along with units using quick march are in no way restricted by these rules, as long as they did not use quick march. Only units using quick march are affected.



DIPLOMACY WORLD is a quarterly magazine on Diplomacy which is edited by Walter Buchanan, R.R. #3, Box 324, Lebanon, IN 46052 and subsidized by The Avalon Hill Game Company. The purpose of each 40-page offset issue is to present a broad overview of the postal Diplomacy hobby by printing articles on good play, zine news, listing rating systems, game openings, and printing a complete variant game and map with each issue. Subs are \$4.00 with single copies \$1.25 each.

Orders for DIPLOMACY WORLD must be made payable to DIPLOMACY WORLD and sent to the editor's Indiana address.

SWEEPING FIRE AND BARRAGE SPECIAL CRT

ODDS

Die Roll	1-4	1-3	1-2	1-1	2-1	3-1	5-1	7+-1
-2	d	d	d	d	d	d	d	d
-1	d	d	d	d	d	d	d	d
0	d	d	d	d	d	d	d	d
1	—	d	d	d	d	d	d	d
2	—	—	d	d	d	d	d	d
3	—	—	—	d	d	d	d	d
4	—	—	—	—	d	d	d	d
5	—	—	—	—	—	d	d	d
6	—	—	—	—	—	—	d	d
7	—	—	—	—	—	—	—	d
8	—	—	—	—	—	—	—	—

NOTES: Units may never suffer elimination when attacked using this CRT, since only regular dispersals occur. Also, these types of attacks never have any affect (as far as CRT results are concerned) against units in forts, fortifications, foxholes, etc.

d = dispersal — = no effect

Certain 'H' class units, in particular flak units, may use sweeping fire, but may not use barrage. They are:

Germans: 20mm, 20(4)mm, 37mm, Sdkfz 234/1, Wirbelwind, 32mm, Sdkfz 233.

Russian: none.

U.S.: 40mm, Recon HQ, Churchill Flamethrower, Buffalo.

British: Bofors, 20mm.

A.H. PHILOSOPHY . . . Cont'd. from Pg. 2, Col. 3

If the wargame companies are the problem why am I writing to you, the official voice of AH? First, AH has been the only company to at least show some concern over the proliferation of new titles. Second, AH is the only company who's publication is not unreasonably biased towards itself in its editorial policies.

My purpose in writing this letter is to express my feelings and to hopefully elicit some response from AH, one of the "Big 3" of wargaming. If any of my thoughts raise some questions or thoughts in your own mind I hope you present them to the rest of the *GENERAL* subscribers. I will be the first to admit I could be way off base in my thinking. Perhaps this sudden growth will help the hobby to grow. There must now be one title in every given time period and game scale (including game mechanics) to appeal to any person with even a minimal interest in board-games. But, I experienced the collapse of another hobby-industry, slot-car racing. As you know, this hobby reached a peak and virtually disappeared in five years. At its peak, the number of new products and new companies was uncountable. The current situation in wargaming is not dissimilar. I have put too much time into wargaming to watch it indulge in self-destruction. I have gotten too much enjoyment out of wargames to sit back and hold my tongue while the hobby seemingly self-destructs.

I would like to see the AH Philosophy column address itself to some of the points I have raised, either in agreement or rebuttal. I believe I am not entirely wrong. But, how do other wargamers feel?

Thank you for hearing me out.

John G. Alsen
St. Paul, MN

By means of reply, we'll address the points brought out in John's letter as he brings them up, commencing and ending with the simple matter of the future of wargaming. Clairvoyance not being among our attributes, we can quickly admit we don't know what the future holds in store for the hobby. However, there are several positive signs among the rubble of Mr. Alsen's letter, not the least of which is the success of the ORIGINS conventions. The establishment of a well attended national show for the wargaming industry presages better things to come. The past two shows were excellent foundations on which to build a respected national showcase. Now that the show has "gone on the road" so to speak under the auspices of SPI as the '77 host, wargamers everywhere will get a chance to meet the decision makers of the hobby in person. This can only increase the level of professionalism expected from hobby stalwarts and improve the hobbyist's lot as a whole. Recognizing that anything is the sum of its parts we'll continue to answer this question by addressing more specific charges in John's letter, and letting you draw your own conclusions.

I have personally expounded for years to anyone who would listen on the evils of flooding the wargame market. So far I've been unabashedly proved wrong. The proliferation of titles has resulted in increased, rather than decreased, sales . . . so far. Jim Dunnigan's theory is that games should be treated like books, and like books, they can be collected without end. One could easily buy several books on the Ardennes Offensive for their differences in viewpoint and style, so why not 5 or 6 games on the same subject? After all, there are never enough good books. That theory has worked up to this point and I suspect it will continue to work, although I disagree with the premise. Games are not books. I read a book once and put it up on the shelf to gather dust. I play a game several times before I can enjoy it, and there is the difference.

Our disagreement seems to stem from arguing apples and oranges. The book theory may be 100% correct for *simulations*, and 100% wrong for *games*. I've always felt that the main difference between AH and SPI products is their emphasis on simulation as opposed to ours on gaming. I think both approaches are right for their respective following and as a result you'll see an increasing polarization of support for the two companies. Gamers will increasingly tend to be enthusiasts of one company's games, exclusive of all others. As a result the consumer will be able to judge a title on the basis of manufacturer/designer as the principles subscribed to become more identifiable. For example, most Avalon Hill enthusiasts know what to expect from a Randy Reed design; completeness, deluxe artwork presentation, and an attention to detail rarely surpassed. If anything, I am known for my taste in highly playable games. Although I am most definitely biased I feel that recent AH game releases are second to none in quality. I cannot speak for other manufacturers because I rarely play their games, but I do take exception to the remark that you can't judge a game by its manufacturer . . . at least where recent Avalon Hill wargames are concerned.

Personally, my good friend and affable pbm opponent Tom Oleson summed up my view of the situation perfectly in a recent letter. "Deploring the flood of games is not new, and I am not about to repeat it, because I don't long for the "good old days" of *D-DAY* and *STALINGRAD*. Like most "good old days" of any sort, memory has painted them better than they were. Games now are better, and getting better still. What I do miss is a certain enjoyment which I am experiencing less and less. No one who goes to a banquet, offering a large variety of succulent food and fine wines, only to cram down as much sheer quantity and quaff as much sheer volume as possible before passing out, could be considered a gourmet, but rather a glutton. Delicacies must be slowly savored to be appreciated, wine carefully sipped. Few wargamers do this any more, so eager are we to experience the latest thing, then toss it aside for something fresher still.

There is a pleasure to be had from knowing a game intimately, and playing it well. I think every wargamer owes himself this pleasure: the art of wargaming well. To achieve it, you select one really good wargame that also appeals to quality opponents, and play it not all the time, to the exclusion of others, but frequently enough to become really good at it."

As to the general ineffectiveness of game reviewers I must concur wholeheartedly. There is no such thing as an objective game review—even the best critic is influenced subconsciously by his own preferences in game design style. The only truly objective review is a numerical analysis melted down into a lump average from the responses of hundreds of players. Objective yes, accurate . . . well, that's another story. If 9 people love a game and one hates it then you have a real good rating. But what if *your* tastes are similar to the guy who hated the game? You've just spent \$10 to find out you're abnormal. Subjective reviews are needed to fill the void between the figures. Consumers have to identify with the tastes of the critic. Unfortunately, competent reviewers with the inclination and the time available are few and far between. Richard Berg is the only exceptional critic that comes to mind in the entire hobby, and his tastes differ considerably from my own. We don't publish reviews in the *GENERAL* for obvious

reasons. Anything favorable would automatically be considered prejudiced. You can't win in a situation like that, so we give as much information as we can in the ads, let you rate the games in the RBG and let the articles fill in the information gaps as best they can. Someday a hobby magazine will come to pass that does nothing but subjective reviews by qualified critics. It will be an instant success and wargaming's future will look a lot brighter.

I would agree with the premise that 6 months is not sufficient time to produce a good wargame. Yet I remind the reader that Avalon Hill has never done a game in less than a year. Any in-house AH design is in the works for at least a year as the fulltime project of an AH designer. We have managed to increase our output only by publishing outside designs which were not only over a year in design, but in many cases published by other concerns. In cases such as *WS&M*, *RC*, and *WAS* we have been able to utilize public reaction to these first edition games to further improve them when they go through the 6 month AH development process. We don't succumb to the pressures of deadlines all that easily. If a game isn't ready we don't publish it. A case in point is *FOUR ROADS TO MOSCOW* which has been in the grist mill for a year and a half. It is a fine simulation. We are simply unhappy with the way it plays, have cancelled plans for its production for the time being, and returned it to the designer. So I would maintain that recent AH products have not suffered from a short design time . . . if anything we've increased the design hours spent on each product.

As for being involved in a "race to beat the other guy", I cannot see where this is applicable to AH. We readily concede that we can't keep pace with the speed others produce wargames. Why try? Instead we come out with games when we can and hope that AH quality makes up for the fact we weren't first. Almost every game subject we've done in recent years has been done previously by other companies—even though they may have been started at or about the same time. We have been guilty in the past of rushing games to meet a seasonal retail sales deadline (*THIRD REICH* comes readily to mind), but never to beat a competitor to the punch. Our philosophy has generally been to do our own thing and let the chips fall where they may. We concede that we can't be first, but we try (granted, by our own criteria) to be best. I have yet to hear a bad word about the quality of our summer trilogy (*STARSHIP*, *CAESAR*, *WAR AT SEA*) and I would bitterly refute claims to the contrary. But remember . . . I'm biased. I'm a firm believer that Avalon Hill games are better than ever before and I imagine designers of other companies feel the same way about their products. The truth lies in what you think after you've tried the games.

Regardless of one's viewpoint regarding the number of games available these days it is important to understand why the phenomenon exists. Wargames, as we all know, are a very specialized product. Far too much so to subsist, as other game companies do, on normal retail distribution. It has taken us 16 years to build our retail distribution which is universally recognized as the best in our small industry. Yet, by standards of a Parker Brothers or a Milton Bradley our efforts are miniscule. Similarly, other wargame producers' retail efforts are dwarfed by our own. Therefore you have a

. . . Cont'd. on Pg. 30, Col. 3

Dear Mr. Greenwood:

The Design Analysis article on Average Losses by Mr. Geary in the most recent issue of the *GENERAL* (Vol. 12, No. 6) makes some statements that I do not agree with. In his first paragraph, he bemoans the fact that luck has to play a part in wargames and states that such games will never attain a high level of serious competition because of the luck factor. Perhaps this is true if the desire is to restrict the game to a small group of experts who will be competing with each other. However, if the horizons are to be broadened and a game is to appeal to a larger group of players, then the problem is not to eliminate luck but to find the proper blend of luck and skill that will allow the better player to win most of the time, yet give the less than expert person the possibility of coming out on top.

In my opinion, chess is a very dull game unless it is played by roughly equal competitors who are also reasonably good. It might have a wider appeal if there were a luck element involved. In the realm of card games, contract bridge is the most popular, both socially and on a tournament level. One of the reasons for this is the blend of luck and skill, whereby an average pair can take on two experts and beat them. This is true in rubber bridge and also pair duplicate tournaments. It won't happen very often, but it does occur.

A good measure of a true expert is the ability to take a run of bad luck and still prevail. In *THIRD REICH*, if the 2 to 1 attack on Warsaw should result in a German elimination, just think of the challenge to the German player to try and recover from the blow. Incidentally, the odds of this attack failing are not 1 in 36, but closer to 1 in 32. Although on the initial attack and counterattack series, the probability of the original attacker being eliminated is 1 in 36, there are four cases (11% of the possibilities) where the attack will need to be repeated, which changes the original odds. In theory there is the possibility of an infinite series of attacks and counterattacks, so that the probability of success or failure can only be approximated.

Another point on this is if the attacker has only one unit involved and success is measured by being able to eliminate the enemy unit and occupy the hex, then the probability of failure of a 2 to 1 attack is even greater. This is because an exchange on either the attack or counterattack effectively eliminates the attacking unit. In *THIRD REICH*, for a German 4-6 to attack a Russian 1-3 (doubled on defense) at 2 to 1 odds is economically foolish because the German player is risking 8 BRP's against 1 for less than a 2 to 1 chance of success. The military strategy may override the economic considerations, but this should be a rare case.

In Volume 12, No. 5 of the *GENERAL*, Mr. Saha, in his article on *THIRD REICH*, pointed out that a 1 to 1 attack is not so bad since counterattacks must come at basic rather than directed odds. This also is relative to the units involved. A 4-6 going against a 2-3 (doubled) has less than a 50% chance of success; however, if three 3-3's attack a lone 3-3 (again doubled so that the odds are 1 to 1) then the chance of success is 83% or 5 to 1. In addition, of course, the economic (BRP) and military (objectives) considerations need to be weighed in determining if such an attack is worthwhile.

It is the power of a properly executed 1 to 1 attack that poses a threat to Britain and forces the British to keep a reasonable defensive force available. The rule changes in Vol. 11, No. 6 moderate this somewhat, but if the Allied (British) player defends unrealistically, the German can get about 4 to 1 odds at eliminating Britain from the game. Britain needs to keep about 50% of its air and ground factors available, in addition to the 6 replacement counters stacked in London, to reduce that chance to less than 1 in 6. Even after the German is attacking elsewhere, say in Russia, the threat is still there so that the British player better have in Britain, or immediately redeployable in Britain, the required combat factors. The threat will continue until U.S. forces arrive.

Vol. 11, No. 6 also had a discussion of the initiative or who goes first rule. I think this is a good rule as designed. The arithmetic is simple, so the only drag on the action is the players procrastinating on whether or not to cause a switch in order. A playable and realistic alternative would be to make the determination during the Year-start sequence, and have it apply to the full year. In the real war, Germany did have the initiative until late 1942 and the Allies thereafter.

But back to the luck factor which is the point of this letter. As Mr. Geary states, chess and wargames, such as *THIRD REICH*, are not really comparable, but this does not mean that one involves greater intelligence than the other. Take that great game of "chance", poker, for example.

Letters to the Editor ...

In serious competition, which means high or unlimited stakes, a very high level of ability is required. The skills involved are a small part probability knowledge and a very large amount of psychology. Die roll wargames in addition to involving the ability to move the pieces properly, also require some probability knowledge and a degree of psychological awareness. Granted, a single roll of the die may change the course of the game dramatically. For example, if the 1 in 6 shot at knocking out Britain succeeds, that is luck. If it happened against me and my opponent was a wildman or just unthinking, I'd curse my fate, but I should be content in the knowledge I'll beat the character at least 5 times out of six. On the other hand, if my German opponent made a well reasoned move because he was behind at that stage of the match and the attempt appeared to be his only chance to reverse the course of events, then I'd still curse my fate, but I hope I would have the courtesy to tip my hat to a very skillful player.

I think that *THIRD REICH* has built into the game design a very excellent combination of luck and a variety of skills. I am interested in the BRP or economic strategy as it relates to the military or victory condition strategy. It seems to me that in the campaign game particularly, the economic considerations are of primary importance from the beginning through at least 1941.

The multi-player game requires the care and feeding of a partner (called diplomacy) in order to keep that character from blowing your whole game design. If he happens to be the French player, in a six player game, he may not take kindly to the concept that France is going to fall anyway, so why not use the French forces, particularly air and naval, to attrition the Axis BRP strength to the fullest extent possible. However, with "a little bit of luck" there may be only five players available so that he can get back in shortly to move the U.S. forces—of course under your command.

William R. Nightingale
Lynnwood, Wash.



Dear Don:

In the Nov.-Dec. 75 Vol. 12 No. 4 issue of the *GENERAL* I see you are offering the 2nd edition of rules for your game *1776*: \$2.00 plus 50¢ handling, etc. I feel I'm being screwed over by having to pay for something that damn well wasn't my fault by not being in the rules when I purchased the game. The least you guys could do is print the 9 rule changes in the *GENERAL* and help take care of those who take care of you by subscribing.

I feel the *GENERAL* should be the tool in which material such as this should be relayed. If I had to pay \$2.50 for a 2nd rules edition for every game I own, I would be laying out approximately \$150.00 No thanks. I don't need that kind of loyalty.

Ed. Leisinger
Laurel, Md. 20811

Ed. Note: Everybody is entitled to their opinion, including the fellow below, but you'll be happy to hear that we intend to use the Design Analysis column as a sort on ongoing errata sheet in the future.



Dear Sir:

I don't have the time to write an appropriate letter to the correct department, but let it be known to the entire staff that I think this revised rules idea is fantastic. I don't know how profitable it is to you to take the time to do it, but I feel that such revision to improve an already fine product is admirable, and the prices, for the most part, are equitable. May all your future products be free from printing errors!

Floyd E. Paxton
Bridgeton, MO



Dear Sir:

I try not to bore you with details, but I feel it necessary to give you some background on my-

self in regard to wargaming. I have been "into" wargaming for nearly five years. I currently own 48 games, and hold subscriptions to both *The GENERAL* and *MOVES*. I have invested considerable time and money in my hobby, and generally, I feel both were well spent. During my five years of gaming, I have never played an opponent. I have been strictly a solitaire gamer.

In view of the above, and the receipt of Vol. 13, No. 2, of *The GENERAL*, I felt compelled to write this letter. I subscribed to the *GENERAL* for two reasons. First and foremost is for the Series Replay. I greatly enjoy following the action as this is the only "opponent" I ever have. If I do not happen to have a game that is featured in the Series Replay, I go out and buy it. I was grievously disappointed with the Series Replay of *DIPLOMACY* in Vol. 13, No. 2. It indicates a total disregard for the average wargamer who does not have a plethora of opponents, and who depends on each issue of *The GENERAL* for a major portion of their wargame enjoyment. I am of the opinion that this type of gamer constitutes a considerable portion of your market. Also, the *DIPLOMACY* Replay was totally unnecessary due to the many alternatives open to Diplomacy fans.

My second reason for subscribing to *The GENERAL* is for the Opponents Wanted page. Since my subscription began, there have been only two El Paso addresses listed, and when checked, both were no longer valid as the persons had apparently moved. This is not your fault of course, but I would like to know the time differential between submission of an opponents wanted request and its printing in *The GENERAL*.

I notice that the major articles in Vol. 13, No. 2 are centered on your most popular RBG rated game, *WS&M*. This is apparently an attempt to boost the sagging ratings of recent issues of *The GENERAL*, but the attempt failed, in my mind at least by inclusion of the Diplomacy Replay, and I would give the issue as a whole a rating of 7 at best.

Paul Bidwell
El Paso, TX

ED. NOTE: Many readers felt the same as you did in respect to the inclusion of so much space for coverage of DIPLOMACY. Because of this and also due to the fact that we now subsidize an entire magazine (DIPLOMACY WORLD) which is devoted entirely to coverage of the DIPLOMACY game, articles pertaining to DIPLOMACY in the GENERAL will be comparatively few and far between. As to the Opponents Wanted advertisements, they are usually inserted into the next issue but those missing a printing deadline may sit around for as long as four months. Most ads are approximately two months old, however.



Dear Sirs:

It is, and has been for two years, apparent, that the "Realism" buffs have finally succeeded in conquering the "Playability" buffs in wargame circles. It seems that the victory has been total as the Avalon Hill Game Co. and *THE GENERAL* have fallen into their hands. Kudos on your win!

However, methinks that you should reconsider your position as virtual "Dictators" of the hobby. The increased emphasis on realism (to the detriment of playability) has driven many of us from the ranks of the hobby. None of your new titles in the past two years has really appealed to the playability buffs (The Silent Minority?). Sure we still have *STALINGRAD*, *WATERLOO*, et al, to keep us busy, but we'd like something new once in a while too! The current fad of *THIRD REICH*-type games is fine, but most of us either work for a living or attend school full-time and cannot devote 48 straight hours to a game of *THIRD REICH* (Hey, you can't do that! "Sure I can, it's rule five-o-nine-dash-two-point-seven-o-three-four of subsection twenty three. Don't you read the rules?") Looking for a way to capture Malta can make me two days late for work!

A "Benevolent Dictatorship" would be more to our liking. Us "Playables" can become despondent to the point of suicide when we eagerly rush home for our new *GENERALS* only to find the entire issue devoted to only two titles (Vol. 13 No. 2). We tend to get a sinking feeling in our wallets and/or purses. (I pay for this! ?)

Please, tolerate us and humor us with at least one last Good-Old-Fashioned-How-I-Won-At-Stalingrad-Unbeatable-Except-On-Alternate-Thursdays-Plan-Of-The-Month.

G. S. Albert
Manteca, CA



Dear Sirs:

I noticed your title survey in the latest issue of the *GENERAL*, and I could not resist the opportunity to send you my choices for possible new games as well as some comments concerning existing games. I have been playing your games since 1961 (I now own 19 of them!), and my interest in wargaming has grown over the years. I intend in becoming more actively involved in wargaming as soon as I complete my graduate studies in civil and geological engineering early next year. As a result of the distraction from my studies, I have not been able to play as many games of some of your releases over the past five years as to be able to comment intelligently on them, e.g., *PANZER LEADER*, *ALEXANDER*, or revised *CHANCELLORSVILLE*.

However, being that I am a devotee of classic and campaign games, I have played your recent releases *RUSSIAN CAMPAIGN*, *THIRD REICH*, and *1776* several times, each with great enjoyment. I believe of all my AH games (I also own *STAR FORCE* which I am crazy about) that my favorite is now *RUSSIAN CAMPAIGN*. The more realistic reinforcement counters for the Soviet Army and the extension of playing time to the end of the war or 1945 are welcome improvements to that favorite classic *STALINGRAD*. I realize that *RUSSIAN CAMPAIGN* is an entirely new game rather than a revised edition of *STALINGRAD*, but I really think you should have included the latter's rule on frozen rivers and lakes as this adds an interesting dimension to winter strategy and play. I have one other thought on an existing game which I hope you will consider. I believe that there should be a better system for getting the strategically important countries of Turkey and Spain into the *THIRD REICH* game without resorting to invasion or a lucky role of the variant die. I have played several games where the Axis had spectacular early success including capture of the eastern Mediterranean. Under such circumstances, I cannot but believe that Turkey would have joined the Axis powers. I cannot, admittedly, conceive of a similar situation except possibly a successful Selow that would have changed Franco's mind towards neutrality. Still, I believe that a rule should be included such that these countries might freely enter the war as Axis allies if the Axis conquers certain objectives such as the Suez canal. Of course, the Axis in such a situation can easily conquer Turkey in anticipation of using it as a springboard for invasion of the Caucasus, but such a situation would surely influence Turkey to join the Axis.

One last point concerning *THIRD REICH*. I believe that you should consider serious BRP losses for loss of the Caucasus oil fields by Russia and the loss of the Rumanian fields by the Germans. Both of these countries relied heavily upon their respective oil fields and could not have fought for many months, if that long, without them. In the case of the Soviets, I do not believe that they could have developed Siberian oil (assuming they knew about these deposits then) or that we could have effectively supplied them by sea with sufficient gasoline and lubricants to have run their war machine. I would suggest a loss of 20-50 BRP's for Russia coming immediately or within one quarter after a German conquest of the Caucasus. A similar or larger BRP loss should take place on the German side if they lose the Rumanian oil fields. The exact number of BRP losses, of course, must not reflect too adversely on playability.

Finally, I would like to comment on your title survey. To attempt to play every new game that you and SI have put out in the last few years (besides being financially difficult) and master these games is just impossible. A true wargame devotee is not going to be able to become really competent at more than a very limited number of new releases per year. I am sure you are quite aware of this, I hope that Avalon Hill continues to market 2, 3, 4 new games per year—whatever the market will take. I will certainly buy those that intrigue me, but I do not believe I, or most wargamers are going to purchase the number of games that we have the past few years. We are still trying to master the ones that we have! We never completely learn though... I have just purchased copies of your *STAR TROOPER* and *CAESAR*.

Gary K. Olson
Gainesville, FL

READER BUYER'S GUIDE

TITLE: RUSSIAN CAMPAIGN

SUBJECT: Corps Level Simulation of entire Eastern Front; 1941-1945.

THE RUSSIAN CAMPAIGN was the 28th game to undergo analysis in the RBG and surprised even us by going immediately to the head of the list with a cumulative rating of 2.24. Although we recognized TRC as a fine game we did not expect that kind of success. At least part of its great popularity is attributable to the small sample caused by its mail-order-only status. We suspect mail order only games such as ANZIO, JUTLAND, etc. do better than expected in the RBG in large part due to the relative inaccessibility of the game. Those who go to the trouble to order by mail are highly interested in the subject matter to begin with and thus more inclined to receive the game favorably.

This is not meant to detract from a fine game however. Led by a best ever rating in the Excitement Level category, the game rated in the top third of 8 of the 9 categories. Only in Completeness of Rules was the game found wanting to any extent. Most of the ambiguities were answered in the Vol. 13, No. 3 Question Box and all loopholes will be plugged by a rewrite of the 2nd edition due out in March.

The fine ratings for Physical Quality, Mapboard and Components are interpreted here as satisfaction with several innovative concepts such as eliminating the hex grid over

unplayable terrain to do away totally with ambiguous hexes, and a set-up coordinate printed directly on the counters and well organized OB sheets for easy set-up. Also worthy of comment is the fine rating for Ease of Understanding—showing that gamers appreciate a 4 pp. rulebook they don't have to "wade through"

Play Balance is actually too good in TRC with a majority of games played between expert players resulting in draws. Both this problem and the long Campaign Game playing time have been corrected in the upcoming 2nd edition by new "Sudden Death" victory conditions and a combination of new scenarios.

1. Physical Quality	1.98
2. Mapboard	1.85
3. Components	2.02
4. Ease of Understanding	2.24
5. Completeness of Rules	3.07
6. Play Balance	2.78
7. Realism	2.41
8. Excitement Level	1.78
9. Overall Value	2.07
10. Game Length	4 hr., 45 min.

A. There would be no final fire because the defender is under full cover. They would melee normally, however.

Q. If the line-of-fire runs exactly along the hexside between two wreck hexes, what is added to the HPN, +1 or +2?

A. Add '2' to the HPN. The common hexside is assumed to be a part of both wreck hexes, thus the line-of-fire intersects two wreck hexes.

Q. May Stukas drop bombs on targets moving more than two hexes per turn? Are direct hits rolled for moving targets?

A. No. Stuka attacks are restricted in the same manner as other types of indirect fire.

Q. May vehicular units move into/through enemy-occupied hexes?

A. Yes.
Q. Scenario two states that personnel units may not fire into hexes containing other friendly personnel units. May non-personnel units fire into hexes containing friendly units? May personnel units fire into hexes containing friendly vehicular and/or weapon units?

A. No. Friendly units may not fire into hexes containing friendly personnel, vehicular, or weapon units. They may, however, fire into hexes containing un-manned weapon units and abandoned, bailed-out, or K-killed AFV's.

Q. When firing HE rounds at a weapon unit, does the crew receive casualties if all of the shots are "misses"? Is the weapon and the crew operating it treated as one target or two separate targets?

A. Although not specifically stated, a weapon and its operating crew are treated as one target. The HE "misses" would be evaluated as frag against the crew in good cover.

Q. If a crew assigned to a weapon unit is in the same hex but not operating that unit (and therefore on top of it), and both are in the same cover state, what happens to the crew if the weapon is F-Killed by a direct hit?

A. Nothing, except collateral damage if hit by indirect fire.

Q. What is the defensive condition of a porteeed ATG in a weapon pit?

A. Same as a non-porteeed ATG in a weapon pit.

Q. Personnel units operating a heavy weapon unit are considered to be in GOOD cover. What about when they are in a weapon pit?

A. Still only good cover . . .

Q. When firing at heavy weapon units with weapons of 40mm or smaller, does the Burst On Target rule apply to weapons that are hit but not F-Killed?

A. Yes.

Q. If a tank crew bails-out, is the tank considered K-Killed for victory point purposes?

A. In general 'yes'. But, if you're playing with the Experimental Capture Rules, the AFV is not considered K-Killed and may therefore be captured.

Q. In the Firefights, are points given for AFV crew casualties?

A. Not automatically. Use AFV Crew Counters for bailed-out crews and decide their fate as normal personnel units.

Q. Using the AFV Crew Counter rule, are crews automatically acquired for fire when they bail-out?

A. Not automatically; if it is direct fire, they must be acquired normally, if it is indirect fire, then they would be acquired by simply switching targets in the same hex.

Q. Can AFV crews automatically bail-out of undamaged AFV's?

A. No—what on earth for?!!

Q. Using the 'Best Aspect' rule, assume an AFV moves perpendicular to the firing unit and then pivots in the last hex of movement to face the firing unit. If the firing unit fires at the FLANK aspect and gets a TRACK hit, which way would the target vehicle be positioned? Also, would the firing unit subtract, '1' for firing at the flank?

A. The target AFV would be positioned such that the flank faced the firing unit. Also, '-1' would be subtracted from the HPN for firing at the flank.

Q. If an AFV remains in the same hex and continues to overrun a unit for several turns, may it fire its MG's as 'final fire' on subsequent turns?

A. No. Final fire is only used during the initial turn of overrun

Q. If a friendly AFV is being close assaulted by enemy personnel units, may another friendly AFV enter the same hex and overrun the close-assaulting infantry?

A. Yes. The only effect, however, would be to lower the infantry units' morale by an additional four points.

Q. May a Przkw-[V]E move one hex, pivot, and still be able to fire indirectly?

A. Yes. It can only move one hex, but it can still expend two movement points.

THE QUESTION BOX

TOBRUK:

Q. May forward observers for off-board artillery adjust indirect fire when in full cover (such as under a hedgehog counter)?

A. Yes
Q. Can anti-tank guns "in portee" in light trucks fire from weapon pits?

A. Yes—as if they were in weapon pits without the portee.

Q. May personnel units in full cover, and thus their identity hidden by the limited intelligence rule, be targeted for direct or indirect fire? And if more than one personnel unit is under full cover, how can a target unit be chosen not knowing what any of the units are?

A. No. If the unit fires, or moves into or out of full cover, it may be fired upon.

Q. Can weapon crews be chosen as targets for direct (or indirect) fire while they are operating their weapons?

A. Yes

Q. For weapon pits, may SIX personnel units occupy a weapon pit in addition to a weapon and a crew?

A. Yes. This was a bit obscure in the rules, but a weapon pit acts as a hedgehog with the added proviso for the protection of weapon units and vehicles.

Q. May an AFV in a melee hex fire at targets outside of the hex? May it be fired upon by units outside the melee hex?

A. The AFV may fire out of the hex, but it cannot be fired upon by outside units.

Q. Are non-personnel units 'frozen' in a melee hex?

A. No, only personnel units.

Q. If the defender in a melee situation is under full cover, what is the effect of an attacker's final fire in melee?

WARGAMING T-SHIRTS

The wargaming t-shirts are now available and although these black and white photos do not portray the vivid colors and sharpness of the artwork you can take our word that these shirts sport an exact full color likeness of wargaming's most widely recognized box cover.

The back sports an enlarged, silk screened version of the Avalon Hill logo. The neck and sleeves feature attractive red collars to present a very pleasing overall appearance.

The shirts sell for \$5.00 each plus the usual postage charges based on the dollar amount of your total order. Be sure to specify size. Maryland residents add 4% State Sales Tax.

Small Medium Large Xtra Large



AVALON HILL RBG RATING CHART

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

	Cumulative	Physical Quality	Mapboard	Components	Ease of Understanding	Completeness of Rules	Play Balance	Realism	Excitement Level	Overall Value	Game Length
1. RUSSIAN CAMPAIGN	2.24	1.98	1.85	2.02	2.24	3.07	2.78	2.41	1.78	2.07	28.5
2. W.S. & I.M.	2.34	2.40	3.07	2.38	2.88	2.39	2.07	1.85	1.88	2.10	9.2
3. ANZIO	2.36	2.11	1.74	1.94	3.74	2.88	2.62	2.00	2.09	2.15	21.7
4. PANZER LEADER	2.50	2.41	2.17	2.34	3.65	2.60	2.67	2.19	2.34	2.20	13.1
5. RICHTHOFEN'S	2.52	2.28	2.62	2.12	2.63	2.94	2.60	2.66	2.39	2.45	6.0
6. 1776	2.56	2.16	1.76	2.45	3.27	2.62	3.08	2.72	2.63	2.36	33.4
7. 3rd REICH	2.57	2.12	2.47	2.34	4.15	3.22	2.59	2.24	1.95	2.05	34.9
8. PANZERBLITZ	2.58	2.00	3.00	2.03	4.03	3.00	3.06	2.05	2.07	2.05	14.0
9. KINGMAKER	2.60	2.26	2.84	2.34	2.83	3.07	1.86	3.65	2.14	2.41	20.2
10. CAESAR'S LEGIONS	2.64	2.32	2.36	2.31	2.14	2.23	3.73	3.05	2.86	2.73	13.5
11. CHANCELLORSVILLE	2.68	2.62	2.57	2.45	2.26	2.52	3.43	3.07	2.55	2.64	18.8
12. FRANCE 1940	2.82	1.75	2.05	1.85	3.30	3.25	4.05	3.00	3.40	2.75	16.0
13. JUTLAND	2.83	2.84	-	2.39	3.27	3.06	3.24	2.53	2.61	2.67	29.7
14. LUFTWAFFE	2.87	2.41	2.91	2.04	2.86	3.02	3.73	3.41	2.82	2.64	24.2
15. MIDWAY	2.88	2.75	3.12	2.56	2.78	2.90	3.66	3.08	2.37	2.73	15.7
16. AFRIKA KORPS	2.90	3.04	3.10	2.92	2.12	2.29	3.39	3.57	2.91	2.77	13.5
17. ALEXANDER	2.93	2.99	3.21	3.19	2.55	2.98	3.43	2.76	2.43	2.86	12.7
18. ORIGINS OF WW II	2.98	2.69	2.58	2.80	2.00	2.22	4.00	4.06	3.11	3.40	9.6
19. BLITZKRIEG	3.09	3.39	3.28	3.30	3.14	2.89	2.25	3.67	2.81	3.05	24.0
20. TOBRUK	3.10	2.85	4.68	2.13	4.32	2.77	3.06	2.11	3.00	2.96	21.0
21. WATERLOO	3.18	3.29	3.27	3.11	2.01	3.11	3.27	4.32	3.21	3.01	16.2
22. BULGE	3.21	2.93	2.80	3.31	3.08	3.40	3.53	4.11	2.81	2.95	20.0
23. D-DAY	3.43	3.72	4.54	3.69	2.56	3.09	4.38	4.50	3.60	3.56	17.8
24. STALINGRAD	3.44	3.43	3.74	3.40	2.07	2.52	4.37	5.15	3.28	3.04	20.0
25. TACTICS II	3.51	3.43	4.30	3.59	1.45	2.18	2.32	5.57	4.59	4.20	11.6
26. 1914	3.87	3.18	3.40	3.26	5.46	4.32	3.86	1.95	5.48	3.86	55.0
27. GETTYSBURG	3.88	3.59	3.84	3.54	2.68	3.39	5.08	4.51	4.34	3.98	12.5
28. KRIEGSPIEL	4.04	3.77	4.20	3.85	2.13	2.94	2.93	6.09	5.20	5.29	9.8

Since adapting *DIPLOMACY* to bookcase packaging, the old style GRI *DIPLOMACY* mapboard is rapidly becoming a rare item. When the present stock of approximately 200 boards is exhausted there will be no more. Those wishing an original GRI mapboard should order now while it is still possible and be sure to specify that you want the old edition mapboard. The board sells for \$4.00 plus 75¢ postage.

Dozens of readers justifiably complained about the solution to Contest No. 71. Our contest developer seemingly forgot that artillery can't fire through intervening woods. He promises he'll never do it again however if we'll cut him down.

GEN CON WEST I which took place Sept 4-6th in San Jose, CA is reported to have drawn 1200 people to participate in board and miniatures competition as well as view displays and trade stands. This was apparently the most successful of the West Coast gaming conventions.

The illustration on pp. 3 is entitled "Setting Up". It is a print by Bruce Weigle from The Desert Campaign portfolio. It depicts the German 'FLAK 18' 88mm gun and its half-tracked prime mover, the Sd. Kfz. 7. The 11 man crew could unlimber and make ready for firing in 12 minutes. This and many other prints are available from LAMO-LEM Battle Prints, P.O. Box 2382, La Jolla, CA 92038. The complete Armor-in-Action series consisting of five portfolios is available for \$4.95 ppd. Lamo-Lem also offers a catalogue free for the asking.

Bruce Zollars of 4573 Coolidge St., Concord, CA 94521 announces that he is moderating multi-player games of WS&IM. The price of a twenty turn postal game starts at \$3.00 for the first ship plus 25¢ for each additional ship up to a maximum of 5 (\$4.00 total). Players may request a scenario and ship(s) but should include an alternate choice as not everyone can get a 120 gun ship of the line. This may be your best chance to engage in a full scale multi-commander game of TRAFALGAR with real fog of war.

Bill Donoher of 573 Woodland Dr., Los Osos, CA 93402 is organizing an *ORIGINS OF WWII* PBM tournament. Those interested may refer to the "Play-by-mail Game" section of the rules folder for the basic rules, although certain differences will be outlined upon entrance. Cash prizes are promised. A \$3.00 entry fee is required.

More evidence of the emergence of wargaming into the public eye is found on pp. 242-244 of the new bestseller on Watergate "*THE FINAL DAYS*" by Bernstein and Woodward. The authors make a point of showing David Eisenhower's preference for playing *DIPLOMACY* over joining Julie's involvement in her father's defense.

The Ealing Games Group in England is the most recent local club to get their act together. Complete with a fine club newsletter, stationery, and esprit de corps this group is doing much to promote active UK face to face boardgaming. Interested Englanders or visitors are urged to contact Bob Watson at 32 Windmill Lane, Southall, Mddx UB2 4ND or call 01-574-2709.

Infiltrator's Report

Wargame conventions are rapidly becoming a year around phenomenon. Winter events are planned in a variety of locations, not the least of which is WINTER WAR IV sponsored by the University of Illinois Conflict Simulations Society at the Foreign Language Bldg., 700 S. Mathews Ave., Urbana, IL 61801 January 14-16. Among the planned events are competitions in *DIPLOMACY*, *WS&IM*, *PANZERBLITZ* & *LEADER*. Further information is available from Alan Conrad, 911 S. Locust #101, Champaign, IL 61820.

There's liable to be less snow but just as much fun at GROUND ZERO in Jacksonville, FL. Sponsored by the Cowford Dragons (Northeast Florida Wargaming Association), GROUND ZERO promises the usual array of competitive events including *KINGMAKER*, *TOBRUK*, *WS&IM* and a *RICHTHOFEN'S WAR DEMO DERBY*. Scheduled for February 19th and 20th at the Holiday Inn on the Arlington Expressway, GROUND ZERO promises to be a class event. For a free brochure write Roy Beach, 5333 Santa Monica Blvd.N., Jacksonville, FL 32207.

WARCON III is scheduled for Jan 28-30 in the Memorial Student Center at Texas A&M University in College Station, TX. Sponsored by the Texas A&M Society, this promises to be a much expanded and improved version of last year's event with tournaments in *KINGMAKER*, and *PANZER LEADER* among the planned competitions. Interested parties should contact Keith Gross at P.O. Box 8199, College Station, TX 77844.

The Armchair Strategists Club of California State University announces that ORCCON 1 will be held on Jan. 7, 8, and 9 at the University Activities Center in Fullerton, CA. Among the planned events are an AH Classics Tournament, Richthofen's War Demo Derby, Panzer Leader Macro Game, *WS&IM*, *KINGMAKER*, and *DIPLOMACY* tournaments. Cost is \$3 per person at the door.

U.S. servicemen in West Germany will get their crack at the convention scene Feb. 12-14 at the U.S. Army Rec Center in Landstuhl. Those in the area are urged to contact SFC David Rolfe, Box 14, 2nd General Hospital, APO NY 09180.

Vol. 13, No. 3 proved to be the most popular issue ever with an overall rating of 2.53 which edged the 2.57 of Vol. 12, No. 1 and in so doing showed the readership's preference for a wide variety of subject coverage. The ratings of individual articles by our 1200 maximum point scoring system looked like this:

Initial Impressions of	
Russian Campaign	404
Panzerblitz, 1941	181
Midway Series Replay	143
Furor Teutonicus	131
Basic Probability for War at Sea	92
Another Man's View of	
Russian Campaign	86
Design Analysis—Kingmaker	35
A Question of Balance	27
Just One More Hex	20
More French Alternatives	19
Avalon Hill Philosophy	12

Since nobody has sent in a completely accurate solution to Contest 73 yet (yes, all you clever people who found the storming attack, you left something out!), we're accepting submissions right up to the time this issue of the *GENERAL* is mailed out. Consequently we don't have a list of winners at this writing, but we will tip you off to the *complete* solution.

(A number of solutions were wrong because of rules misinterpretations. Before I give the right solution, I'd like to point out that: in the second impulse units move as indicated on the movement allowance chart, they cannot move if they start the second impulse in enemy ZOC, and they cannot attack at all if they were in a first impulse AV; only one unit can invade in the Black Sea during a player's *turn*, all Black Sea ports must be controlled for the invasion to be guaranteed of success; units must stop in the first hex after crossing the Kerch Straits and cannot cross into an enemy ZOC; and the Russian units near Rostov are doubled behind the river. If you're wondering why your solution wasn't right, the above might explain it.)

Maybe we should have reminded you that the Russians get reinforcements in May, 1943, too—the 5th Guards Armored Army. As a final hint to all you people who almost got the solution, the 59th infantry corps is the final key to the puzzle—that unit must be used! If you'd like to go back and solve the puzzle for your own satisfaction, the time to do it is now—the solution is spelled out in the following paragraphs.

First, the 48th and 57th panzer corps and the 3rd Rumanian go to GG21, attacking the Russian 3rd armor with a Stuka to get an Automatic Victory. Then the 59th infantry corps goes to II22, controlling Sevastopol. Then move any of the nearby 4-4s into Rostov—and at that moment all three ports are in Axis control. The 1st SS invades at KK18, AVing the Stavka unit, and the 2nd SS, 1st cavalry, and 14th panzer corps move into KK19, which is now free of Russian ZOC. The 52nd panzer grenadiers move to OO16, and the 11th infantry corps move to JJ21. The rest hold their positions.

The Axis can get a 4-1 surrounded against Stalin and the 19th Army, but a "Contact" result would save Stalin and allow the Russians to counterattack and break the encirclement, giving Stalin a retreat route when he counterattacks on his turn. So the Axis must make sure Stalin is eliminated when he counterattacks—they must force him to attack at worse than 1-6 odds, so he will automatically surrender regardless of other battles. The Axis need 30+ points adjacent to Stalin (and the 19th) and placed so that no other Russian unit can attack them.

So on the second impulse the 2nd SS and 14th panzer go to MM18, where they will be doubled to 32 points when Stalin counterattacks. These are the units that must be protected from other Russian attacks. The 1st cavalry goes to LL18 to fill out the Axis 4-1 attack and to block the coastal approach. The 1st SS goes to MM15 to block the overland approach and to surround Stalin.

Now comes the part everyone forgot—you have to block against a *Russian* invasion to reinforce Stalin's attack! The 52nd panzer grenadier goes to OO17, and the 11th infantry goes to KK19. The Russians can invade at LL19 or NN18, but the invading unit must attack the appropriate flank unit *only*. Stalin and the 19th Army must attack at 1-7 and are automatically eliminated!

OPONENTS WANTED

Alex-Phm, Jut-Phm, Jack J. Romano, IC2, R-3 DIV, USS Protbes AS-19, FPO San Francisco, CA 96601.

Fit 1776 or any Civil War game. Should have AREA of 1500 plus Robert Martin, 1900 Gettysburg, Granada Hills, CA 91344, 383-5644.

Veteran game seeks new opponents for all AH games, also many others. No blood sport, want friends, not enemies! Can travel within southern California. Ben Harb, 10341 Lassen St., Los Alamitos, CA 90720, (714) 430-0896.

Chaotic wishes fit with anyone Porterville or Fresno area any game if you breath the air you can die. John Kuebler, 147 E. St., Porterville, CA 95257, 781-6170.

AREA rating pbm or fit have AK, Fr40, Tac, Pan, Pan/L, 3R, Tobruk and others. Answer all letters or calls also worth to you. Jay Armar, 1110 Via Pintada, Riverside, CA 92507, 787-2643. Rack into action against Stearns back! Will play AK, Alex, 3R, Fr40. Good Pan, Pan/L, Wat and maybe 1776, RW, and Grid. Still the best Victor Peak, 90 Brookwood Ct., San Anselmo, CA 94960, 457-9287.

Like to get involved in Kingmaker? Looking for AREA rated or unrated, AK, Wat, Pan, Grad, Pan/L, BB, Fr40, Earl J. Evans, 4517 W. Oakfield, Santa Ana, CA 92703, (714) 531-5584.

Canon fodder needed FTF all AH, AREA 1500. Les Carpenter, 516 E. Orange St., Santa Maria, CA 93454, 922-6296.

Average player desires fit in 3R, Pan/L, Fr40, Out, War at Sea, Chacka Spiekerman, 707 Bristol, Stockton, CA 95204, 265-1421.

Wanted: players for multi-player game of Grad. Prefer players living in Whittier area but you don't have to. Good players only. Parker Hurlburt, 9347 Lindane, Whittier, CA 90601, 697-1896.

AREA rated 1200 Am fit 1776, old seeking opponents for pbm BB, Also want fit for Pan/L, LUf, Tobruk, and Jut. Leland Gourley, 282 Elm, Alton, CO 80720, 345-2570.

AREA player wants to learn or play AK, Fr40, King, Pan, Pan/L, 1776, 3R, DD, Diplomacy. Anybody in CA area please contact me. Even those of you who did and I lost your numbers. Walt Cassidy, 4 Roimer Rd., Westport, CT 06880, 227-5007.

Adult AREA opponents in Newark-Wilmington area needed for fit only of any AH game. Am willing to travel up to 130 miles. James E. Pyle, 145 Woodshade Dr., Newark, DE 19702, (302) 751-7461.

For Sale: Out-of-print AH games. Send 13c stamp for list. Wally Williams, Jr., 1507 W. 13th St., Panama City, FL 32401, (904) 763-1609.

AREA pbm for Amroz, Grad, DD, BB, 3R and Pan/L if you have a good system. Larry J. Kelly, 1504 S. Pecan Apt. D, Carlede, CA 91015, (912) 273-2970.

Want Pbm opponents for most AH games. Need kits for some. AREA players should be 1100 and up. Will play non-rated games too. James H. McCall, 1305 E. 60th, Chicago, IL 60637.

Recently moved to Chicago area. Very interested in finding clubs in western suburbs. Also AREA pbm Anzio, Biziz 758. Will fit most AH titles. Please contact David L. Simdel, 3 East 51st St., LaGrange, IL 60525, (312) 352-8716.

AREA rated 1200 looking for opponents in Northern Area. Fit: Have LUf, Mid, Pan, Pan/L, RW, 1776, Tac, 3R. Willing to learn. Paul Nordhaus, 1845 Beechnut Rd., Northridge, IL 60062, (312) 272-2018.

Average player desires opponent any AH warfare fit or pbm. Lawrence Parrish, 13301 W. 169, Leawood, KS 66205, 696-7907.

Any gamers in Louisville area? Will fit any AH game. Especially interested in multi-player games. AREA 1200. Jeff Murrell, 1908 Trevilian W, Louisville, KY 40295, 902-590-9550.

Looking for fit opponents near me. Brent Bancheit, 130 Ohio St., Miltonketter, ME 04402, (207) 723-9636.

Pbm AK, Grad, Wat. New England's in 205 preferred. Not AREA rated. Will respond to all. Robert J. Kane, 7 Lafayette St., Portland, ME 04101, 773-29293.

Novice players need opponent. For 3R or Grad. Fit or pbm. Kurt Sehnghal, 708 Clayton St., Aberdeen, MD 21011, 272-2249.

Spill area group forming for fit play. We meet every Wed night. All ages are welcome. Richard Wright, 16 Howard Hill, E. Longmeadow, MA 01028, 525-3910.

Fit opponents wanted for Biziz, DD, Fr. St., Gett, Jut, Pan/L, RW, BB St., Out, 1776, Tobruk, WSK&M AREA rated. Will pbm Biziz and DD. Joseph M. Stovakite, 209 Grove St., Lexington, MA 02173, 861-1327.

AREA player wants to learn or play AK, Fr40, King, Pan, Pan/L, 1776, 3R, DD, Diplomacy. Anybody in CA area please contact me. Even those of you who did and I lost your numbers. Walt Cassidy, 4 Roimer Rd., Westport, CT 06880, 227-5007.

Adult AREA opponents in Newark-Wilmington area needed for fit only of any AH game. Am willing to travel up to 130 miles. James E. Pyle, 145 Woodshade Dr., Newark, DE 19702, (302) 751-7461.

For Sale: Out-of-print AH games. Send 13c stamp for list. Wally Williams, Jr., 1507 W. 13th St., Panama City, FL 32401, (904) 763-1609.

AREA pbm for Amroz, Grad, DD, BB, 3R and Pan/L if you have a good system. Larry J. Kelly, 1504 S. Pecan Apt. D, Carlede, CA 91015, (912) 273-2970.

Want Pbm opponents for most AH games. Need kits for some. AREA players should be 1100 and up. Will play non-rated games too. James H. McCall, 1305 E. 60th, Chicago, IL 60637.

Recently moved to Chicago area. Very interested in finding clubs in western suburbs. Also AREA pbm Anzio, Biziz 758. Will fit most AH titles. Please contact David L. Simdel, 3 East 51st St., LaGrange, IL 60525, (312) 352-8716.

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OPONENTS WANTED

Wanted: Adult fit Pan, Pan/L, 3R, Sande Desteliano, 4731, RR 7, Angushre Apts. Bldg. B, 511 Cedar, New Berlin, WI 53057, 482-1993.

Wanted: any fit opponents for LUf, 3R, DD, Pan/L. Will learn others. Keith Larson, 2915 West Blvd., S. Columbia, MO 65201, 445-3451.

Oppon. wanted, will play pbm, fit, 3R, BB, DD, Alex, Pan, BK, All letters answered. Any clubs around? Also play Biziz, pbm or fit. Al Fay, 12 C Bayou View Apts, Gulfport, MS 39301, 864-7859.

17 yr. old beginner wants fit Gett, Tac, BB, 1776. Will play Gett by phone, Gale Pfand, 240 W. Linden, Fremont, NB 60825, 727-1138.

Fit for occasional weekends wanted in Charlottesville or Washington, Va. area. Also interested in Cherry Hill, NJ area most AH games some others. Bill Scott, Jr., 318 Chalklyn Pk., Cherry Hill, NJ 08034, (609) 983-4781.

I am an average player age 40 looking for opponents. For fit in North Jersey area. Evenings only. No pbm please. Lou Dunter, 4 Dayton Dr., Apt. 10A, Edison, NJ 08817, (201) 494-6343.

AREA player rated 1200 wants to join local club. Would like rated fit games of WSK&M, Wat, and AK. Non-rated RW, DD, Grad. Andy Tomoulik, 48 Dearborn Dr., Old Tappan, NJ 07675, (201) 768-6851.

Peasants! Afraid of me? Play AK, Alex, FT St. Jut, Krieg, LUf, 1974, Out, Pan/L, RW, Grad, Tobruk, WSK&M, Kaiser's, an AREA player. Count Mark Holowdzak, 778 Centre St., Trenton, NJ 08607, (609) 392-4037.

1200 player will pbm (Geor), S-D (Rasi), Krieg (Red), Wan fit in Cortland Homes area. Chase and I will fight any counter. John D'Addario, 35 Greenbush St., Cortland, NY 13045, (607) 753-0014.

Anybody there any wargamers near Dunes? Need fit opponents for AK, Anzio, Mid, Out, Pan/L, RW, 1776, 3R, WSK&M, David March, Box 242, RD 2, Delhi, NY 13753, 746-4614.

Alex, Biziz, Jut, LUf, LUf, Mid, Out, Pan, Pan/L, RW, 3R and Tobruk. Will pbm or fit. Have no kit but will split cost. Not AREA rated. Play for fun, not kill. Jam 15, Robert Duxley, 109 Bristol Rd., Fayetteville, NY 13066, (315) 637-7000.

Fit players! wanted for Biziz, DD, Pan/L, 1776, 3R (know but don't own), AK, Anzio, Gett, Krieg, LUf, Mid, Out, Mark Fitzgerald, 2131 Westvirer Pkwy, Grand Is., NY 11007, 723-7967.

Fit players wanted for: Gett, Krieg, LUf, Anzio, Out, 3R, AK, Mid, Tobruk, 1776, Pan/L, DD, Dip, Wooden Ships, Am willing to learn others. Mark Kozenick, 2766 West River, Grand Is., NY 11007, (718) 273-4900.

Help! Desperate! 14 yr. old, looking for competition. Will pbm. AREA is 900. Will play Pan, Biziz.

Elvin Juino, 64 Madison St. #5G, New York, NY 10038, (212) 227-2480.

Good high school age player desires opp. in pbm. AK, LUf, Fr40, Krieg, Phbitz, Paul L. Clement, 429 Elliott St., 22 Syracuse, NY 13204, 474-8608.

FTF Grad, BB, Biziz, Pan, Pan/L, Anzio, Tob, Pbm, Grad, BB, LUf, AREA 900. Have club if interested. Age 14. All letters answered. Walter Green, Tide Court RR #2, Wading River, NY 11792, (516) 929-6949.

AREA opponent of 1650+ rating wanted for Russian Campaign, Sgrad, or RW. Local players call me for info, on our Sunday session at UNCC. Jim Grammer, III, 5205A Monroe Rd., Charlotte, NC 28265, 568-4949.

ALFA 1200 AAA. Fit Fr40, Grad, Pan, RW, (especially) 1776. Need a fifth for Dippy? We have club in Char. Contact us! Bill Pechel, 1629 Shammounco, Charlotte, NC 28215, (704) 535-1871.

Pbm BB, Pan, "Grad, prefer over 7R. AREA opponents only. Prefer opponents rated 1400 plus. Cpt. Thomas R. Williams, 624 Emerald Dr., Fayetteville, NC 28301, 488-3423.

AM 13 and novice-player. No opponents. Pbm Russ, Camp, Biziz, IAC, pbm 3R if you have system. Fit all above plus Mid, Krieg, I'm in Sandusky area. Alan Collingwood, 3 Lansdowne Drive, Milton, OH 44026, 689-2950.

1700 AREA player wants to play rated game of 'Grad. Opponent must have AREA rating of 1500 or higher. Pbm or fit. Philip D. Huffman, 5135 Oak Creek, North Orem, OH 44070, 777-2129.

Am looking for opp. in Anzio and 3R. Pbm or fit. I have a friend for poss. multi-player games. Mark Rightnow, 1515 12St. Apt. 7, Alhonna, PA 16011, (814) 943-0966.

Altona Wargamers, where are you? I know there are more than six of us with a seven mile radius. Show yourselves. Matt Shirley, 1014 Park Blvd., Alhonna, PA 16011, 946-3281.

Fit players: DD, LUf, AK, 3R, RW, Grad, Pan/L. Can play more games I own. Age 16, average player. Alex Antipas, P.O. Box D-1, Buck Hill Falls, PA 18323, (717) 595-3517.

Anyone in the Harrisburg, Pa. area interested in starting a Wargamers Club for weekly meetings and tournaments, send a postcard (with name, age, phone, CPT Robert K. Swenson, RD01, Box E61, Erters, PA 17319, (717) 938-0910, 724-8941).

AREA 750 AKA, desizes pbm AK, fit Mid, DD. Any clubs in south Pa. Hbg. or York area? George Koeh, Jr., 96 Greenwood Dr., West Cumberland, Pa. 17070, (717) 493-4941.

3R pbm kagap, CSS sponsored. Write for details. Want AREA pbm/fit all AH games. All letters answered. Mark Matuchak, 15 Connor St.

Will trade 1914, Grad, plus 30 more games. Send list of games and needs and will reciprocate. John Fierthman, 607 Mapletree Lane, Urbana, OH 43078, (513) 653-3152.

For sale: 1914, mint condition \$35. Never used. You pay postage. Opponents wanted for fit in the Lehigh Valley area for most Avalon Hill war games. Michael J. Balasi, 739 Delwood St., Bethlehem, PA 18018, (215) 868-8138.

For sale: Grad, good cond. Highest bid over \$10. You pay postage. Also want to form club in my area. Now have 3 members. Joseph D. Castora, RD1 #1, Box 132, Millerton, PA 16936, (717) 537-2857.

For sale: U-boat, Bismark, Hex, Gettysburg, B&C, C&O, Dspatcher, Civil War, DD61, Grad, etc. SASE for list. D. Fitzgerald, 1839 Loreto Ave., Philadelphia, PA 19152.

For sale: Grad in good cond. No pieces missing. \$15. 1 pay postage only first letter accepted. Alex Powell, 229 Elm St., Slippery Rock, PA 16057, 794-8898.

For sale: good cond. Civil War. Take best offer. Want Generals Vol. 10-16 and Vol. 11-14. Will accept zeroes if complete. Call after 5 p.m. Paul Kester, 311 Second St., Towanda, PA 16848, (717) 265-6161.

Sale Gen. Vol. 10, No. 1, 5; Vol. 11, No. 2, 5, 6; Vol. 12, No. 1-6; Vol. 13, No. 1, 2. Good condition. \$4.50 and 50c postage. Bob Berold, Box 472, Conspville, VA 98239, (206) 676-4712.

For sale: 1914, \$15. 701, DD-313 both in very good cond. Neal Moody, 328 Hazel St., Belmont, VA 53510.

1914 games for sale! One used in good condition \$15. One untouched \$20. Postage paid! Will play face to face in Milwaukee-Lake Geneva area! Greg Rubin, 1867 Thomas Dr., East Troy, WI 53120, (414) 642-3660.

Want Gen. Vol. 9, No. 6. State cond. and price. Also fit in Marina High area. Rod Mriouan, 4026 Aladdin Dr., Huntington Beach, CA 92649, 846-3579.

Wanted! fit player for Tobruk, 3R and 1776. Also would like to buy a discount. AH games. Please

THE GENERAL

OPONENTS WANTED

Unintown, PA 15401, (412) 437-7901.

Lost in Brookings SD? Is there any gamers within 55 miles of this prairie town? Good fit play of Fr40, Pan, Pan/L, WSK&M, I am a 25 yr. old experienced player and teach here at SDSU. Gary S. Stagliano, 1037 Main Ave. #C1, Brookings, SD 57006, (605) 692-5581.

Wanted: Fit opponents in AK, Grad, DD, LUf, Pan & most any other game. Recent college grad. Arthur Dolbrmann, 120 Malibu Dr., Apt. C16, Clarksville, TN 37040.

Average player 27 seeks adult wargamers in New Johnsonville area. LUf, Pan, RW, St. others. Michael Doyle, P.O. Box 152, New Johnsonville, TN 37134, 535-2903.

Join the Houston Military Gaming Society. Dan Matous, 10415 Sagraal, Houston, TX 77089, 881-0832.

900 BCE wants responsible opponents west of Algechines for pbm base, Biziz, plus rules 22 & 23, red, Hurry. I'm fast improving! Bill Salvatore, 507 Monticello, Alex, VA 22405.

Adult 28 needs fit opponents. Will play most games of most publishers. I have over 130 titles available. George Lyon, 2152 Evans Ct., Apt. 303, Falls Church, VA 22043, (703) 821-2940.

If possible fit 3R, Tobruk, Starship. Military obligations at VMI leave Sat afternoon or Sunday as free time. Opposition welcome. Room 306, Caslet Drive, V. Wells, Box 211 VMI, Lexington, VA 24405.

Good adult game players with opponents for any AH wargame. Bob Perkins, 11 Sher St., Portsmouth, VA 23701, 488-8138.

Desire opponents for fit and pbm in Pan. Also for fit in Pan/L, Tobruk, and other games that I have. Mike Christ, 14020 26th N.E., Seattle, WA 98125, EM-4-7072.

Pbm wanted for LUf, Krieg, Pan, WSK&M. Answer all. Also fit in Anchorage, AK. Any clubs around? James Laughlin, P.O. Box 5-398, SE 98749, (907) 864-1287.

3R, RW, Grad, Alex, 29, desires matzue, non-fantastic, pbm relationship for 1776, RW, Camp, LUf. Also can be forced into 3R. If you're serious, Carl F. Peters, 13421 26th N.E., Seattle, WA 98125, (206) 446-4615.

Fit, LUf, Mid, Pan, Pan/L, RW, 1776, 3R. Will pbm. You must have kit. Not AREA rated. Ben Bennett, 2804 E. 27th St., Vancouver, WA 98661, (206) 693-2693.

AREA opponent wanted for two game series of pbm Pan, Scenarios 1, 6, 9, 15, 22, or Parabiz. Also fit in area. Chris Hawkins, 927 Kittitas, Wenatchee, WA 98801, 662-6