<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>RIDING WITH THE BEST: A Commander's Eye View PATTON'S BEST</td>
<td>By Jeff Petraska</td>
</tr>
<tr>
<td>12</td>
<td>CANADA'S BEST: The Saga of the Canadian 4th Armoured</td>
<td>By Mitch Rupe</td>
</tr>
<tr>
<td>13</td>
<td>WHEELS OF DEMOCRACY: The Development of the M4 Sherman</td>
<td>By Jeff Petraska</td>
</tr>
<tr>
<td>17</td>
<td>IMPROVING ON PATTON'S BEST: Realism in the Solitaire Game</td>
<td>By Rick Jennings</td>
</tr>
<tr>
<td>19</td>
<td>COMING ATTRACTIONS: TURNING POINT: STALINGRAD</td>
<td>By Don Greenwood</td>
</tr>
<tr>
<td>20</td>
<td>LOST IN THE FOG: Increasing the Info Gap in Wargames</td>
<td>By Brent McKee</td>
</tr>
<tr>
<td>21</td>
<td>UPGUNNING AN OLD WARRIOR: AFRIKA KORPS for Everybody</td>
<td>By Richard Gutenkunst</td>
</tr>
<tr>
<td>22</td>
<td>COMPUTER CORNER: UNDER FIRE</td>
<td>By John Huff</td>
</tr>
<tr>
<td>23</td>
<td>A NEW CAMPAIGN: THIRD REICH—1941</td>
<td>By Larry Bucher</td>
</tr>
<tr>
<td>27</td>
<td>SQUAD LEADER CLINIC: Guns Versus Tanks</td>
<td>By Jon Mishcon</td>
</tr>
<tr>
<td>29</td>
<td>GUNNED-UP-IN THE DESERT: A WEST OF ALAMEIN Adventure</td>
<td>By Mark Nixon</td>
</tr>
<tr>
<td>33</td>
<td>SPORTS SPECIAL: The KnockOut Game</td>
<td>By Jim Burnett</td>
</tr>
<tr>
<td>35</td>
<td>STORMING SMOLENSK VIA THE POSTAL ROUTE: PANZERGRUPPE GUDERIAN By Mail</td>
<td>By Jim Lutz</td>
</tr>
<tr>
<td>38</td>
<td>THE KING OF BATTLE: Artillery in the PANZERBLITZ Series</td>
<td>By Carl Schwamberger</td>
</tr>
<tr>
<td>41</td>
<td>UP FRONT WITH SGT. ROCK: American Problems in the Patrol Scenario</td>
<td>By Stephen Harvester</td>
</tr>
<tr>
<td>43</td>
<td>PRELUDE TO THE STORM OVER ARNHEM: A Historical Perspective</td>
<td>By Chuck Lane</td>
</tr>
<tr>
<td>46</td>
<td>A ROCK AND A HARD PLACE: PANZER LEADER Situation #12</td>
<td>By Steve Wheeler</td>
</tr>
<tr>
<td>53</td>
<td>THOSE BITTER WOODS: German Tactics in BULGE</td>
<td>By John Malaska</td>
</tr>
</tbody>
</table>
August 12th, 1941...The 9th "Pasubio" Division's advance guard, the first element of the Italian Expeditionary Force in Russia to see action, is moving down the right bank of the Bug River. Its objective is to seize crossing points along the river to aid in the entrapment of the Soviet 9th Army. In the early morning hours, men of the 80th "Roma" Infantry Regiment launch a surprise attack to capture a bridge spanning a tributary of the Bug. The bridge must be taken swiftly to keep the advance moving...

November 19th, 1941...Unknown to Rommel, the British have launched Operation Crusader. The Italians of the 132nd "Ariete" Armored Division, however, warned by their own intelligence service of an impending attack, stand ready, well dug in behind soggy ground at Bir el Gubi. As Crusader tanks roll into range, their crews disdainful of the Italians' fighting ability, the defenders unleash a hail of AT fire which stops them cold. Then the M13/40s of the Ariete's tank regiment are ordered to counterattack. Suddenly the overconfident British have more on their hands than they bargained for...

July 11th, 1943...The 7th Infantry is pushing forward to expand and secure the U.S. beachhead around Licata, Sicily. As its 3rd Battalion nearly the town of Palma di Montechiaro, it comes under fire from low hills to the south. The GIs push the Italian defenders back into the town, wherever white flags begin appearing on its buildings. Thinking that the Italians are surrendering, a patrol is sent forward. But the flags have been put out by civilians, and the patrol is suddenly cut down by withering fire. Enraged, the battalion commander launches an all-out assault on Palma. His aim: Retribution.

September 10th, 1943...Two days ago Italy announced its armistice with the Allies. Now the German 2nd Parachute Division, supported by assault guns, is attempting to occupy Rome—but doggedly trying to block its advance is the elite 21st "Grenadiers of Sardinia" Division. The sounds of war echo through the southern suburbs of the Eternal City as the embattled Grenadiers, aided by meager reinforcements and a few armed civilians, slowly yield ground to the tough paratroopers. The Italians field some of the best weapons in their armoire, but ammunition is running low and the German pressure is relentless. The battle for Rome is reaching its crescendo...

This is HOLLOW LEGIONS—the long-awaited Italian ASL module. Here is the complete order of battle for a new nationality—one never before offered in the long history of the SL/ASL systems. The Italian soldier of the Second World War has been much maligned—but is this view totally justified? How much was his performance affected by the quality of his weapons and the abilities of his small unit leaders? Playing HOLLOW LEGIONS, which incorporates the results of extensive research on this lesser-known army and its equipment, will allow you to form your own opinion by giving you the opportunity to command every major vehicle, gun and troop type employed by the Italians in North and East Africa, Russia, Sicily, the Balkans and Italy during World War II. The two mapboards (#30 and #31) contained herein depict open desert; added to those in WEST OF ALAMEIN, they allow you to re-create North African battles of even greater expanse than was possible with just the British module. But HOLLOW LEGIONS is certainly not limited to the desert; indeed, of the eight scenarios in this module, five are set in Europe. Also included are the ASL Chapter H (Design Your Own) Italian vehicle and weapon listings, point values, historical notes and DYO charts—plus the ASL Chapter N (Armory) pages for the countersheets in HOLLOW LEGIONS, those for the Allied and Axis Minor infantry and support weapons, and those for British ordnance and transport.

HOLLOW LEGIONS is now available for $25.00 from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Please add the usual 10% for shipping and handling—20% for Canadian or 30% for overseas orders. Maryland residents please add 5% sales tax.

HOLLOW LEGIONS is not a complete game. Ownership of ASL, BEYOND VALOR, YANKS and WEST OF ALAMEIN is required—as are boards 4, 7 and 12 for three scenarios.
If there is one problem that wargamers can sympathize with, it is not being able to play the game you want when you want. The reasons vary, but in many cases it reduces to the simple lack of an opponent. (I suspect that many potential wargamers never get deeply involved in the hobby because they can never talk a buddy into trying a wargame.) But there are problems even for we hard-core devotees—risks being available when the opponent is (divergent work schedules), or a lifestyle that doesn't allow eight uninterrupted hours (say, that curse of our age, parenthood). Some gamers would like to try new game systems, but their "regular" opponents are too hidebound ("I don't want to play no monster game!").

In the early days of the wargaming hobby it was particularly hard to locate opponents, and so some inventive fellows devised methods to play the early Avalon Hill games by mail. This innovation meant that one could play against an opponent across town, or across the country, without all the attendant problems of scheduling and time constraints. Players simply wrote out their moves and sent them along to their opponent. There were problems of course—how to handle the die rolls, how to locate opponents, length of time playing a game to conclusion by mail, the amount of effort in recording each move, enforcing honest play, and so forth. But there were some distinct advantages as well—convenience of playing when one wanted, playing the game you wanted to play, the amount of time spent each session was brief, the ability to carefully plan moves, and exposure to a wide variety of strategies and styles of play.

In 1966, a group of stalwart gamers founded The Avalon Hill Intercontinental Kriegspiel Society (AHIKS). The purpose of AHIKS was to be a self-supporting, non-profit organization devoted to supporting play-by-mail wargaming. At the time there was only one wargame manufacturer, hence the name; there has never been any official connection between AHIKS and The Avalon Hill Game Company. The officers and membership value highly their independent status; it is an integral part of their bylaws.

It was hoped by those original members that some of the problems alluded to above could be alleviated, and the advantages heightened. AHIKS would act as a matching service to pair members who wanted to play the same game. They would provide a standard system for generating dice rolls (the ICRK). And they would police their own ranks, barring any members who dropped out of matches without good cause or failed to act in a courteous, adult manner. In all of these endeavors, the organization succeeded admirably. And their services have grown over the past two decades.

Now there is the Kommandeur, a bimonthly newsletter with news, views, articles on strategy for those who play wargames by mail. AHIKS provides pre-printed OOBs for a number of the most popular by-mail wargames, saving members the trouble of writing up their own. As games have become more complex, with numerous phases and systems, it has become necessary to provide new pmr systems for these games. A ratings system has been introduced to allow members to find opponents of equal ability. The position of "Judge" was instituted to resolve rules disputes among members, and the "Membership Guide" provides a protocol for resolving most disputes in a courteous and sportsmanlike manner.

The main services that AHIKS provides remain the same though. Members send in their request for the game(s) they wish to play and list a few conditions (AREA-rated, multi-player, speedy opponent, and such). When the organization has two requests for the same game and conditions, each involved member is sent a "Match Form" and an ICRK. And members send in their request for the game(s) they wish to play and list a few conditions (AREA-rated, multi-player, speedy opponent, and such). When the organization has two requests for the same game and conditions, each involved member is sent a "Match Form" and an ICRK. And the game begins.

AHIKS still polices itself. Members who drop out of matches without good cause, who are discovered cheating, who behave in an immature fashion, are expelled. This does not necessarily guarantee a good match every time, but it does mean that the probability of a satisfactory game played by mail is much higher than otherwise for members. Occasionally new members are amazed to find themselves matched against well-known grognards of the hobby. Initial pride turns to horror as the game's designer takes Berlin in a protocol for resolving most disputes in a courteous and sportsmanlike manner.

AHIKS still provides service to a regular, polished and professional publication. After 23 years, AHIKS has weathered many changes in the industry, its own executive branch, mail strikes and postal rate hikes, and all the usual brouhaha of any large organization active for two decades. The Kommandeur has gone from an erratic newsletter to a regular, polished and professional publication. After 23 years, AHIKS is still going strong, and that's a healthy sign for all of us interested in the growth of this hobby. Plans for the future are, as always, to "improve services" (whatever that may actually entail, given that they do so much now). If readers are interested in joining AHIKS, or have any questions about the organization, you can contact:

Mr. Bill Salvatore
Secretary, AHIKS
19885 Wild Cherry Lane
Waters' Landing, MD 20874

Many members of AHIKS have found something beyond the wargaming they initially wanted to do; they have made friends all over the world. It is difficult to correspond with someone for a year or more and not get to know him. Members have been known to plan vacations around the locations of their opponents (staying at Dave's place in Gettysburg, or at last going to England or Kenya because they now know someone there). Some finally make it to ORIGINS where they can now meet their friendly postal opponent after all these years. And that may be what, in the end, AHIKS is all about.

CONVENTION CALENDAR

MAY 26-29
GAMECAUCUS II, Concord, California
Contact: Mike Wilson, P.O. Box 4867, Walnut Creek, CA 94596. (415) 228-0764.
Note: Tournaments include TRC AIR, UP FRONT, TITAN, B-17 and 7th Fleer among others.

MAY 27-28
DIXIECON III, Chapel Hill, North Carolina
Contact: David Hood, 15-F Estes Park, Carrboro, NC 27510.
Note: A three-round DIPLOMACY tournament for team and individual competition.

JUNE 16-18
MICHCION '89, Southfield, Michigan
Contact: Barry Jensen or Mike Bartmiowski, Metro Detroit Gamers, P.O. Box 656, Wyandotte, MI 48192. (313) 591-2300.

JUNE 29—JULY 2
ORIGINS '89, Los Angeles, California
Contact: Jeff Albanez, P.O. Box 8399, Long Beach, CA 90808. (213) 420-3675.
Note: The Wargame Convention of 1989, rotating this year to a West Coast location.

JULY 8-9
DOVERCON V, Dover, New Hampshire
Contact: Edward Loomis, DoverCon, P.O. Box 753, Dover, NH 03820.

JULY 21-23
ATLANTICON '89, Baltimore, Maryland
Contact: Dale Wetzelberger, Eastern Conventions Inc., P.O. Box 15405, Baltimore, MD 21220. (301) 298-3155.

JULY 28-30
DIP-CON XXII, San Diego, California
Contact: Larry Peery, P.O. Box 8416, San Diego, CA 92102. (619) 255-6248.
Note: The premier DIPLOMACY tournament in the States, featuring individual and team and variant competitions.

AUGUST 5
CAPITOL-CON V, Springfield, Illinois
Contact: Bill Wilson, 99 Cottonwood Drive, Chatham, IL 62629. (217) 483-7579.
Note: Among the several board tournaments are ones in CIV, DIP, PL and TRC.

SEPTEMBER 15-17
SIoux City Wargames IV, Sioux City, Nebraska
Contact: Russ Gifford, 1600 Pierce, Sioux City, IA 51105.
Note: Among the many events—TRC, DIP, ASL and SPRFF CIRCUIT.

OCTOBER 6-8
ASL OKTOBERFEST IV, Youngstown, Ohio
Contact: Bill Conner, P.O. Box 4114, Youngstown, OH 44515.
Note: One of the premier ASL events, a round-robin tournament for novices and experts alike.
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Ask for Operator Q.
RIDING WITH THE BEST
A Commander’s Eye View of PATTON’S BEST
By Jeff Petraska

So, your B-17 has just touched down after completing its 100th mission and you’ve finally decided to throw in the towel. Getting tired of dealing with flak and Focke-Wulf’s? Tired of flying along like a goose in a flock with no freedom of action?

Well then, climb down from that cockpit. I’ve got an offer for you. How’d you like to trade in that bomber jacket and headset for a tanker’s uniform and helmet? There’s an opening for you as a tank commander in the U.S. 4th Armored Division. An ice, that now, would you? Just sign these transfer papers and you’ll be an official member of PATTON’S BEST. PATTON’S BEST is an earth-bound version of the popular B-17, QUEEN OF THE SKIES solitaire game. In PATTON’S BEST you command one of the many varieties of M4 Sherman tanks serving with the U.S. 4th Armored Division. As part of a task force consisting of Sherman tanks and infantry squads, you are pitted against a variety of German forces as you participate in the liberation of France and the defeat of Germany.

Like B-17, playing PATTON’S BEST is a very personal affair. That’s not some nameless, faceless G.I. in the commander’s hatch, that’s you. That’s your alter ego, with those of your friends, co-workers and acquaintances serving as your loyal crew. As the days pass, the attachment to these characters, and to your tank itself, slowly grows. When the day comes that you lose your tank to a panzerfaust, Panther, or PaK 43, you’ll feel real regret if some of your favorite crew members are lost.

Because of this personal flavor, to simply describe the game mechanics from a third person point of view would not do it justice. Therefore, this article offers you a tour of the game as seen from the eyes of a tank commander. Your guide will be Sgt. Jeff Petraska, commander of an M4A1 Sherman (Tank card #5) named the Iron Mule. The tour starts on the morning of 5 August 1944 not far from Vannes, France.

0500, August 5, 1944
It was a dark, overcast morning as Sgt. Petraska trudged slowly toward the Iron Mule. The engine was already running and the crew had everything ready to go since the task force was preparing to move out soon. As he passed the open driver’s hatch, he couldn’t help taking a lighthearted jab at Bill.

“Hey, Bill!” he shouted into the hatch.

“Bill’s head popped up. “Yeah?”

“Let the engineers find the minefields this time, okay?”

Bill simply grinned, shook his head, and disappeared into the hull. It really hadn’t been his fault that they’d hit a mine the last time out, and they both knew it. Besides, there wasn’t much chance of something like that happening again.

Sgt. Petraska scaled the tank and dropped deftly into the turret. Ed and Scotty were already there, but it still seemed unusually spacious this morning. I don’t believe it. No extra ammo? Jeff asked.

“There’s actually room to move in here this morning.”

“Nope, just some extra .30 caliber boxes Frank grabbed for his bow machinegun,” said Scotty. “It figures that the day we expect heavy opposition is the day they don’t order us to take extra ammo. That’s officers for you.”

“So what have you got loaded for today?” asked Jeff.

“We’ve got 61 HE, 20 AP and 10 HCB. I put three HE and three AP in the ready rack, along with two of the smokers,” replied Scotty. “Same as usual.”

“That ought to get us through the day. We won’t be getting air support with this weather, and we’ll have to cut back on the advancing fire to conserve ammo. I’m sure we can depend on some accurate shooting by Eddie to keep ammo wastage to a minimum, right?”

“Sure thing, Serge.” Ed patted the breach of the 75mm gun with mock affection. “I feel extra sharp today. I think today’s going to be the day we kill some Panthers. I even brought a pencil with me to keep score.”

“I hope you remembered to sharpen it,” laughed Jeff. “You’re probably going to get plenty of opportunities. This looks to be the toughest day’s worth of fighting we’ve faced so far.”

Jeff climbed back up and sat on the turret roof, looking out over the sky. This tank and crew had been in action since Cobra and had become a skilled and experienced team. So far no German tank or gun had fired at them, but they had been plagued with some bad luck lately. They lost a track to a mine the last time out, and the time before that a lucky bullet destroyed the gun sight. “If we’ve got to have bad luck, I’m glad we’ve got the kind that creates little problems instead of big ones,” he thought. He glanced at the map once more, surveyed the task forces, then waved his arm. It was the signal to move out.

A day of combat in PATTON’S BEST comes in three forms. The most common are “Advances,” representing aggressive rampages against disorganized German defenders. The next most common are “Countertacks,” where you and your task force must fend off attacking Germans. The third type are “Battles,” representing attacks upon prepared German defensive positions. Each of these scenarios can take place against light, medium, or heavy opposition. The Combat Calendar lists each day elements of the 4th Armored Division saw action, and gives each day a code defining the scenario type and opposition. For August 5, 1944, the scenario is an advance against heavy opposition.

PATTON’S BEST is best appreciated when played as a campaign game, where the player tries simply to survive from July 1944 through April 1945. Campaign play starts by rolling initial skill levels for your five crew members, then assigning them to positions. Initial skills range from 1 to 5 (1D10/2), and may be increased after each day of combat by rolling higher than the crew member’s current skill level on a ten-sided die. You start the campaign with a basic M4 Sherman (Tank card #1), the worst Sherman variant in the game. You receive a replacement tank whenever yours is lost or during the year for repairs (if you so desire). Availability of the various Shermans changes...
The task force continued along the road without incident. A few HE and machinegun rounds had been fired at possible ambush locations during the advance so far, but there had been no sign of German presence as yet.

"Hold up a minute, Bill," Jeff called into the intercom. "I see him," came the reply. The turret slewed to the left, laying it approximately on target. Jeff radioed the leader of the platoon that was in the vicinity.

"I see him," Jeff said. "I think we've got an enemy up ahead."

Jeff turned his attention back to the road. The German squad was moving at close range. The HE round had found its mark, pinning the squad.

The scenario starts out on the Movement Board. This board shows a generic area of western Europe divided into 42 areas. Each area contains a unit that represents the countryside within, city, woods, fields, or farm fields. Ten areas around the edge of the board are numbered, and two die rolls determine which ones will be your entrance and exit areas. For advance scenarios such as Patton's Campaign, the Objective Table, the Campaign Objective, and your territorial objective. Each time you capture your exit area the dice are rolled again, new entrance and exit areas are determined, and play continues.

It is at this point that the play of PATTON'S BEST really diverges from that of B-17. QUEEN OF THE SKIES. Your starting area and objective area are defined, but what route you take to get there and how you travel the area are entirely up to you. Generally speaking, it's a good idea to choose the path of least resistance rather than the path of fastest advance unless you are near a river or you are trying to reach a one more exit area.

Speaking of sundown, every action you choose takes anywhere from 15 minutes to one hour to perform. The time it takes to travel between adjacent areas depends upon whether the two areas are connected by a road or highway. Highway travel is fast (15 minutes per area) but leads through towns in the center of the map where the heaviest resistance can be expected. Traveling the back roads takes twice as long, and traveling cross-country takes even longer.

Of course, movement is not your only option. You can have adjacent areas scouted to determine the enemy resistance level therein, or call for artillery or air strikes on adjacent areas as a prelude to advance. If need be, you can also call for ammo resupply or a replacement for an incapacitated crew member. All of these actions take time, however, and when the sun sets your time is up.

This freedom of action gives you enormous leeway in how you choose to play the game. You may play very cautiously, preceding each movement with artillery and/or air strikes, in which case you will probably not capture more than one exit area. Alternatively, you may choose to run your tank force along the highways regardless of opposition. This will garner you two or three (or more?) exit areas in a single action, but you may increase your tank casualties and a higher risk to your own tank. Bold, conservative, or somewhere in between, the choice is yours to make and the results are yours to live with.

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BETTERING PATTON'S BEST

The following are a series of questions on this engaging solitaire game by Jeff Petruska, with answers from Bruce Shelley—designer of the game. These are presented here in the hopes of clarifying some points for fans of the simulation and making their play even more enjoyable. As always, Avalon Hill welcomes questions on any of our designs still in print, provided that such are accompanied by a self-addressed, stamped envelope. However, the following may save players of PATTON'S BEST some postage:

Spotting

Q. Do I have to make spotting attempts for all enemy units every round of battle, or just those that do not have Spotted markers?
A. Just those without Spotted markers.

Q. If I only have to spot those without markers, are Spotted markers removed when my tank moves? If not, do I still have to check each unit for hidden status from my new location?
A. When you move your tank, you have the option of leaving or removing Spotted markers. When an enemy unit moves, you must remove the Spotted marker.

Q. For target identification purposes, should the crew member's skill number be rounded up (as per the table) or down (as per the rules)?
A. Rounded down.

Q. When I define spotting sectors for buttoned-up crew members in the "Prepare for Battle" sequence, does this limit their spotting to those sectors for the entire engagement or just the initial round of combat?
A. Just the initial round. They may choose new sectors each round, or unbutton, etc. This rule just fixes what they are doing when the battle breaks out.

Q. Can hidden enemy units still fire at other tanks and infantry in my task force?
A. Yes.

Combat

Q. Are German vehicles subject to track hits?
A. Yes, Deliberate Immobilization or track hit. Mark it with a Throw Track marker.

Q. When does the Deliberate Immobilization modifier in the To Hit Target Table apply?
A. Whenever you are attempting to hit the track of an enemy vehicle; any vehicle with a thrown track cannot move or pivot.

Q. Can vehicles be hit by HE fired as Area Fire?
A. Yes. You must roll an unmodified 01-03 to hit.

Q. Can I switch between Area Fire and Direct Fire without losing target acquisition?
A. Yes.

Q. Can I put machine gun advancing fire into a zone that contains any enemy units (a), spotted or unspotted? If so, is that unit affected by the fire?
A. Yes. Yes.

Q. If I exhaust my Ready Rack ammo supply while firing, but make my rate of fire roll, can I switch to reloading from the normal ammo supply—or must I stop firing?
A. You may switch to using the normal ammo supply.

Q. What is the availability of APD ammo for the MG151/20? A. I suggest one ten-sided die roll.

Movement

Q. If the movement of my tank forces one or more (but not all) enemy units to leave the Battle Board, from sectors 4-5, 6-9 or 9-10, what becomes of them? Are they gone for good?
A. Place them on the Movement Board in the area your force marker occupied. If you eventually leave the Battle Board, you do not capture the area. If you want to capture the area, go back to 4-4, skip 4-5, go to 4-6 and skip 4-62, place the enemy unit at the center of the board and place your marker on the board according to 4-63, and continue play from there.

Smoke

Q. When my tank movement requires shifting of enemy units on the Battle Board, should I also shift the Smoke markers in play? If so, where does the Smoke marker on my tank (from a smoke grenade) shift to?
A. Yes, shift the Smoke markers. And any on your tank shift to the close range zone directly to the rear of your tank.

Q. Are Smoke markers placed by artillery strikes, air strikes, or advancing fire?
A. Yes, for the purposes of tracing line of sight through smoke, is my task force assumed to be in the center hex of the Battle Board with my tank?
A. Yes.

Friendly Fire

Q. Do the friendly fire modifiers for the number of U.S.-controlled sectors and friendly fire losses apply to artillery strikes—air strikes—and advancing fire?
A. No.—No.—Yes.

Sequence of Play

Q. If after the Random Events check of an ambush, there are no enemy units left on the Battle Board, does the engagement end at that point or does it continue to the Random Events check of the remaining units?
A. Yes.

Q. Friendly Fire

Q. Are the friendly fire modifiers for the number of U.S.-controlled sectors and friendly fire losses applied to artillery strikes—air strikes—and advancing fire?
A. No.—No.—Yes.

Crew Actions

Q. When an assistant driver passes ammo, is the rate of fire modifier the crew member's skill (as per the table) or -10 (as per the rules)?
A. His skill rating.

Q. Does the loader's Restock Ready Rack action completely refill the rack or just transfer one round to it?
A. It completely refills the rack.

Q. If my crew elects to bail out of the tank after throwing a track, do I get a new tank after the scenario ends or is my old one recovered?
A. The old one is recovered.

Counterattack Scenario Table

Q. Is the To Kill number for the Panzer VI (Tiger) in the Friendly Fire Table really "10", or should it be "1-10"?
A. Should be "1-10".

Q. Shouldn't the dice rolls for MG/LW fire against infantry in the "Enemy Action: Counterattack Scenario" table be "71-75" rather than "71-75.5"?
A. Yes.

"Combat in PATTON'S BEST occurs when your task force moves into a new area. The probability of an engagement occurring depends upon the level of resistance in the area and the area type. The number of German units involved is also determined by the area's resistance level: two units for light resistance, three for medium, and four for heavy. The types of units encountered are determined randomly, but vary with the scenario type. The widest variety is encountered in Advance scenarios, where you can come across anything from a dug-in 88mm anti-tank gun to an unarmed truck. During Battle and Counterattack scenarios only enemy combat units will be encountered, reflecting better German preparation for combat.

Combat takes place on the Battle Board, which consists of a central hexagon surrounded by three concentric circles representing short, medium and long range. These circles are split into six sectors by lines emanating from the hexagon corners, thus defining 18 zones. Your tank is always located in the central hexagon, and enemy units are placed into zones somewhere in the front three sectors by random die rolls.

Once all German units are in their initial positions, the combat sequence is ready to begin. If you called for a preliminary artillery bombardment or air strike on this area, the dice are rolled for each German unit to determine if they are knocked out. Advancing fire by your task force is handled in a similar manner, except only select zones are affected and German units "killed" are actually assumed to have withdrawn from the area, garnering you no victory points.

The real shooting usually starts off as an ambush, meaning the defenders get to perform the first actions. All German actions are determined at random from an action table appropriate to the scenario type. Thus, the opposition tends to be more determined during Battles and Counterattacks than Advances. Dice roll modifiers for ambushes make them especially dangerous for the lead tank (which hopefully is not yours). German actions are followed by a random event, which concludes the ambush.

After the ambush, you and your crew get to perform activities. You may open or close hatches, try to establish or identify German units, and choose actions for each crew member. The selected actions are then resolved by die rolls on various tables, and any units knocked out by your tank are removed from the board.

The remaining German units get to perform their actions this round. This is followed by the friendly fire segment, where the other tanks and infantry of your task force may eliminate German units or obscure them with smoke. A final random event is determined, completing the combat round. If enemy units still remain on the battle board, play cycles back to your tank and crew and for another combat round; otherwise the engagement ends and the area on the movement board becomes U.S.—controlled.
After fighting through two encounters so far this morning, the task force was finally entering the objective area. Task force losses were three infantry squads from the first encounter and one tank from the second, killed in an ambush by an unidentified anti-tank gun. Opposition in the objective area was expected to be moderate, so Sgt. Petrika and his crew had an HE round already loaded in the gun and were ready for action.

As Iron Mule rolled along, Jeff scanned the passing farmland with his binoculars, trying very hard to avoid being ambushed again. A steady light rain was falling now, reducing visibility and making an ambush by a concealed enemy even more likely. He was also concerned with the ground condition, for if the rain didn’t let up soon the terrain would turn muddy and slow down their progress toward the second objective. Assuming they captured this sunken path not far behind them and guided Bill’s driving toward it. With a sharp pop the smoke of a sunken path not far behind them and guided Bill’s driving toward it. With a sharp pop the smoke again the tactical radio came to life with shouts of warnings and contact reports. Jeff clutched his bag to his chest, instinctively crouched lower in the hatch, but this time the sounds passed them by and the area ahead was mowed down by intense infantry fire. It was almost too good to be true.

It was a Panther, moving across open ground at 200 yards directly toward them. The lead Sherman was showered in a cascade of sod and mud from a near miss. Once again the tactical radio came to life with shouts of warnings and contact reports. Jeff clutched his bag to his chest, instinctively crouched lower in the hatch, but this time the sounds passed them by and the area ahead was mowed down by intense infantry fire. It was almost too good to be true.

Jeff glanced at the sector indicated in the radio reports. A machinegun team was reported in some woods to their left, but the line of sight was blocked by a small copse of trees. However, he did spot the anti-tank gun dead ahead at short range, and recognized it as a 75mm Pak 40. It was the gun that fired at the lead tank to start the encounter, and had survived the artillery unscathed.

Jeff’s eyes were quickly drawn from the gun position to a large object moving just to the right. It was a Panther, moving across open ground at 200 yards directly toward them.

“Panther and ATG dead ahead, close range!” Jeff shouted into the intercom. “Bill, back up now! I’ll guide you toward a defilade position! Scotty, fire the smoke mortar! I want some cover!”

The Iron Mule’s forward motion abruptly ceased. It paused momentarily as Bill changed gears, then lurched backward as Bill hit the gas. Jeff spotted a sunken path not far behind them and guided Bill’s driving toward it. With a sharp pop the smoke mortar fired, its bomb hitting the ground 100 yards forward of the retreating tank and providing an instantaneous white smoke plume between them and the threat. In this rain it wouldn’t last long.

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Panther disappeared. There was still no sign of it. He was about to order Bill to close the range when another tank radioed that the Panther had retreated.

"Good fortune to the turret," Jeff said dryly. "Missed our big chance," he lamented. "I thought we had that Panther cold."

"Too bad we had an HE round loaded at the start," said Scotty. "We could have killed him on the first shot. I guess I should have changed the gun load before firing at all, huh?"

"I can't believe I missed him on that second shot," said Eddie. "Did you see how close it was? Couldn't have been off by more than a foot, if that."

"Well, I guess there's no use crying about it now," said Jeff. "We may still get another chance yet today. It's still early. We'll have to practice our accuracy no matter how much I hate to see them get away like that."

"Right, Sarge," Eddie and Scotty replied in unison.

Jeff climbed back up through the turret hatch and watched the task force get reorganized for the advance as it was on the move. This time it was 1515. They had four more hours of daylight.

The single most important thing new players of PATTON'S BEST must learn is what targets to shoot at and WHEN to do it. Beginning players, especially those experienced with T-17, QUEEN OF THE SKIES, will tend to open fire on every unit in sight. This is a very good way to earn a ticket home in a pine box. As the crew of a Sherman tank you must be very selective of your targets, especially those capable of knocking you out.

The rules of thumb for target selection depend upon which gun your Sherman is armed with, the 75mm or 76mm. The 75mm gun has a superior HE lethality, while the 76mm has a superior AP penetration and higher accuracy. Regardless of gun, you may only fire at any German unit that is incapable of knocking you out. These units consist of light weapon squads, machinegun teams, trucks, armored cars, and armored infantry vehicles (half-tracks).

Of all German units, anti-tank guns are the most dangerous to the turret. This is because if you fail to kill them, the probability that you will fire at your tank jumps dramatically (from 5% to 40% in Advance scenarios, 10% to 60% in Battle scenarios). They are also especially difficult to kill with HE fire, almost impossible from a 76mm gun. Before you fire at an anti-tank gun, therefore, you had better be in a hull-down position and have a good chance of a first round kill.

Only the 70mm PaK 38 anti-tank gun is a relatively safe target, especially at medium or long range or when you are hull-down. This is assuming of course, that you are facing the target. Offering any gun, even the lovely 50mm, a flank shot is like playing with dyname.

For the 75mm PaK 40 or 88mm PaK 43, your best option is simply not to shoot at them at all possible. Leave them for your infantry to eliminate; that's what they're for. Note that this also applies to all unidentified guns as well.

Tanks and self-propelled guns must also be engaged with care because they too like to shoot back at whoever shoots at them. Unless you have a Sherman Jumbo, any German gun of 75mm or larger has a good chance of penetrating your frontal armor and killing the crew. A good rule of thumb, therefore, is don't shoot at the front of enemy AFVs if you don't have to, or unless you have a very good chance of killing the target with a single hit. If you catch an AFV with a flank or rear shot their preferred reaction is to move back to a longer range, as the Panzer IV encircles.

Frontal shots against German tanks is frequently pointless anyway, especially with the 75mm gun. The only tank that the 75mm gun can knock out with a frontal hit is the Panzer IV. A 75mm Sherman is roughly equal to the Panzer IV, so engaging one in a face-to-face gun duel is about a 50-50 proposition, which are not really the kind of odds you'd want to bet your life on. Jeff decided chances of killing a Panzer IV with a single hit, making such duels a better bet. For all other tanks, the rule is never shoot at their front.

There is considerable variation in the armor protection of self-propelled guns, making it impossible to give a general rule of thumb. The Hammer II and Marder III are easy kills for any Sherman at any range, or these vehicles may be engaged whenever you have a high first-round hit probability. On the other hand, the frontal armor of the JagdPanzer IV and the JagdPanzer 38t (Hetzer) are virtually invulnerable. These are best ganged together as Panther or Tiger tanks. The armor of the StuG IIIg is somewhere in between, comparable to that of the Panzer IV. Make your firing decision accordingly.

The one great equalizer that I haven't mentioned yet is HVAP ammunition for the 75mm gun. You can use this technique at close range, so if you've got one to spare and you have a high hit probability, you might decide to use it to knock out a particularly dangerous opponent. Just be sure to cross your fingers before you roll the dice.

1600, August 5, 1944

The task force had passed through the town without incident and was now poised at a crossroads at its outskirts. The second objective area was two miles to the west, along the muddy country road that crossed the highway they had followed through the town. Scouts had reported heavy resistance in that direction, and further along the highway. There appeared to be no reasonable alternative; they would have to advance by road and tackle whatever the Germans had waiting for them.

Jeff spent the next 45 minutes on the radio arranging a rolling artillery barrage to precede the task force into the area. Since there was no chance of reaching the third objective today and they had daylight left, Jeff was about to relax when an infantry squad reported seeing an assault gun at long range. He scanned the reported sector for the SPG but was unable to locate it, the line of sight apparently blocked by the nearby farm buildings.

"Eddie, let's move up," he called to the driver. "There's an assault gun somewhere up ahead. Frank, continue the advancing fire."

Iron Mule moved forward slowly over the soft ground. Eddie swung the turret back to face forward. An AP round was already in the breech from their shot at the half-track. The bow machinegun fired a long burst, then went silent.

"Frank, where's that advancing fire?" asked Jeff. "The gun's jammed up," Frank replied. "I'm trying to clear it now."

Up ahead an HE round churned up the earth near an infantry squad, apparently fired by the SPG. Jeff scanned the area again as the buildings passed by and spotted the SPG hull-down behind a small earthen bank. It was still at long range and presenting a good target. Good enough as far as Jeff was concerned to let the Germans have it.

"SPG straight ahead, 1200 yards in defilade," he called out. "Can anyone identify it?" A chorus of negative responses came in return.

"Keep us moving, Bill. Let's close up on him. Eddie, give us advancing fire with the coaxial MG until Frank clears his jam."

"Right, Sarge. The coaxial machinegun came to life, firing several short bursts as the turret rotated slightly side to side.

The machinegun fired as Jeff watched the range to the SPG close to under 1000 yards. The SPG was moving, heading to the left, being careful to remain hull-down behind the bank.

Suddenly there was a loud explosion. Jeff was pitched sideways in his hatch as Iron Mule lurched sharply, then came quickly to a stop leaning noticeably to the left.

"Oh no! It couldn't be!" Jeff cried into the intercom. He leaned forward and looked down at the left drive sprocket. A dozen feet of track lay spooled out ahead of the tank.

"A mine! We ran over another stinkin' mine!" Jeff pounded his fist against the turret roof. In frustration. "Is anybody hurt?"

"Bill and I are okay," replied Frank. "All fine in the turret," added Scotty.

"Of all the lousy luck," lamented Jeff. "This is the second time in a row!" He suddenly remembered the SPG and quickly shoved aside the self-pity. "We've still got an assault gun to deal with, so let's go! Get ourselves together and get on with business."

Jeff picked up the binoculars from where they had fallen on the turret roof and scanned the last direction he had seen the SPG traveling. Friendly fire had guided his eyes to its new location, to the left of the tank at medium range. It was still hull-down and presenting a frontal aspect, but its movement revealed several features that identified it as a StuG IIIg.
"It's a Sturmgeschutz III, moving at 10 o'clock range 800 yards. If he fires at us from there, we'll be dead meat for sure. Lewis pointed to the turret and fire the smoke mortar. Frank, keep working on that machinegun."

As the turret swung to the left and the smoke mortar fired, Jeff grabbed the anti-aircraft machinegun and began spraying the area directly in front of the disabled tank. He got off three long bursts before it suddenly quit.

"I don't believe this! Now this gun is jammed too!" he cried out as he tried to clear it. "What else can go wrong?"

"Don't say that!" said Eddie. "Are you trying to jinx us, Sarge?"

Jeff ignored the question and looked again toward the SPG. It had been stopped in its new position, still facing their left flank. It seemed to lead a charmed life as it continued to fire directly at it by several Shermans.

"Eddie, give me some coaxial advancing fire to the left. Frank, how are the repairs coming?"

"It's jammed up pretty good," Frank replied. "I'm still working on it."

"Same here," Jeff replied. "For god's sake, Eddie, don't jam the coaxial. It's the only one we've got."

The staccato sound of the coaxial machinegun was the only reply. Jeff worked the bolt on the .50 caliber M1 frolicked and it suddenly came loose. He fired a short burst to confirm it. The jam was cleared.

He looked up again at the SPG through the rapidly thinning smoke screen. It appeared to simply be sitting there, doing nothing. Just as he was about to call Scotty for another mortar round the StuG III was rocked by a direct AP hit. The hatches popped open and the crew scrambled out in the face of considerable small arms fire. With the destruction of the assault gun, the firing soon stopped. The encounter was over.

Jeff climbed out of the turret and leaned out over the left side of the hull. The main had exploded under the left front bogie assembly, breaking the track and damaging one of the wheels. With the track gone, the bogie wheels were sunk deep into the soft earth. Bill climbed out of the hull hatch and looked at the damage as well.

"Bill, you promised me you'd wait for the engineers," Jeff moaned in mock disappointment. "Now we have to wait here for a recovery vehicle while the task force goes on without us."

"Listen to you," Bill objected. "You're not the one with the numb rear end. We can't keep doing this, you know. My doctor says it'll give me hemorrhoids."

Jeff laughed. "Oh, well, we can't have that now, can we? I'd have to make you the commander just so you could stand up all day. Still, it's too bad this had to happen so close to the objective area. Call me old fashioned, but someday I would like to finish the day with the rest of the task force instead of being towed away and patched up."

"Next time, Sarge. Next time for sure."

Jeff climbed back up into the turret and called for assistance on the radio. "Well guys, it wasn't too bad of a day until this happened," he said to the turret crew. "What was our final score?"

"We got two infantry squads and two trucks," replied Eddie. "But it's hard to forget the Panther that got away."

"Well, we'll just work on our firing drills a little more," said Jeff. "I'm sure there will be a next time, and by then we'll be older and wiser. Until then we might as well kick back and relax. As far as you're concerned, the day is over.

A scenario comes to an end in one of two ways, either you run out of daylight or you run out of luck. This scenario is an example of the later. PATTON'S BEST is an exercise in probabilities and chance, and even the best-played game can end in tragedy if the dice turn against you. In this case the crew of the Iron Mule was lucky. The tank was disabled but repairable and no crew members were injured. If you must end a scenario the hard way, then this is the way to do it.

After a scenario in the campaign game ends, all surviving crew members can attempt to increase their skill rating as described earlier. In this instance the skills of Sgt. Petraska, gunner Eddie and assistant driver Frank increased to "7", "7" and "4", respectively. The next division refill period is September 2-10, and if this crew can survive that long they will be able to trade in their M4A1 for a more modern Sherman variant, perhaps one of the late-model M4A1's with the 76mm gun. They will also be trained to use the Sherman's gyrostabilizer, giving them the ability to fire the main gun while moving. Although this is still almost a month away, it gives campaign players a near-term goal to look forward to.

This scenario ended with the task force capturing nine map areas and one exit area for a total of 38 victory points. Enemy kills for the day consisted of seven light weapon squads/machinegun teams, seven trucks, two half-tracks, one SPG, two Panthers, and three anti-tank guns. Friendly losses were two tanks and three infantry squads, light by comparison. This scenario netted a total of 72 victory points, an outstanding victory for the 4th Armored Division. For Sgt. Petraska and his crew it was technically a defeat, but they failed to complete the scenario. Nonetheless, these are the kind of defeats that are easy to live with. There's a long war ahead and as long as Sgt. Petraska and his crew are still alive at the end of the day, it's a victory to me. In the campaign game, these kind of victories are the only ones that matter.

The most notable thing about this issue's survey of what's being played are the number of games that have been featured in The GENERAL lately that are on the listing: KREMELN, THUNDER AT CASINO, BRITANNIA RAID ON ST. NAZAIRE and DIPLOMACY. Either the readers are discovering these gems through these pages, or our selections for features last have been "spot on". And, if this survey is to be used as a guide, this issue should be immensely popular for five of the games covered herein are on this list. Too, after some months where the various modules of PATTON'S best until the dominate the survey, not one appears on this one—a fact that I am sure will change as folk start playing the new desert module.

More than just a flight simulator, SPITFIRE 40 is a matter of life and death with you at the controls of one of the world's most versatile aircraft. The cockpit has working dials, gauges and compass. Taking off, landing and flying are based on the Mark I Supermarine Spitfire, right down to fuel pump problems actual pilots faced while diving! With a choice of simulator and game scenarios, the game gives any number of players a chance to shoot down enemy aircraft. You can save your log to disk, so you can record the number of kills and flight hours you've flown. Succeeding flights become tougher as your Spitfire demands more flying and fighting skill, providing a never-ending challenge.

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The Saga of the Canadian 4th Armoured Divison
By Mitch Rupe

<table>
<thead>
<tr>
<th>Month/Day</th>
<th>Situation</th>
<th>Historical Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/31</td>
<td>Arrive in France</td>
<td></td>
</tr>
<tr>
<td>8/5</td>
<td>Arrive in Tilly</td>
<td></td>
</tr>
<tr>
<td>8/8</td>
<td>Cintaux</td>
<td></td>
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<tr>
<td>8/9</td>
<td>Point 195</td>
<td></td>
</tr>
<tr>
<td>8/10</td>
<td>Quesnay</td>
<td></td>
</tr>
<tr>
<td>8/14</td>
<td>A/6/M Liaison Valley</td>
<td></td>
</tr>
<tr>
<td>8/15</td>
<td>A/7/H Verainville</td>
<td></td>
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<tr>
<td>8/16</td>
<td>A/6/H</td>
<td></td>
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<tr>
<td>8/17</td>
<td>A/6/H Couloubeuf</td>
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</tr>
<tr>
<td>8/18</td>
<td>A/4/M</td>
<td></td>
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<tr>
<td>8/19</td>
<td>A/4/L</td>
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<tr>
<td>8/20</td>
<td>C/5/M</td>
<td></td>
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<tr>
<td>8/21</td>
<td>C/6/H Chambois</td>
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<tr>
<td>8/22</td>
<td>B/3/L</td>
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<td>8/23</td>
<td>B/4/L</td>
<td></td>
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<tr>
<td>8/24</td>
<td>B/5/M</td>
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</tr>
<tr>
<td>8/25</td>
<td>B/7/H Le Neubourg</td>
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<tr>
<td>8/26</td>
<td>B/5/S</td>
<td></td>
</tr>
<tr>
<td>8/27</td>
<td>A/5/H Criquembouf</td>
<td></td>
</tr>
<tr>
<td>8/28</td>
<td>A/5/L Elbeuf-Seine Crossing</td>
<td></td>
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<tr>
<td>8/29</td>
<td>A/3/M</td>
<td></td>
</tr>
<tr>
<td>8/30</td>
<td>A/4/L</td>
<td></td>
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<tr>
<td>9/3</td>
<td>B/4/L Point Remy</td>
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<td>B/2/L</td>
<td></td>
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<td>9/5</td>
<td>A/2/L</td>
<td></td>
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<tr>
<td>9/6</td>
<td>A/3/L St. Omar</td>
<td></td>
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North of the border is published the fine amateur magazine "The Canadian Wargamers Journal" (907 Bernard Drive NW, Calgary, Alberta) devoted to our pastime—with a particularly Canadian bent of course. The following, although polished and expanded for our use, first appeared in the Feb/March 1988 issue of that publication and appears here with the kind permission of the editor and the author.

The Canadian 4th Armoured Division, while perhaps not the most famous Canadian division of the Second World War, certainly covered itself with enough glory to last the lifetimes of its men. Having arrived in France after D-Day, the division was first used in the stiff fighting around Falaise to help close the pocket from the north while Patton’s troops pressed in from the south. After a brief refit, the Canadians rushed along the coast destroying pockets of resistance and seizing much needed ports. When the British attacked to capture Antwerp, perhaps the most important port for the continuing Allied advance, the 4th Armoured attacked on their left flank over the Leopold Canal. Next came the Rhine crossings and a thrust into Germany. At the end of hostilities, the Canadian tankers were mopping up in the Netherlands. The division’s four regiments—the 29th Recon (the south Alberta Regiment), the 21st Armoured (the Governor-General’s Foot Guards), the 22nd Armoured (the Canadian Grenadier Guards) and the 28th Armoured (the British Columbia Regiment)—earned their share of battle honors and citations in some stiff actions (the 28th Regiment was virtually destroyed at Point 195). The division was “detanked” on 30th June, and disbanded on 27th December 1945.

The accompanying is a Combat Calendar to be used for the 4th Canadian Armoured Division with PATTSON'S BEST (format as in the game). Too, to reflect the fact that the "Firefly" was in use, delete the entries for the M4A3s (#16 and #17) from the Tank Replacement Table and substitute the #18 Firefly Sherman version when these values are rolled.
PATTON'S BEST offers the opportunity for players to command a vehicle that is the epitome of Allied tanks in World War II: the U.S. M4 Medium tank, better known as the Sherman. Indeed, the Sherman tank is the star of the game, the focus of all that transpires. Given 18 Sherman variants to choose from, players enjoy gaining simulated firsthand experience in how these vehicles operated, learn what their advantages and disadvantages were, and appreciate the situations that faced our fathers and grandfathers as they drove and fought these vehicles through western Europe.

The Sherman models included in the game are a very good sample of the various design changes that this vehicle underwent from its appearance in 1942 to the ultimate designs that were reaching the front of 1945. This article flushes out the design history of the Sherman tank that PATTON'S BEST illustrates so well. So take The GENERAL in one hand, your stack of PATTON'S BEST tank cards in the other, and read on.

Sherman Prehistory

In the summer of 1939, the Rock Island Arsenal began producing America’s first medium tank, the M2. Constructed from a multitude of face-hardened steel plates and mounting a 37mm gun in a turret, it was a development of indigenous pre-war designs going back to the early 1930s. Nonetheless, this tank had features that would be used in later U.S. tanks throughout World War II. First, it was powered by a 350-horsepower Wright air-cooled radial engine, giving it a tall silhouette. Also, its suspension consisted of a front drive sprocket, three bogie assemblies per side, and a rear idler wheel. The bogies consisted of two spoked road wheels, each having a vertical volute spring suspension. At the top center of each bogie assembly was a return roller to support the track on its way to the drive sprocket. The track had two rows of steel guides that passed on either side of the road wheels. Until the development of horizontal volute spring suspension, this system was to set the pattern for all American medium tanks.

Only 18 M2 medium tanks were built, for by 1940 it was apparent that the worsening world situation and rapid design improvements had already made the M2 a tank without a future. The latest news about European tanks indicated that the 37mm gun was obsolete and the M2’s thin armor would be no match for its contemporaries. In order to keep pace with potential adversaries, it was decided that the next U.S. medium tank would have to be armed with at least a 75mm gun.

A new medium tank design was standardized in July 1940 as the M3, later known to the public and military as the ‘General Lee.’ Soon thereafter an international buyer appeared. Britain desperately needed tanks to make up its losses in France and had a very tall silhouette. The hull was of riveted construction and roughly the same shape as that of the M2, but this new tank had a 75mm gun in a right front hull sponson. In addition, a new cast turret armed with a 37mm gun sat atop the angular hull.

The obvious drawback of the M3 was the sponson-mounted 75mm gun, which was limited to only 30 degrees of traverse in azimuth and 29 degrees in elevation. A turret-mounted 75mm was far more desirable, but a turret large enough to contain the weapon had yet to be designed. Given the choice of waiting another year or two and producing nothing or of putting the M3 into production while a larger turret was designed, the latter choice was selected. Considering Britain’s urgent need for large numbers of tanks in North Africa and the desire to get some kind of modern tank into U.S. Army service soon, there was really very little choice at all.

The M3 medium tank production began in March 1941 and was terminated in August 1942. A total of 4924 tanks were produced during this period. During production a number of M3 variants having different suspensions, hulls and/or engines were tested. A number of these variations would have direct application to the design and construction of the next U.S. medium tank.

The Original Shermans

In September 1941 the first prototype of America’s next medium tank, the T6, was completed at Aberdeen Proving Ground. The T6 had the new cast turret with a 75mm gun and a cast-hull with three .30 caliber machine guns, one in a flexible mount. The track, suspension and powertrain were standard from the M3 Lee. Like the M3, it also had doors throughout the hull and engine deck. The design of the modified T6 was approved in October as the M4 Medium tank. The welded-hull version was designated the M4 and the cast-hull version the M4A1. The ‘Sherman’ was born.

For modern armored vehicles it is usually the case that variants are produced sequentially, with the latest models containing improvements over those with earlier designations. The current M1/M1A1/future-M1A2 is such an example. This was not the case with the Sherman. By the end of 1942 there would be five M4 variants in production simultaneously in American factories. The diversity was driven by one central need, the need to produce a battleworthy medium tank in massive quantities for U.S. and allied service. The main stumbling block in meeting tank production quotas was the lack of suitable engines for the vehicles. The difference between most of the Sherman variants put into production was the over- or under-powerplant, as no one engine was available in sufficient quantity to be used in all of the production vehicles. The only exception was the M4A1, whose production was limited by many manufacturers’ inability to produce the large, one-piece hull casting. These manufacturers produced welded-hull versions instead.

The first Sherman variant to enter production was the M4A1, based upon the cast-hull version of the T6. Powered by the same Wright (later Continental) R-975 air-cooled radial engine as the M3, the M4A1 was the only Sherman variant to have a fully cast-hull. As the first production vehicle, the earliest versions had features that were soon abolished from the design. The fixed pair of .30 caliber forward firing machineguns were eliminated in March 1942, and the new, longer-barrelled 75mm gun replaced the original short-barrelled gun. The 75mm M4A1 was produced from February 1942 through January 1944, for a total of 6281 units.

The next Sherman variant to enter production was the M4A2, in April 1942. This welded-hull variant was powered by a General Motors 6046 diesel engine which had also been used in the M3A3 and M3A5 variants of the Lee. Like the M4A1, it also had its predecessor’s track and suspension. As the first welded-hull Sherman to be produced, it helped to pioneer the fabrication techniques that would later be applied to all the other angular versions. Although produced in quantity (8053 units with the 75mm gun) until May 1944, it served little part in the U.S. war effort. The U.S. Army decreed in March 1942 that only gasoline powered tanks would be used overseas by our troops, condemning the M4A2 to use as a training tank. It was, however, supplied in quantity to Britain and the Soviet Union.

The third Sherman variant produced was the M4A3, starting in May 1942. Outwardly it was very similar to the M4 and M4A2, except for the rear hull and engine deck. The M4A3 was powered by a Ford GAA V-8 gasoline engine, which had been developed from an experimental V-12 airplane engine and tested in an M3 in February. This engine proved to be compact and have an excellent power-to-weight ratio, making it the engine of choice for the U.S. Army. Had sufficient quantities of this engine been available, other Sherman variants would have been cancelled. The original Ford production run of 1690 75mm-armed M4A3 tanks ended in September 1943. After this a modernized M4A3 was produced by other manufacturers, as will be described later.

Although the first Sherman variant to be approved, the M4 did not enter production until July 1942. The M4 was identical to the M4A1, except for having the welded-hull. Because the welded-hull offered slightly more interior space, the ammunition load of the M4 was 97 rounds (compared the 91 for the M4A1). Production of the M4 with the 75mm gun ended in January 1944, with 6748 such tanks being built. Some of the late M4 tanks produced by the Detroit Arsenal had a composite hull with a cast front similar to that of the M4A1 welded to standard M4 angular sides and rear.

The M4A4 Sherman also entered production in July 1942. The unique feature of this vehicle was its increased length, required for the installation of the Chrysler A57 multi-bank 30-cylinder engine. The rear hull was lengthened 11 inches and the bogies were spaced farther apart than on the other Sherman versions. The A57 engine was difficult to maintain due to its size, so much so that an intensive training program was organized to help maintenance personnel to familiarize them with the problems unique to this engine. Rejected by the U.S. Army for overseas duty, the M4A4 was used for training in this country. Of the 7999 M4A4’s produced by September 1943, the majority were delivered to Britain under Lend-Lease. They performed excellently in British service, bearing the designation Sherman V.

The last of the original Sherman variants to enter production was the M4A6, in October 1943. This vehicle used the M4A4 hull but with a cast front, similar to the late Chrysler-built M4. It was powered by a Caterpillar D200A radial diesel engine that was capable of operating on a variety of fuels. However, by this time the decision has been made to concentrate on production of the M4A3, and M4A6
production was cancelled in February 1944 after production of only 75 units. Tests held at Fort Knox the next month showed that the M4A6 had superior fuel economy and cruising range than any other Sherman variant. Nonetheless, the vehicles were used exclusively by the U.S. Army for training purposes.

All of the Sherman variants in production before 1943 had early design features that were later modified. First, the original tanks had a bolted, three-piece differential housing (lower front hull). This was first replaced by a single piece case housing having the same large curvature shape. Later, a second cast housing design with a flatter surface and sharper curvature was adopted, offering improved ballistic protection.

The early vehicles also had direct view vision slots with armored shutters in the front hull for the drivers. These were soon replaced by rotating periscopes installed in the hull hatches and fixed auxiliary periscopes mounted just in front of the hatches. The periscopes provided the drivers with protection from small arms fire and shell fragments, plus gave them a wider field of view when buttoned up.

Another early design feature was the narrow M34 gun mount, which covered only the gunshield immediately around the cannon. A second, smaller shield was attached to the coaxial machinegun to provide protection for its opening in the gunshield. On tanks with the M34 mount, the gunner sighted the main gun through a periscope in the turret roof that was aligned with the gun. However, this sighting system was difficult to keep in alignment and was replaced by a coaxial telescopic sight added to the gunshield to the right of the main gun. Since this required a new opening in the gunshield, a new combination gun mount M34A1 was standardized in October 1942. This new mount covered the entire width of the gunshield, protecting the main gun, coaxial machinegun, and gunner’s sight openings from small arms fire.

Another significant modification was the replacement of the original M3 bogies with a new, heavy-duty bogie in the summer of 1942. The new bogies had larger springs, a rounded track support skid on top, and a support roller that was displaced rearward. The new bogies reduced the number of suspension spring failures being experienced on the heavier Sherman variants.

Ballistic tests showed that the frontal protection of the Sherman tanks was very uneven, especially for the models with the welded-hulls. The front armor of these models consisted of several separate armor plates welded together, and the weld joints proved to be weak spots compared to a solid plate or casting. Also, the inside of the right front turret wall was machined down to provide space for the main gun controls, creating an armor weakness in that area as well. Finally, the drivers’ hoods protruded out of the 57° sloped front hull, resulting in vertical surfaces that were prone to penetration.

The problem of the drivers’ hoods and the turret front was solved by the addition of applique armor welded over these areas. The turret problem was later permanently corrected by thickening the casting. The weakness of the hull weld joints, however, was not corrected until the later Sherman models were designed. If you examine the Sherman penetra-
tion table in PATTON'S BEST, you’ll see that this weakness in the front hull armor is the only difference between armor classes I and II, and explains why the M4 and early M4A3 versions have armor class II while their contemporary, the M4A1, has armor class I.

In addition to applying applique armor to the front, additional one-inch armor plates were welded to the hull sides over the sponson ammunition storage area. This layout proved to be a considerable design defect in combat, and was corrected in the later Sherman variants.

In June 1943, the Army Ordnance Committee recommended the installation of a British 2" bomb thrower into the Sherman’s turret. This device (called a smoke mortar, but not to be confused with a real mortar) resembled a flare gun and was mounted to the left front turret roof. Although the mortaring was not flexible, its range could be adjusted from 35 to 150 yards through the use of a propellant gas regulator.

A turret roof hatch was installed over the loader’s position starting in December 1943. Combat experience had shown that the single commander’s hatch made it difficult for the loader to escape in an emergency, since he was forced to wait for both the commander and gunner to exit first, plus having to duck under the gun breech. For those tanks already produced, a loader’s hatch installation kit was available.

Tank cards 1-9 are examples of these early Sherman designs. The drawings all show them having the latest model differential housing, the heavy duty VVSS suspension, and the M3A4A1 gun mount. Cards #1, #4 and #7 are the earliest variants, each having the original (type A) turret. These tanks would have been produced sometime between October 1942 and the summer of 1943. The next oldest are the B turret models, #2, #5 and #8. Having both the smoke mortar and loader’s hatch, these models would have left the assembly lines in late 1943 or early 1944. Note that all of the type A and B turrets have applique armor to the right of the gun mount, although none of these drawings show applique armor anywhere on the hull. Tank cards #3, #6 and #9 have the type C turret with the commander’s vision cupola (discussed later), making them probably some of the very last of these models produced. This tank represents B turret models with the commander’s split hatch replaced by the vision cupola in the field.

Although the 17-pounder was a later modification, the Sherman VC Firefly pictured on tank card #18 is an example of the many M4A4s sent to Britain. Compared to the 75mm gun, the 76mm’s length is an increase of a little over a half inch to compensate for the decreased slope. The new hull would also have larger drivers’ hatches, a feature that was applied to the cast hull as well.

A late development that would be applied to these variants was horizontal volute spring suspension (HVSS). Early designs were tested in April 1943, but it was not until a year later that the final version was tested and approved for use. The HVSS suspension offered a smoother ride and a wider track (23") for reduced ground pressure. The new track had a single set of guide teeth in the center that passed between split bogie wheels, rather than solid bogie wheels and twin track guides of the VVSS design.

The new production plans called for the following armament for the redesigned Sherman variants:

- **M4**: 76mm gun, 105mm howitzer
- **M4A1**: 76mm gun
- **M4A2**: 76mm gun
- **M4A3**: 76mm gun, 76mm howitzer
- **M4A4**: 76mm gun, 105mm howitzer
- **M4A6**: 76mm gun, 105mm howitzer

Production of the M4A4 and M4A6 was to be canceled. Since the M4A3 was the preferred model for U.S. Army, it was the only one that would still be produced with all three types of guns. Vehicle armament was appended to the vehicle’s designation in parentheses.

**Improving the Armament**

The design of the Sherman’s turret made allowances for the possible installation of three types of guns: the standard 75mm gun, a high velocity three-inch (76.2mm) gun, or a 105mm howitzer. All three of these weapons eventually saw service on the Sherman tank, made possible through the use of a 69" turret ring. This was three inches larger than that of its contemporary, the Panzerkampfwagen IV.

Work on mounting the three-inch gun and 105mm howitzer got underway soon after the Sherman went into production. This work ended up involving the redesign of these guns to make their size, weight, and balance suitable for turret installation. This led to a revision of the gun’s design, and in February 1943 the revised versions were tested again. The Ordnance Committee approved the design for production but the Armored Force Board disagreed, citing inadequate turret space for the crew and pointing out that the design was simply a “quick fix” to get the vehicles into production using current components. So it was that the 76mm gun, which could have been produced in quantity before the end of 1942, was sent back to the drawing board.

In July 1943 the next prototype 76mm Sherman was produced. Given the designation M4E6, this tank was a prototype built from a T23 medium tank to mount the 76mm gun. The vehicle also contained several other design changes that would appear on the next generation of Sherman tanks.

The combination of the 76mm gun and the larger T23 turret proved to be a winner, and the design was recommended for immediate production with minor modifications in August 1943. In fact, the Armored Ground Forces requested 1000 M4E6s and ordered that the production of 75mm-armed Shermans be discontinued. This idea was again harpooned by the Armored Force Board due to the 76mm gun’s poorer HE round. Objections about the smoke and dust produced by the gun’s muzzle blast were also raised. The former problem was solved by redesigned ammunition, and the latter was reduced by fitting a muzzle brake on later 76mm guns that deflected the blast to the sides.

The first Sherman tank variant produced with the 76mm gun appeared in January 1944, and many were available by late spring. However, their initial reception by combat forces was lukewarm at best, since armored commanders were reluctant to issue the new tanks to their units so close of D-Day, without adequate time for crew training. Even as late as June 12, at a demonstration for U.S. armored division commanders (Generals Grow, Oliver and Patton), the attendees were impressed with the gun’s performance but did not want it to replace most of their 75mm Shermans.

It would not be until after bludgeoning through the bocage country of Normandy, when Sherman tanks found themselves forced to battle German Panthers and Tigers in spite of the Army’s doctrine, that the 76mm gun would be in high demand. Even
In the summer of 1943, when it became apparent that the Challenger tank would not be available in quantity before D-Day, the British decided to mount their 17-pounder in Sherman tank turrets. Although the new gun reduced crew size in the turret, it was not as serious as the U.S. experience with 76mm gun because the 17-pounder had a shorter breech and required less space. The assistant driver’s position was sacrificed to provide ammo stowage, however. With a muzzle velocity of 2980 feet/second with its standard AP round, the 17-pounder proved to be the excellent anti-tank weapon that the 76mm gun had failed to be.

Tank cards #10–#18 are samples of these late production vehicles. With the exception of the Sherman VC (tank card #18, mentioned earlier), there are a pair of cards for each vehicle type. In each new vehicle, the commander and the loader/crew had a pair of vision blocks which gave the commander a wider field of view while buttoned up. Perhaps the Sherman’s greatest strong points were its mobility, reliability and versatility. The M4 chassis was adapted for almost any imaginable variety of tank destroyers, engineering vehicles, self-propelled guns, and other specialty vehicles. The tank itself was sometimes armed with various types of flamethrowers, rocket launchers or other special devices that are simply too numerous to be mentioned. Perhaps the M4 was mechanically sound, dependable, easy to maintain, and could do just about any job required of it.

The Sherman tank crews received one of the great tank handbooks. Designed in 1941, it served throughout World War II and the Korean conflict (where it comprised over half of the U.S. tank force). It was not until 1957 that the last U.S. Army Sherman tanks were declared obsolete and relegated to the scrap yards. Modified versions soldiered on in Israeli service even longer, and Shermans can still be found in the military inventories of minor countries. Few are the tanks that can surpass the Sherman’s longevity, which stands as the ultimate testimony to the quality of its design.

On to Posterity

As I said at the beginning of this article, the Sherman tank is the epitome of Allied tanks in World War II. Produced in massive quantities and supplied to both England and the Soviet Union, the Sherman tank saw action in almost every combat theater of World War II. Although best remembered for its contribution in the European theater, the Sherman also performed yeoman service in the Pacific doing the job it was designed to do, providing direct fire support for friendly troops. A slogan going around the Army was “Win the war with the M4.” It turned out to be quite true.

The strange thing about the Sherman tank is that it’s fame was not gained from its combat strength. Throughout most of its lifetime the Sherman was both undergunned and underarmored, facts to which any veteran Patton’s best player will attest. However, it did have very good mobility so that, when deployed in numbers, they were able to maneuver into flanking positions and defeat their stronger opponents. Captured German tank crews used to tell their U.S. captors, “One of our tanks is better than ten of yours...but you always have eleven!”

The Sherman did have a few combat capabilities superior to their German counterparts. All Sherman tanks had an elevation gyrostabilizer for the main gun and a power turret traverse. The latter gave Sherman crews an edge in getting off the first shot, or at least being able to train the gun onto a target quickly once fired upon. For example, the following incident occurred on April 22, 1945, and is recounted in the history of the 5th Armored Division:

Corporal James E. Mathies, tank gunner of A Company, 34th Tank Battalion, was all set for anything as his tank rounded a corner and he saw an unfamiliar vehicle 400 yards away, its gun pointed straight at Mathies’ tank. Mathies’ 76 roared twice in rapid succession and the rear of the strange vehicle disappeared. It was a British scout car. The British soldiers manning it pilled out and were recognized before further damage was done.

The British commander of the car afterwards came up looking for Mathies. “That was fast shooting, old chap.” he told the 34th Tank Battalion gunner. “We had been there an hour, waiting to shoot anything that moved around that corner, and when you came around it you hit me twice before I could lay my hand on the trigger.” With that he patted the startled Mathies on the back and went to see what he could salvage out of his scout car.

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Bibliography

One way I can tell if a game is good is if it inspires me to look further into its subject matter. If Patton’s Best has piqued your interest in the Sherman tank as much as it has mine, I can recommend the three books that I used to write this article. The most detailed and informative source of the Sherman tank’s design history I’ve seen is Sherman: A History of the American Medium Tank by R.P. Hunnicutt (Taurus Enterprises, 1978). This book also appears in the Patton’s Best bibliography. The bulk of the information used in this article is from this source, including the “quick shooting” anecdote.

Another good source of design information is M4 Sherman by George Forty (Blandford Press, 1987). This book provides a good history of the Sherman tank, but is not quite as detailed as the previous source. It does contain numerous firsthand accounts of Sherman tank crewmembers however, and is the source of the Eisenhow-Bradley conversation and the German tankers’ joke.

Finally, Sherman in Action by Bruce Culver (Squadron/Signal Publications, 1977) provides a short but well-detailed description of the Sherman tank variants that saw service in World War II.
20 September 1944

The 4th Armored Division of George Patton's Third Army is advancing east out of the Moselle River valley. It has been overcast all morning, with the threat of rain hanging in the air. Your tank, ALF (named after Alf Landon, Republican loser in the 1936 presidential election), an M4A1 Sherman, is third in the column moving along the first paved road you've seen in two days. With hatches open, your driver "Bf", his assistant Fred, and you yourself are carefully studying the countryside through eyes trained by three months of combat experience. From below, the smell of coffee drifts up as your gunner "Oddball" and his loader "Oge" finish the last of their "lunch break". You're uneasy. Sure, G-2 reports expect only light resistance in this area, and your company's advancing fire has been successful in driving back the scattered German resistance encountered so far this morning. Too successful. That copse of trees on the left, a perfect spot for...

"Muzzle flash near the base of that big tree!"

The lead tank explodes in a ball of fire. A staccato burst of machine gun fire and the whine of ricocheting bullets.

"Fred, somewhere around that big tree! BJ, button up fast and stop this thing!" Behind you, Tank 4 goes hard left and plows into the soft mud on the shoulder. Rookies!

"Got it! AT gun bearing three-four-five, range two-zero-zero."

"HE round loaded; reload ready."

"Bearing, mark. Range, mark."

"FIRE!"

You know that your gun crew is good. No problem getting off that crucial second shot. The first round was a bit high.

"Correct range to one-niner-eight. FIRE!"

An explosion erupts near the base of the tree. KO one AT gun!

That machine gun sounds again. This time hitting a squad as they bail out of a halftrack. "Jeeze, they're getting cut to pieces!" Tanks 2 and 5 cut loose in the direction of the machine gun's bunker. Silence... except for the cries of the wounded and the crackling flames from the twisted pile of metal that was the lead tank. At least for now, it's over. It will take another fifteen minutes to clean up before moving on. A chance to try enjoying the coffee Oddball just handed up to you; a chance to let the gnawing in the pit of your stomach subside. Rain has finally begun to fall.

A reminiscence of combat from the E.T.O. history? No, just a dramatized replay of an engagement on the battle board of Avalon Hill's new tank game, Patton's BEST.

Morning Briefing

For those readers not familiar with the game, a brief description will set the stage for the discussions that follow. Successfully combining a role-playing game with a board game, Patton's BEST puts you in command of an M4 Sherman tank in Patton's Third Army. The game can be played on three levels: as a single engagement (as depicted in the opening of this article), as a scenario for a complete day, or as the entire campaign of the 4th Armored from 27 July 1944 through 18 April 1945. On each day of the campaign, there is the possibility that your tank will see action; if it does, there is the chance that combat engagements will break out several times during the course of this scenario. Based on the historical events encountered by the division on a particular day, a scenario can be typed as an engagement, a Battle, or a Counterattack. The Advance scenario represents the rapid drive of your division across Europe meeting only scattered resistance. In a Battle scenario, the resistance is greater as you assault enemy positions. Under a Counterattack scenario, you are on the defensive attempting to repel German thrusts.

In your role as tank commander, you control the actions of the tank's crew in fighting and maneuvering your vehicle. As a solitaire game, the German infantry and armored units are controlled by dice rolls (using a pair of ten-sided dice) and several Action Tables. The number of enemy units activated during any type of engagement is determined by the expected level of resistance (Light—two units; Medium—three; Heavy—four) encountered by the 4th Armored on that day. These enemy units can be infantry, machine gun units, light armored vehicles, AT guns, self-propelled guns, and tanks which take the form of the PzKw IV, V, VI "Tiger" and even—although rarely—the Vb "King Tiger". Rounding out this impressive list of threats is enemy artillery, antitank mines and panzerfausts with which you must contend.

Winning at Patton's BEST is measured in very basic terms. For each of the three levels of play, if you are killed or your tank is knocked out, then you lose. If both you and your tank survive, you win. Variations on these points are awarded for tenacious capture and enemy units K'O'ed (points that can lead to promotions and decorations for valor), the bottom line is still survival, which is rooted in your experience and skill in selection of tactics in each combat situation.

To understand how well Patton's BEST handles the dynamic elements of armored warfare, it will be helpful to briefly compare it with Avalon Hill's earlier popular solitaire offering, B-17: Queen of the Skies. Comparing how each game handles the key areas of player involvement, the various elements of combat within the solitaire environment, and how each game captures the particular style of combat, Patton's BEST does score better than B-17.

In B-17, the "star" of the game is, as is historically correct, the Flying Fortress itself with its ability to absorb tremendous punishment and still bring its crew safely home. The aircraft commander—thrust into the role of "The Captain"—has at his disposal the entire crew and their various different skills and abilities. Because the actions of each crew unit are as unpredictable as the roll of the dice, the aircraft commander must be ready to respond to continually changing game situations. Beyond question, this is an intense game!

Clarifying Your Orders

As you may have surmised by this point, I definitely recommend Patton's BEST to the WWII gamer who is looking for a different approach in a wargame than is usually found in the normal board game. For the student of armored vehicles, the game's inclusion of seventeen Sherman tank variants, plus the British Firefly, presents a unique insight into the development of the M4 tank.

The only area in which Patton's BEST does not get top marks would be in the category "Completeness of Rules". Perhaps, in the last-minute haste to meet production deadlines, more than the usual errata crept in, along with two "cloudy" passages in key sections of the rules. After corresponding with Bruce Shelley, the game's designer, I offer these notes to the reader as rules clarifications:

1. Rule 4.6.5.2 Par. (a) refers to a non-existent Rule 19.4; the correct reference is Rule 20.43.
2. On the Enemy Action: Counterattack Scenario Table under "MO/LW", the dice range for "Fire—Infantry" is printed as "71-75"; it should be "71-95".
3. On the Friendly Action Table, the KO range for the 50 cal. B-17 is printed as "10"; it should be "11-10".
4. On the Sherman Tank Card, the 50 cal. AAMG is depicted only on Card #1; however, all variants used in the game carried this weapon.
5. Although not specifically mentioned in the rules, Smoke Markers are affected by Sherman tank movement in the same manner as enemy units.
6. Note 1 on the Enemy Vehicle/Gun Apparatus Table states that once a Tank/SPG/AT Gun has been identified, all subsequent Tank/SPG/AT Gun units appearing during this engagement will be of the same type. However, even though it is already determined, the identification of these subsequent units is not "automatic" upon being spotted; the tank crew must still make a successful identification DR on the spotted unit.

Turning to the two "cloudy" rules sections, the first is the Friendly Action Table. This table covers four distinctly different types of Allied fire: Allied aircraft attacks; advancing fire conducted by your tank and other Third Army units accompanying you; friendly fire executed in Rule 4.76 representing fire from armored and infantry units immediately engaged in combat along with your tank; friendly
“Off Board” artillery fire. The confusion here is that the listed DRMs applicable on this table should be applied differently to each of these types of fire, but the table does not clarify these distinctions. For example, artillery fire would not be affected by the DRM for the loss of tanks or the loss of infantry squads. For the application of these DRMs, I offer the following matrix:

**Friendly Fire DRM Matrix**

<table>
<thead>
<tr>
<th>Air</th>
<th>Adv</th>
<th>4.76 O.B.</th>
<th>Strike</th>
<th>Fire</th>
<th>Fire</th>
<th>Arty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flanking Fire</td>
<td>N</td>
<td>N</td>
<td>(1) N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Strike vs Vehicle</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each US-occupied Sector</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arty vs LW/MG/AT in Woods</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each Inf Sq lost vs LW/MG</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each Tank lost vs Vehicle</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke in Trench Zone</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During Fog/Snow</td>
<td>(2)</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adv/Arty vs Vehicle</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: (1) Flanking fire is applicable only when generated on the Random Events Table and is conducted by friendly units on the immediate battlefield.
(2) Air Strikes are not allowed during fog or falling snow conditions (Time Use Table, footnote #1).

One final note on this table. Air strikes were rarely used to lay smoke. If that result is rolled when resolving air attacks, it can be ignored. However, to improve the game’s accuracy, consider that even the presence of smoke would cause enemy units to drastically restrict their movements. Therefore, if a “Smoke” result is rolled, treat it as an aircraft interdiction. Mark the unit with a homemade “Interdiction” counter and ignore any “Move F/L/R/B” results subsequently rolled for that unit on the Enemy Action Table.

The second rule section that is not clear is Rule 4.77.2. Following the completion of a combat round, you are directed to return to Step 4.4, “Prepare for Combat”, in order to resume play. If followed exactly, this sequence returns you to the steps that should only be conducted at the beginning of the scenario. The correct sequence of steps should be:

- 4.41 through 4.46
- skip 4.47, 4.51 and 4.52
- continue from 4.53.

This should eliminate any confusion in restarting the combat procedure.

**Tweaking the Game System**

While the game system of * Patton’s BEST* is complete as it stands, there are always suggestions that can be made to improve play. I offer the reader three such “Optional Rules” for this game.

The first concerns the point values assigned to each area on the Movement Board. I was surprised that the designer gave each area a victory point value of “1”. Considering that the towns and crossroads represented by the “C” areas would have more strategic value than the open fields of the “B” areas or the farm fields of the “A” areas, it only makes sense to give the “C” area a heavier point value. This has the secondary effect of giving the player more incentive for attacking these strategic areas as he moves towards his exit rather than bypass them in favor of areas with lower resistance. Similarly, because the terrain of the “D” areas would be more difficult to attack/defend, this type could also be given a heavier point value. I would suggest, then, an Optional Point Value system as follows:

- Area A: farms and fields—1 point
- Area B: open fields—1 point
- Area C: towns—3 points
- Area D: woods—2 points

My second Optional Rule involves what SL/ASL gamers refer to as the “Vehicle Cover Arc” (VCA) and the “Turret Covered Arc” (TCA) for enemy tanks and SPG’s. When a German tank/SPG is actuated, subsequent die rolls determine the sector in which it appears, the range, the type of terrain, and its facing relative to your tank’s position at the center of the Battle Board. The game makes an assumption that, as the tank commander, you would not know the turret facing of the enemy tank. While this is a valid assumption, it does give the German tank a “cheap” shot at your tank when its VCA is not oriented toward you. By contrast, the Sherman tank must pay a +10 per Sector DRM penalty for changing its TCA prior to firing and a +25 per Sector DRM penalty if it changes its VCA by pivoting on the firing crew has been trained in the use of the gyrostabilizer! There is a +10 “First Shot” DRM penalty that is applicable to the German units, but it simply does not cover the aiming problems created by turret rotation, and it covers only the first shot. Consider this example: a PzKw IV fires at you during the Ambush Phase taking the “First Shot” penalty and misses; then, in response to your tank’s movement during the subsequent U.S. Action Phase, the Mark IV rolls to change facing to a “side” orientation. During the German Action Phase, it again rolls “Fire—Your Tank” and does so without penalty, even though this would be required to bring its gun to bear on your tank.

While, admittedly, the tank commander would not be able to determine the facing of the enemy tank’s turret with certainty, I feel that this important factor should be taken into consideration. To do this, I dug out some old turret counters, probably from CROSS OF IRON. When the German tank rolls to fire at the Sherman, the turret counter is used to indicate the firing TCA. Ignoring the listed “First Shot” DRM, the German AFV is penalized with a +10 DRM for the first round fired from a side facing, a +20 DRM for the first round fired from the rear facing. Of course, the gamer must take into account that a turret hit on any German AFV which has changed its TCA is resolved with the “Front” To Kill values, whereas a hull hit is resolved with the appropriate “Side/Rear” To Kill values. Incidentally, the purist may want to increase the per-Sector DRM to +15 for the Tiger and King Tiger tanks as they are rated “slow turret-transverse” AFVs. Even if the German tank subsequently moves, the new TCA is maintained until required to change by again firing at your tank.

A self-propelled gun presents a slightly different problem, as it would need to pivot the entire vehicle to bring its gun to bear on the target. Since these units would be employing the use of the gyro-stabilizer, in order to historically reflect the aiming problems caused by pivoting, I would recommend the following option. If “Fire—Your Tank” is rolled, the enemy SPG is allowed only to change its current side/rear facing to a front facing. In the following turn(s), if “Fire—Your Tank” is again rolled, the SPG fires at you.

The third Optional Rule challenges the game’s assumption that AT Guns are always activated oriented towards your tank. When an AT Gun is encountered, it is quite plausible that the gun crew could be engaging another target not in your direction. It is simply be unaware of your tank’s approach. To reflect this, roll to determine the facing of AT Gun(s) which are activated using the “Tank” column of the Vehicle Facing table. AT Guns are then subjected to the same DRM penalties for firing outside their covered arc as tanks/SPG’s. Because of its 360-degree movement, the 88mm gun would use the +10 per Sector DRM, all other AT Guns would have to be manhandled into the new firing position and are subjected to the +25 per Sector DRM. Unlike SPG’s, AT Guns are allowed to pivot and fire in the same turn.

The above three variant rules serve best when all are incorporated, but even individually will enrich your game.

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**Evening Debriefing**

To bring things to a conclusion, in * Patton’s BEST* Bruce Shelley has captured the feel and the intensity of armored combat in a solitary game which is easy to learn, yet challenging to master. The “Optional Rules” offered here are intended to correct any few oversights that can be found with the game’s design by purists and enhance your enjoyment.

For now . . . “the rain has stopped as ALF and its combat veterans push into another sector over roads leading toward Bastogne and, ultimately, the Rhine.”

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Lost . . . Cont’d from Page 21

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strength of his own units, limited information about the positions held by other Confederate units, and only a general awareness of the location and type of the Union forces. The supreme commander would have knowledge of the location of his entire army, plus whatever information about unit strengths that the corps commanders chose to relay. The supreme commander would write general orders to the corps commanders. The corps commanders would have full command of the units in their corps, would determine which units would move and attack, and send that information to the GameMaster. The same thing would happen on the Union side, although a single player might want to take command of two or more corps. The GameMaster would release general information about the opponents’ unit strengths only when the units are attacked. Most games, from the simplest to the most complex, could be played in a similar manner to re-create the battles being simulated more completely. Of course, on a tactical level, this sort of division of command would not be as realistic as it would be in a strategic or operational game. Other factors, such as hidden units, unknown orders of battle, or terrain, could become important and could be added into the simulation.

Frankly, I doubt that most people will embrace GameMastered play-by-mail as the method they play their wargames. The investment of time and energy involved in this effort is probably too much for the average player who is involved in wargaming as a hobby. There is simply no easy answer to the conflict between realism and playability. The first wargame that I ever owned was 1914. That design, which was very innovative for its time and had a number of features that are still valid today, used inverted counters to re-create the Fog of War. Things have not progressed very far from that starting point, largely because the mathematical basis of our wargames cannot reproduce the intangible facets of war. Re-creating the reality of the battlefield information gap takes a lot of work, but it can add a great deal to our understanding of the history that we are trying to examine. No wargamer would re-create Pickett’s Charge in the course of a game, knowing what he knows about the historic result. And yet, on the third day of the battle of Gettysburg, having evaluated the information available to him from the previous day’s fighting, Robert E. Lee chose to attack Cemetery Ridge, the center of the Union line. Perhaps a wargamer, limited to the sort of information available to Robert E. Lee, would reluctantly make the same choice. After all, the information that we wargamers take for granted was, for Lee, lost in the Fog of War.
CONTEST 145

It's the start of Game Turn 9 in a playing of Situation #12 for PANZER LEADER, and the Germans have muscled their way into Gran- celles. Fifteen American combat units have fallen. At least a dozen more are threatened. Still, the Americans have dished out a lot of fire recently. Some of the best German units are pinned. Prior skillful delaying tactics have diffused the German attack. As the enemy con- centrates to deliver his final blows, what moves should the American player make to have the best chance to parry the thrusts and win a dazzling victory against the odds?

Unit Placement:

<table>
<thead>
<tr>
<th>Americans:</th>
<th>Hex(es):</th>
</tr>
</thead>
<tbody>
<tr>
<td>105mm+3 Inf platoons</td>
<td>A02—spotted</td>
</tr>
<tr>
<td>Truck</td>
<td>A2r</td>
</tr>
<tr>
<td>MG+Inf platoons+ Truck</td>
<td>Aq3</td>
</tr>
<tr>
<td>57mm AT each</td>
<td>Aq4 and Aq3</td>
</tr>
<tr>
<td>Sherman platoons</td>
<td>Aqes</td>
</tr>
<tr>
<td>2 M8s+M20</td>
<td>Aq8</td>
</tr>
<tr>
<td>3 Inf platoons+halftrack</td>
<td>Aq6—spotted</td>
</tr>
<tr>
<td>2 81mm Mortar</td>
<td>D2w—spotted</td>
</tr>
<tr>
<td>Inf platoon</td>
<td>D3w—spotted</td>
</tr>
<tr>
<td>20mm AA+2 trucks</td>
<td>D3s</td>
</tr>
<tr>
<td>German wreck each</td>
<td>Aq6 and Aq7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Germans:</th>
<th>Hex(es):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 MIV+Sust III+Hezer</td>
<td>Av6—pinned</td>
</tr>
<tr>
<td>Eng platoon</td>
<td>Av7—pinned</td>
</tr>
<tr>
<td>3 Inf platoons+234/4</td>
<td>Aq5—pinned</td>
</tr>
<tr>
<td>234/1+Puma+Lynx</td>
<td>Aq8</td>
</tr>
<tr>
<td>halftrack</td>
<td>Aw6</td>
</tr>
<tr>
<td>Inf platoon+halftrack</td>
<td>Aw7</td>
</tr>
<tr>
<td>Panther</td>
<td>At7—spotted</td>
</tr>
<tr>
<td>3 Panthers</td>
<td>Ak7—spotted</td>
</tr>
<tr>
<td>M41V</td>
<td>Av9</td>
</tr>
<tr>
<td>2 Inf platoons mounted in halftracks</td>
<td>Kuhn</td>
</tr>
<tr>
<td>120mm Mortar+truck</td>
<td>Av9</td>
</tr>
<tr>
<td>Inf platoon mounted in halftrack</td>
<td>Aq9</td>
</tr>
<tr>
<td>halftrack</td>
<td>Dv3—spotted</td>
</tr>
<tr>
<td>3 81mm Mortor mounted in trucks</td>
<td>Dw3</td>
</tr>
<tr>
<td>Hezer</td>
<td>Da5</td>
</tr>
<tr>
<td>2 Inf platoons+2 halftracks each</td>
<td>Dq4 and Dq5</td>
</tr>
<tr>
<td>20mm AA+2 trucks</td>
<td>D3s</td>
</tr>
<tr>
<td>German wreck each</td>
<td>Aq6 and Aq7</td>
</tr>
</tbody>
</table>

Note spotted units were marked. Except where noted, units are not mounted. All optional and experimental rules from the rulebook are in effect. The US 105mm howitzers may fire one smoke shell concentration.

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Simply indicate your actions with each American unit—if movement is desired, the last hex entered; if firing, the target and the odds of the attack. Close combat must indicate both movement and attack. Ten winning entries will receive a merchandise credit from The Avalon Hill Game Company. To be valid, an entry must include a numerical rating for this issue as a whole and a listing of the three best articles in the judgment of the contest.

The solution to Contest 145 will appear in Vol. 25, No. 4 and the list of winners in Vol. 25, No. 5 of THE GENERAL.

A year ago I was recommending THUNDER AT CASSINO to one and all without reservation as the best wargame I had ever played. I now find myself somewhat sheepishly unable to make the same claim. Oh, I still like it a whole bunch; but TURNING POINT: STALINGRAD has replaced it as my all-time favorite. Just call me fickle.

Actually, it's not surprising that I'm so enamored with this game since it evolved from the STORM OVER ARNHEM/THUNDER AT CASSINO school. I merely blended the strongest points of the former games with new concepts that improved on some of those games's weaker points. TURNING POINT: STALINGRAD is a semi-simultaneous movement system in which players alternate moving a single unit or group of units rather than all their forces in a single turn. This "reactive" style of play, while not conducive to easy PBEM, is a format I've always found exciting. And in TURNING POINT, I believe it has evolved into one of the most intriguing systems ever—one faintly reminiscent of VICTORY IN THE PACIFIC—and one of my old favorites.

TURNING POINT: STALINGRAD is not just STORM OVER ARNHEM moved to the Volga with a different scale and protagonists. While owing its ancestry to Courtney Allen's creation, it has evolved into a unique game system all its own. The German player is in command of the Sixth Army during its nine-week battle for the city just prior to the catastrophic encirclement which proved to be the turn- ing point of the war. The German commands the 62nd Army of Vasily Chuykov with orders to hold the city until the Russian winter offensive springs the trap that will doom Sixth Army.

The battle is broken into nine weekly intervals. At the end of each week, the German's progress is measured against sudden death victory criteria which will either end the game or allow it to continue another week. This approach causes the average one-week basic game to end in three to four hours, but also allows players to continue to the latter stages of the battle and experience the full spectrum of the agony that was Stalingrad. Players may choose from two sets of victory conditions—an exacting schedule emphasizing a quick conclusion or a lenient scale in which the most likely result is a draw (allowing the simulation to continue). Therein lies the key to happiness for both types of competitive-minded and a realistic simulation for the practitioners of the realism-at-all-costs school. Reviewers often decry the absence of both a good game and a good simulation in the same package. I unabashedly declare that TURNING POINT: STALINGRAD is both.

Each week consists of seven daily turns, each of which turn contains a varying number of day and night impulses. Unlike STORM OVER ARNHEM, a player does not move all his units every day. The number of impulses—or chances to move—it limited and usually in short supply. Consequently there is little of the "Pass" mentality of STORM OVER ARNHEM while "outwitting" an opponent by moving one unit at a time. An impulse wasted is a slice of precious time gone forever and therefore must be used to best advantage immediately. This "ticking clock" aspect forces the German to be constantly on the attack and marshaling his forces for use in the remaining daylight hours. For nightlife brings Russian reinforcements across the Volga and an increasingly aggressive opponent no longer intimidated by the Luftwaffe. In fact, sunset works a veritable transformation over the battlefield as the Russians infiltrate back into the same blocks cleared by the Germans by day.

Most combat is not of the ranged fire type common to STORM OVER ARNHEM, but of the house-to-house variety with entrants of an area attacking the occupants in close combat. Each move/attack pays a price for its action in that it is flipped over to its inactive side for a period ranging from one to four days. These periods of inactivity give the Russian enough respite to rush reinforcements into place—usually just in the nick of time—to avert a catastrophic breakthrough. Encirclements are very real possibilities. Whenever a defender is unable to pay his Casualty Point bill for any attack, the attacker may continue his move with the victorious assault units. The resulting Overruns deep into the Russian defenses can be devastating, but can also leave an overreaching attacker out on a very shaky limb of his own. It makes for some very interesting nights.

The result is an exciting game of power and maneuver in the opening weeks, which if the Russian survives will soon settle down to the positional slugfest so characteristic of the more highly-publicized aspects of the battle when the Germans encounter the rubble and fortified areas of the river bank.

Another plus for the game is its very high suitability for solitaire play. Although not designed for solitaire use, the lack of hidden movement options and the undetermined length of each day/night turn make the game far more amenable to solitaire play than the bulk of two-player wargames. A large number of our playtests have been generated by solitaire players who are quite enthused by its potential for entertaining solitaire play.

Aside from the game system itself, TURNING POINT: STALINGRAD is enhanced by an extremely attractive components package. The biggest problem we had with THUNDER AT CASSINO was compressing its map area enough to fit into 22" x 24" format for a mounted board. The result was half-inch counters and a different scale insert of the town which detracted from the overall aesthetics of the map. This game has no such drawbacks. The counters are the large ¾" type and Charlie Kibler has painted one of his best maps yet using German aerial photos as his guide. The resulting 16" x 44" mapboard is one of the most striking and accurate maps in existence.

TURNING POINT: STALINGRAD has been play-tested extensively with over 100 test games reported to date by extremely enthusiastic and talented groups of "blind" testers. And while opinions vary as to the favored side from group to group, all seem to agree that this is a very unusual and exciting game.
During the charge of the Light Brigade at the Battle of Balaclava, a French general commented, "C'est magnifique, mais ce n'est pas le guerre." At the time he was commenting on the foolhardy, unquestioning courage of Lord Cardigan and his cavalry troopers. The same statement, applied for different reasons, holds true for wargames. Despite all the care and hard work that goes into the design of a wargame to make it accurately reflect the historical realities of a situation, games cannot reproduce reality. Wargames may be magnificent, but they are not war.

I am not speaking here of the most obvious differences between our games and the reality of war. Our cardboard legions do not bleed. They are faceless. But hopefully our purpose in wargaming, or "combat simulation" if you will, is not the glorification of war. Our interest is, at the very best, to gain a better understanding of events that have affected our world in a more effective way than can be achieved through reading a book or seeing a film. At its most innocuous, wargaming provides us with a few hours of relaxation in which our decisions can influence the destiny of nations... if only in our imaginations. What I am interested in is the degree of reality that we are able to achieve, particularly given what the mechanical systems in wargames cannot re-create—the oft-discussed "fog of war."

In order to fully understand the problem of the fog of war, we need to understand what our wargames really are. A wargame is nothing but a mathematical model or analogy, the components of which are intended to depict possible outcomes, modified by the presence of various elements, and leavened with a certain amount of chance. Because wargames are mathematical models, the mathematical analysis of wargames that often appears in The GENERAL is certainly valid study (no matter how aggravating such an analysis may be to many readers). Theoretically, the mathematical model could be carried to the point where a battle to the finish between two comparatively equal nations could be accurately depicted on a two-hex map with two counters in a single turn. It could be done, but it would be boring. Wargamers want the ability to maneuver their troops, to search for a place to break through—in short to behave like the commanders of real armies. Unfortunately, while the mathematical model does an excellent job at re-creating most of the hard facts of battle (equipment, manpower, and the effects of terrain), it is unable to re-create the intangible factors and indeed often serves only to eliminate them. It is these intangibles which taken together make up the "Fog of War."

There are many intangibles that cannot be factored, simply, into the mathematical model that makes up a wargame system. Most of these factors fall into the area of human dynamics: how people operate with each other and the manner in which individual decision-making processes functions. Much of this is complicated by the fact that we, as wargamers, have far more information available to us than our historical counterparts ever had in a similar situation. In addition, wargamers have much more centralized control over the units under their command than the historical commanders ever did. There are any number of historical examples with which these points may be illustrated.

Limited intelligence is recognized as an important factor in certain types of wargames. In most strategic naval wargames it is considered to be essential. Even a game as mechanically simple as
moved south however, Longstreet's engineers reported that there was a signalling station on Little Round Top that might be able to see his movements. They suggested that Longstreet's corps retrace its steps and then move south through an area that was not visible from Little Round Top. This movement took a great deal of time and by the hour that Longstreet attacked, there were Union soldiers on Little Round Top. Yet, unless Longstreet wanted his movement discovered prematurely, there was nothing else that he could do.

Most wargames do not introduce hidden movement, presumably because it is difficult to use even for the moving side. Arguments arise over when a unit is in sight, for example. Many tactical games, such as SQUAD, have some sort of restriction to restrict artillery fire to locations that can be seen either by the artillery unit itself or by some sort of forward observer. Why shouldn't the possibility of moving without exposure be considered as well?

Most of the systems proposed to create limited intelligence are handicapped by being too time-consuming and difficult to implement. The use of inverted units, for example, prevents both the opponent and the owner from knowing the strengths of their forces. Thus instead of merely glancing over his own units, the player is forced to check his units individually. As a Gamemaster believes that the two players in a face-to-face situation is often not practical because it requires three copies of the game, separate rooms and written orders. The same problem of practicality applies to the use of multiple commanders; it is often not practical in a face-to-face game, as well as giving each of the commanders more information than he would have in real life. Hidden units and hidden movement would cause problems of bookkeeping and potential conflicts over when a unit becomes visible. In short, the whole thing seems to more trouble than it is worth.

The easiest aspect of the Fog of War to implement is to make the arrival of reinforcements less dependable. This can be done simply, by using a die roll. On a roll of five or six, for example, a unit or group of units would arrive one turn after it is scheduled to. Any units that would arrive at the same place on the next turn would also be delayed by one turn. This would not only simulate the initial delay, but also the "traffic jam effect" such a delay would create. In strategic games, blank counters could be used to keep the exact number of units still available a secret.

Probably the best way to limit the information available to players is through the use of a Gamemaster. As has been stated previously, Gamemasters are not practical in most face-to-face situations. It is, however, eminently practical to use a Gamemaster in a play-by-mail situation. By using a Gamemaster, various restrictions on the amount of information available to the players can be introduced. Obviously, the Gamemaster is able to keep the players from knowing what units are facing them, or even knowing who the other player is. In addition, the question of reinforcements takes on new aspects, as the Gamemaster does not have to tell a player where his units were when, or even if, his opponent's reinforcements have arrived. Hidden movement, and the possibility of units waiting in ambush, can be handled more readily through the use of a Gamemaster than they would be in a face-to-face or a conventional play-by-mail situation. Possibly the use of Gamemasters in play-by-mail, is the comparative ease in which divided command can be implemented. In a game of GETTYSBURG for example, command of the Confederate forces could be divided into the three historic corps, with a fourth player being the supreme commander. Each corps commander would have complete knowledge of the name, location and

The 25th anniversary of The GENERAL is a good occasion to recall another one. AFRICA KORPS will be 25 years old in 1989. I have one of the original copies published in 1964. These are distinguished by green backs on the counters—but more important, the Axis player doesn’t have to roll the dice for his supply units to arrive! Since then, the Axis supply rules have changed, but other than rule clarifications, OK has remained unmodified since its conception.

I believe AFRICA KORPS belongs in everybody’s game collection. Even if you can’t stand the game and think it’s too simple or inaccurate, it remains perhaps one of the easiest means of introducing a newcomer to the hobby. The rules are simple, the game can be learned in only a few hours and requires a minimum of counters to shelve around. Time enough to introduce more complicated games to the recruit once he’s hooked.

However, after 25 years it is probably about time for a “tournaments level” AFRICA KORPS. Games have become much more challenging and interesting. As an example, the 111 Armored Brigade was a pure Valentine unit. Tripiling its combat factors might be a little optimistic, so I suggest doubling them unless the units have a minimum of counters to shelve around. Time enough to introduce more complicated games to the recruit once he’s hooked.

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At this point, the British have been given a considerable advantage, so we have to give something to the Axis player to counterbalance it. One thing we could do would be to give back to the Axis the original supply rules—that is, a supply unit every turn. Or we can do something about those 7-7-10 panzer regiments.

In reality, the panzer regiments were much more formidable than represented! However, not in raw power. What the Germans had going for them was tank repair. The Germans could typically repair their K0ed tanks in the field while the British had to haul theirs back to Alexandria. To simulate this, I suggest using the Axis Captured Supply Unit #5. In most circumstances, it won’t be used as a supply unit—but we’ll use it as a “wreckage” counter.

When a panzer regiment is destroyed, it is replaced by the upside-down wreckage counter. The next time the Axis player begins his turn, it is placed right-side up. The wreckage counter cannot be moved, but the second time the Axis player begins his turn replace the wreckage counter with his once-defunct panzer regiment (that is, if the British player hasn’t destroyed the wreckage in the meantime). Historically, the British had to get in among the wrecks with thermite bombs to be certain the panzers were finished off. Of course, a certain percentage of the German tanks will be unsalvageable, so this rule will have to be limited in its application. Using it once or twice a game should be enough to balance the game.

These variant rules are suggested as fun additions to AFRIKA KORPS, and have been described in the barest detail. Modify them so you understand them and they work best for you and your friends. After all, it’s your game and the whole idea is to enjoy it for another 25 years.

UNDER FIRE

By John Huff

UNDER FIRE is a tactical-level computer wargame on the same scale as the famous SQUAD LEADER. The original version was written for the Apple II by Ralph Bosson. Subsequent versions have been written for the Commodore 64 and IBM PC.

Play of the game is simple and menu-driven, with the orders entered via keyboard or a joystick. The original game came equipped with three maps (called “Lion’s Ridge,” “Shadow Valley” and “Demon’s Maze”) and the maps themselves cover a range of terrain from city streets to open country to a waterfront. Each map has provided for it three scenarios—one attack/defend type, one breakthrough, and one meeting engagement. In addition there is the option of writing your own scenarios and (with the Mapmaker disc) creating your own maps. The game comes with American, German and Russian infantry and armor types. “Extended” discs provide the Italian, British and Japanese OBs.

Maps can be displayed in three modes: situation, strategic or tactical. During game play, any units within line-of-sight of your squads will be displayed and can be identified from the strategic or tactical maps. Realistically, LOS is not symmetrical. For instance, an enemy squad is hiding behind some vegetation some distance away but your squad is exposed, you most likely will not see him—but he probably will see your squad. The same is true in the reverse case. This adds quite a bit of tension to game play. The situation map displays call upon the entire map area and flashes the objective; this is important if you actually intend to win the game, rather than just “kill bad guys.”

Units in motion are impeded or helped by the 11 specific terrain types. These include beaches, woods, woods, hilltops and whatever else is appropriate to the scenario. Terrain will also affect LOS, and the LOS option can be used to “test” various locations to see if a location where you suspect the enemy to be is visible to one of your selected squads. So, if an enemy appears to have “disappeared from view,” you can use the LOS function to gather more data.

Combat as well is very flexible with the options of posture (assault or defensive) and type of fire (direct, indirect, or area) provided, and can let units “dig in” to gain whatever advantage is possible. UNDER FIRE was philosophically a departure from most computer games in the following ways:

1. It had no arcade element.
2. It simplified the I/O to free the player from worrying about the mechanics of running the computer, letting him concentrate on the tactical situation.
3. It used a set of values and an algorithm which closely simulates most (if not all) of the conditions met on the battlefield.
4. It can be played over and over with no visible guaranteed way to win.
5. It does not “cheat” to achieve these results.

Many players have contacted us about how much they are entertained by the game. In fact, few people find any major omissions to detract from its value as one of the best combat simulators out for home computers. As the person who reviews new submissions, I have not seen anything since we first released UNDER FIRE to even begin to compete with it. The Mapmaker and Expansion discs only made it all-encompassing.

Now, having said all this, it should be realized that nothing is perfect. The surprising thing is that the problems and bugs (read that “undocumented features”) are so minor and so few and far between as to be unnoticeable in the scope of the entire game. Any true fan of SL or WW2 tactical warfare can overlook these.

In the next issue, I will regale you with the long, and sometimes painful, process of turning an idea into a finished computer game.

For this spring and summer, we have some exciting new products—as well as expansions and conversions for some existing products. Readers of THE GENERAL will already be aware of the release of POLICE BLOTTER (advertised elsewhere in this issue); it is currently available for the Apple II and soon to be released for the IBM PC and Macintosh.

Combots is to be a real nuts and bolts game. A tactical game where you use your own armored machines to destroy enemy robots and their base stations. Extensive campaign orientation gives you the freedom to design your own machines and the devices they use. You repair and modify your machines using parts, and components salvaged off damaged machines in the field. Players each get a team of two combatants to control, and can play against the computer, against another opponent, or against both in a three-player game (two human and the computer) at once. Available this summer for the Commodore 64.

UNDER FIRE Mapmaker is a unique program which gives the enthusiast the ability to simulate any terrain and to widen the scope of the game. From the Black Forest to Guadalcanal, you now have the ability to stage battles anywhere they might have occurred in World War II. Available this summer for the Commodore 64.

New Disk for NBA—the expansion disk for the popular basketball simulator. This covers the 1987-88 season and should give the basketball fan as many hours of enjoyment as the original. Available this summer for the Apple II, IBM PC and Commodore 64.
A NEW CAMPAIGN

THIRD REICH—1941

By Larry Bucher

I don’t think many players will ask, “Why? What for? Who needs a 1941 scenario?” But in case someone should, let me put forth two reasons.

First, what percentage of THIRD REICH games follow even a minimally historic course, defined as: France falls first and Russia is invaded in Spring or Summer 1941? It’s a guess, but I’d venture to say well under half, whether due to poor play, historical strategies, or whatever. And it is a real rarity for the game situation in 1941 to reflect history in the Balkans and Africa at this point—rare enough that I have never seen or heard of such a game.

Second, opening strategies and tactics for 1939 have been studied to exhaustion (although certainly not settled to perfection). The titanic collision between Russian and the Reich has, by contrast, received a good deal less attention. While I doubt that any hard-core THIRD REICH player would actually own up to being bored with the Western Front in 1939-40, there may well be a few who would prefer to spend a little more mental energy on other facets of the game. And although the 1942 scenario does allow Germany and Russia to tangle immediately, Barbarossa is it not.

The German invasion of Russia can, however, start on the first turn of my 1941 scenario if desired; but the German player faces Hitler’s much-debated decision: lambast Russia without delay and let the Balkan flank dangle; or take a turn to chastise southern nuisances and let Stalin wait until summer, growing stronger? Or perhaps some sort of compromise—a bit of both? In this scenario, players at last have to face that burden of strategy.

A couple of ‘designer’s notes’ for the reader—on the relationship to date. At first glance, B26 would be a more logical hex for the Allies to control than is AA27. But the Greek requirement to set up adjacent to Italian hexes could then have placed Greek units in AA28. This would have allowed too many barriers to a potential one-turn blitz on Athens, and hex AA27 is not unreasonable. Crete’s special status, and the German ability to set up in Italian territory, are my effort to give Crete the job it deserves.

I believe that opening deployments for this scenario promise to be nearly as varied and as open to argument as those of the 1939 one. Only Russia has no problems to face that are peculiarly new.

With Britain enjoying last-setup advantage, the Axis recipe would appear to be to pose as many different threats as possible. I have a few observations:

Italy can have an invasion force threatening to sail. If the spare 2-5 is aboard, it can instead be sea transported to Tripoli to serve as an exploiter. German armor in Italian ports also would enjoy this potential. Italian fleets in Albania-British armor, set up in AA27, can isolate the north and south hexes of Albania, and Britain has a cheap 2-5 armor to risk on such ventures.

A German invasion force in Kiel can threaten Sealion—but could instead divert to Konigsberg or invade the Baltic States. Air units in Graz and Trieste can pose a triple threat to Britain, Russia and Greece. Armor on the Hungarian border menaces both Russia and Belgrade. Armor in Bulgaria can be switched north against the Soviets or can provide the main punch for an attack on Greece. Remember that an Axis DoW on Yugoslavia will allow some Yugoslav units to be placed in Yugoslavia’s southeast corner. And watch that 20-factor limit in inactive minor allies!

Placement of the German airborne unit offers a variety of interesting options. On Rhodes (with an airbase counter, and a supply fleet inverted in Italy), its potential targets include Alexandria, Tobruk, Crete, Cyprus, Athens and its approaches, and even—if the German gets carried away—Ankara and the Turkish Straits. From Brindisi, the paratroopers can reach Athens and its approaches, Malta, and Belgrade. Now for the down-side: if dropped anywhere it can’t be SRed back from, it is not going to be available against Russia until Fall at the earliest.

Britain’s advantages in setting up last are offset somewhat by the stringent deployment limits I imposed. Despite foreknowledge of the Axis dispositions, there are likely to be a lot of threats to counter with too few units. Should Britain make Sealion inadvisable? Or make it just tempting enough that Germany might try and fail? Maybe the British should put an extra unit or two in Greece? Abandon Cyrenaica or defend it? Fleets will probably be needed at Malta and Port Said for invasion defense. If five fleets stay at home to deter a German invasion of England, only one will be left for Gibraltar and SR capacity to Egypt/Greece is going to be minimal unless some fancy and successful base changing is done at the start of the Allied turn. And Churchill wanted the job . . . ?

I think that most THIRD REICH players, even those jaded by the 1939 scenario, will find much to the situation in 1941 to keep their attention. Many interesting, historical choices are posed, yet the few new rules are simple and straightforward. I will be most interested in hearing players’ thoughts on the scenario, and on its strategy.

SPECIAL RULES for the 1941 THIRD REICH Scenario

1. Axis forces always move first on the first turn.
2. No 1941 YSS, except for British and German Sealion builds.
3. Vichy inactive. Place in European France/Corsica: five 2-3s, one 9-factor fleet; in Tunisia-Algeria-Morocco: one 2-3; in Lebanon-Syria: one 2-3. Axis units may not be placed in the colonies during opening setup; Rule 49.3 governs thereafter. Activation/deactivation attempts may begin in Spring 1941.
4. Intervention and Alliance have already taken place in Greece. Greek units may be initially placed in AA27. At least three Greek 2-3s must set up adjacent to the Italian-controlled hexes of Albania.
5. Contrary to Rule 22.7, Greek ground forces may leave their country. They may stay in the Balkans (or Greek islands), however, and may go no further north than hexrow X.
6. Crete is treated as an objective “hex.” Unless all three Cretan hexes are controlled by the same player, however, it counts for neither side.
7. Contrary to Rule 24.2, Crete does not pass to Axis control when Athens falls (all other Greek islands do). The hexes become uncontrolled unless/until physically occupied.
8. Contrary to Rule 3.36, German units may (with permission) initially be set up in all Italian-controlled territory except Libya.
9. Italian units may not start the 1941 scenario in “lent” status.
10. The United States is handled in exactly the same manner as in the Campaign Game.
11. The scenario may be lengthened by agreement among the players, to extend to Winter 1944 (using the 1942 scenario Victory Conditions) or to Summer 1945 (using the Campaign Game Victory Conditions).
12. The following variants are inapplicable: Axis #5, #12, #18; Allied #1, #2, #3, #11, #12, #14, #16 and #17. (Axis variants #10 and #14 and Allied variant #7 are also void unless a duration longer than Winter 1942 has been agreed upon.)
Italy

1941 BRP: 80
Growth Rate: 20%

Duration: Spring 1941—Winter 1942

Situation: Germany and Italy are at war with Greece and Britain. Russia and United States are neutral.

Order of Deployment: Greece, Italy, Russia, Germany, Britain.

Deployment Limits: At least two 2-3 Infantry units and two 1-3 Infantry units in Albania; at least one 3-3 Infantry unit, three 1-3 Infantry units and one 2-5 Armor unit in Libya.

Control: Sicily, Sardinia, Albania (less hex AA27), Libya west of (not including) hexes MM19/NN19, Rhodes.

Notes: Axis moves first in Spring 1941. Only SW builds allowed in 1941. SR Limit: 5 (see 16.1).

1941 Force Pool:

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1942:

| ![Diagram](image) |

U.S.S.R.

1941 BRP: 120
Growth Rate: 30%

Duration: Spring 1941—Winter 1942

Situation: Germany and Italy are at war with Greece and Britain. Russia and United States are neutral.

Order of Deployment: Greece, Italy, Russia, Germany, Britain.

Deployment Limits: The following units must start at and not move from the stated cities until at war with the Axis and Axis ground unit come within five hexes of the city in question:

- Leningrad: one 2-3 Infantry unit
- Moscow: one 3-5 Armor unit
- Odessa: one 1-3 Infantry unit
- Kharkov: one 1-3 Infantry unit
- Grozny: one 1-3 Infantry unit

Control: East Europe (east of Partition Line).

Notes: Axis moves first in Spring 1941. Only SW builds allowed in 1941 YSS. SR Limit: 6 (see 16.1).

1941 Force Pool:

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1942:

| ![Diagram](image) |
Germany
1941 BRP: 210
Growth Rate: 50%

Duration: Spring 1941—Winter 1942

Situation: Germany and Italy are at war with Greece and Britain. Russia and United States are neutral. German Minor Allies have not been activated.

Order of Deployment: Greece, Italy, Russia, Germany, Britain.

Deployment Limits: Fleets may not start in Mediterranean/Black Sea. May place units in Axis Minor (under usual 20-factor limit). May place units in the Murmansk box during opening setup. May place units in Italian-controlled territory with Italian player's permission.

Control: Norway, Denmark, Netherlands, Belgium, Luxembourg, Poland (west of Partition Line), France.

SW Surplus: 6 U-boat factors.

Notes: Axis moves first in Spring 1941. Only SW builds allowed in 1941 YSS. SR Limit: 9 (see 16.1).

1941 Force Pool:

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Allowable Builds:

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1943:

1944:

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Britain
1941 BRP: 140
Growth Rate: 40%

Duration: Spring 1941—Winter 1942

Situation: Germany and Italy are at war with Greece and Britain. Russia and United States are neutral.

Order of Deployment: Greece, Italy, Russia, Germany, Britain.

Deployment Limits: At least one 1-3 Infantry unit in Malta; one 1-3 Infantry unit in Gibraltar; one 1-3 Infantry unit in Transjordan/Palestine/Iraq; one 3-4 Infantry unit in continental Greece; one 3-4 Infantry and one 4-5 Armor unit in Egypt/Libya; and at least three Replacement units in Britain/Ulster.

Control: Iraq, Palestine, Transjordan, Cyprus, Egypt, Libya east of (including) hexes MM19/NN19, Malta, Gibraltar, Greece, and hex AA27 of Albania.

SW Surplus: None

Notes: Axis moves first in Spring 1941. Only SW builds allowed in 1941 YSS. SR Limit: 7 (see 16.1).
MURDER WE WROTE!

Seven Mysteries from the 13th Precinct

The 13th Precinct is never dull. You're a rookie detective on Captain Reddick's crack force, and if you want to work here, you have to stay on your toes, keep track of the clues and watch your back.

Your beat is the streets of Queensport. Pulled from the files of the QPD are seven tantalizing cases to be investigated and solved by one to four detectives. Travel throughout the precinct, interview witnesses, gather clues and read the reports. When you think you've cracked the case, file an arrest warrant. But beware! Captain Reddick does not tolerate sloppy work. Come up with insufficient evidence and he might just bust you to traffic duty!

Here are just some of the cases you'll have to untangle:

**The Case of the Peculiar Corpse:** The trouble begins when an unidentified body is found floating in the middle of Riverside Park Lake.

**The Death of Reverend Slade:** The former confidence man and bungo artist is found shot to death in the chapel of his new church. Has the good Reverend reformed, or was this the biggest scam of all?

**Lincoln's Acorn:** A priceless piece of American history disappears and Queensport's mayor gives you 12 hours to find it!

**The Big Takeover:** Officer Janet Gale lies critically wounded in Queensport Hospital after being caught in the crossfire. Your investigation could clear her name, or was there a sinister motive behind the attack?

**The Mystery of the Missing Tracys:** The Thanksgiving turkey is on the table, but Walter and Crystal Tracy are nowhere to be found. Is their disappearance a red herring? Be cautious on this one or you may end up a dead duck!

**POLICE BLOTTER contains:**

- Seven Complete Cases involving murder, kidnapping, theft, blackmail, evidence, clues, false trails, suspects, witnesses and bystanders both innocent and not.
- Case Clock to keep track of how much time is taken by each detective to interview suspects and travel about Queensport.
- Map of Queensport showing the major locations where the action takes place.
- Two Manuals consisting of a Rulebook and an extensive Clue Book.
- For 1 to 4 players.

**POLICE BLOTTER runs on the Apple® II series of computers with minimum 64K. Coming soon for the Macintosh®, IBM® PC and compatibles.**

**POLICE BLOTTER is available for $99.95 wherever good software is sold...or call TOLL FREE to order at 1-800-658-5288. Ask for Operator P31. Send $1.00 for our full-color brochure.**
Tank role, whenever we see a scenario for the first examples of "indirect fire" weapons being used to direct anti-tank fire. Historical texts are replete with the need for almost any "gun" to be capable of stopping an armored box for carting around an artillery piece. In fact, a whole class of Soviet AFVs are nothing more than an armored anti-aircraft gun platform. We approach a new scenario may help readers in understanding the manner in which we look at Guns (C2.1) in their anti-tank role, whenever we see a scenario for the first time.

Let us assume you have signed up for one of our ASL tournaments, or perhaps you’ve decided to play a DYO game. Out pops the new scenario. You get an AA gun and an ATG. Your dastardly opponent gets a bunch of metal monsters. All too frequently, tournament players stick their Guns in clumps of woods, often spread out just behind their front line, and wait for opposing armor to blunder into range. This can improve your play (and chances for winning) by developing a framework for Gun use prior to playing a new scenario—a system that should apply in most scenarios regardless of map configurations and victory conditions. This article describes our method. Naturally, once you dissect any published scenario, there is almost always a preferred Gun placement that is contrary to the notes below. Nonetheless, detailing the manner in which we approach a new scenario may help readers in their own approach. We tend to divide Guns into categories. Mortars all by themselves, as they always use the Area Target type. Next we check for HE-only or AP-only weapons, or just any "important" Guns. Then we look for more potent weapons, perhaps with Special Ammunition available (APCPR/APCR/HEAT/SMOKE). Lastly we check out the Manhandling numbers. These will also force players into using any and all available weapons, on occasion, as AT guns. This article deals with how we look at Guns (C2.1) in their anti-tank role, whenever we see a scenario for the first time.

If on the offensive, we divide our force into a maneuver element and a "stand and shoot" group. As Guns are so potent, we almost always try to use them as a firebase. The focal point for our attack is usually determined by what axis we can bring the most firepower upon. Much of the time Guns will be the major determinant of firepower availability. This is wonderfully historical. However, as it is rare that the attacker is forced to destroy defending AFVs with Guns, I’ll save attack tactics for another article.

Much more commonly, if you’ve got the Guns, you’ll be on the defense. The first thing I do is divide up my defense into "zones". Mentally I break up the mapboard into three areas. Let’s call them: Goal Line, Main Line of Resistance, and Front Line. The Goal Line is the last two or three hexes (or hexrows) in front of your enemy’s objective. This can include a building, exit area, or just your final holding position. The Front Line is all the foremost hexes that you are allowed to set up in, plus all hexes forward. The Main Line of Resistance is, naturally, all those hexes in between.

Gun placement is based on the category of weapon, considering each zone. Mortars are easy to place. Unless there is an absolutely pressing need for their placement elsewhere, we always look for a covered position in the Goal Line area that is adjacent to an upper level spotting position. Mortars are very potent if you face open-topped or very weak armored vehicles. Remember that, although they must use halved-FP on the IFT versus AFVs, mortars are always treated as Indirect Fire (C9.1). Thus, they receive a −1 if all AF are ≤ "4" and an additional −1 if OT. Furthermore, any K result is an automatic Shock if all AF are ≤ "4" and an additional −1 if OT. Even if the AFV has 8+ AF all around, as long as it is CE then WP can inflict a NMC (+TEM). Most of the time you’ll get no minus modifiers. Nonetheless, the exceptional reach of a mortar (a "7" TH out to 36-hex range) and its wonderful ROF makes even a puny 81mm mortar intimidating.

HE-only and AP-only and the "doorknockers" are placed next. Our rule of thumb is to put these guys right behind the Front Line. Most of the HE-only Guns are 70+mm with good ROF, while the AP-only weapons generally have puny TK numbers. Any weapon (except perhaps an 88mm) may be seen as a "doorknocker" depending on your opponent’s armor. Unless you are facing some "cheesball" AFVs, no Gun is likely to make a dent in the on-rushing armored horde. The HE-only Guns can be useful at long range, recalling that HE TK numbers aren’t affected by range considerations. However, most of the time we use these guys to try for Deliberate Immobilization (C5.7). Deliberate Immobilization is most valuable when you can stop that tank in front of your line. Furthermore, the further forward your gun is, usually the more time the tank is likely to spend in your LOS. We always try to cover these upfront weapons with a couple of squads nearby, but cover is less important for the Front Line.
Guns may set up HIP even if not in concealment terrain, provided they start out of LOS of all enemy units (A12.34). This can be crucial to controlling a key road junction. Moreover, when placed on board (due to the enemy coming within LOS) the unit automatically gets a ‘?’ again even if not in concealment terrain. This is also in doubt as to exactly what you’ve got (assuming you have more than one type of Gun). Second, read the Ordinance Notes carefully. For instance, the 3.7cm PaK 35/36 is only 30 BPV but it may have both APCR and HEAT. This means a critical shot can be taken with potentially three DRI! Combined with a base RIF of ‘9’, the 3.7cm PaK is often a good buy. Lastly, set up so that you open fire, when possible, with one weapon at 18-range hex. Table A12.121 makes fire at 17 and 18 hexes most desirable vis-a-vis retaining concealment when firing. Guns, even if greatly outnumbered, can be instrumental in defeating an armored assault. Included on this issue’s insert is one of our old SL tournament scenarios (from Vol. 19, No. 5 of The GENERAL) reworked for ASL. Hopefully this will give readers a chance to experiment with some of the concepts contained in this article.

**ATTACKER’S TACTICS: Using your German infantry to contain the U.S. player to two or three buildings and drive any MGs off the hills. Then put the radio in the halftrack atop a hill and call in OBA to soften up the Americans. Finally, use your tanks to knock the U.S. troops out of the one or two buildings you’ll need to win.

**DEFENDER’S TACTICS: You must get a MG up on one of the three heights you can reach, so you can impede the German advance. On the second turn, be aggressive and grab as much terrain as possible. If you can hold the German halftrack off the heights and allow your reinforcements to get into good defensive positions, you should be able to win.**
Anti-tank guns to the left of us; FFE to the right. There were minefields in front of us, and a Creeping Barrage was rolling across the desert straight for us. There we were; just me and Erwin Rommel in our MkIII, dueling with the Desert Rats. The armor in this tank felt mighty thin (I was accustomed to at least an "11" frontal armor) and there were no trees or buildings in LOS to hide in, no hills to cover our approach. I might have been worried about those ATGS, had we not already discovered them to be only 40Ls. Ha! Back in Russia we used to laugh at anything less than 75mm. Those puny shells would bounce off even the light armor of these MkIII.

(Yes, in the ALS, milieu I am a time traveller, for even though I am a conscript in this desert fighting, I have already fought BEYOND VALOR in STREETS OF FIRE, and against PARatroopers, Yanks, Parisans and even in HEDGEROW hell country!)

We started our engines, but when I shifted into gear my roll was boxcars. Damned dust. I silently wished it were after 9/41 so this unforgiving machine would do what I asked of it. I changed tanks, scrambling with my crew into a brand new MkIII. I noticed Erwin impatiently drumming his fingers on the open hatch lid of his purring MkIII, trying not to look distracted while, to the rear, the repair crews seemed to heave a collective sigh as they picked up their tools to work on yet another immobilized tank. My second tank revved to life, and I managed a smooth shift to start moving. "Heh, that's got it," I needlessly explained into my headset. But Erwin was already moving, so I jolted off to keep even with him. I wanted to remain side-by-side so our vehicle dust wouldn't ruin the new paint job on this MkIII.

CRACK!

"What was that?"

"Must have been a 40mm round. Pretty close too. It was a nice opening shot," Erwin replied.

"Nice opening shot?" I muttered to the crew. "Is this the stuff legends are made of?"

I noticed Herr Rommel was CE, but I couldn't imagine it, what with all that choking dust out there. And then he even dropped behind my tank to eat my dust. Well, so much for the legendary Desert Fox, I mused. How smart is a guy who pulls a stunt like that?

CRACK-CRACK-CRANG!

Wow, two more near misses and a hit! How fortunate that it bounced off my side armor. I noticed Erwin still CE, and with his turret frontal armor swung around to face the offending ATG. Hey, now that is a clever idea, but my crew was already swiveling our turret. Can't be too concerned about the trim of our MkIII, that frontal turret armor is probably what actually make a big difference if we're hit again.

CRACK-CRACK-CRACK-CRANG-CRACK-CRANG!!

Hey, how much ROF do those guys get anyway, and how much longer will we be out here before we can shoot back at that ATG? "Durnkopf," comes the reply from Erwin. "There are four ATGS out there. If you calculate their 3-ROF, Multiple Hits, Intensive Fire and Overrun Prevention possibilities, they can shoot at us for what seems like forever. Why aren't you making smoke?"

"We follow our instincts, as would any natural-born fighter in such a situation . . . we run away! This battle is lost, but we will try again later."

As we turned our tanks around, I became CE just in time to see Erwin button up. Now there's a clever fellow. He rides CE in my dust, but when he turns around so that I'm in his dust, he closes up. It was in that very instant of realization that I was hit with yet another inking of what it takes to become a 10-2 armor leader. I had forgotten about the Creeping Barrage. Apparently Erwin had not. I was literally STUNNED by the sheer power of the Barrage. I could watch Erwin successfully skate offboard, his turret swinging this way and that as he moved to face each anticipated enemy shot. "Sigh, what a guy."

Fortunately for me the barrage passed, and the British mysteriously withdrew. I was able to bring the crew back to their senses. We started up and drove off. As luck would have it, we returned to base with valuable information; at least Erwin seemed to think so. He hypothesized that the Tommies might be low on ammo or possibly have something else to hide. Why would they retire from a situation in which they had us outnumbered if they had nothing to hide? Perhaps they were simply trying not to blow us up on fuel? With that hope bringing a gleam to his eye, Erwin quickly decided to go after them. With a bit of luck they might lead us to a fresh supply of petrol.

We loaded up immediately and darted off in pursuit. I was beginning to get the message that my concept of "desert fighting" was mere illusion. It was looking like the rule of thumb out here would be hands-on experience only. I was in the opening stages of mentally conducting a symposium of this realization, justified with the survival-of-the-fittest school of thought, when I caught myself at it and rejected that line of thinking. Since it's my survival at stake here, I determined that the best course would be to avoid wasting effort on useless complaining and simply stick close to Erwin. He seemed to be the one who knew what was going on here, so I might as well learn from a pro.

But the first thing I had to wonder about was why in the name of Otto von Bismarck were we using Platoon Movement? Back in Russia we used to prey on those Red tankers moving in such awkward fashion. Yet here we were, radios fully operational, yet using Platoon Movement. I had to wonder about that. Was IFOF for the second time today.

The next thing I noticed was that we were not headed for the scene of our earlier skirmish, but were driving off on a tangent to the west. After running this through my mind several times, all I could conclude was that Erwin must know something I didn't. Maybe he knew where the enemy was headed? Maybe he just wanted to take advantage of this road so we could gain time and overtake the fleeing British?

Such thoughts were quickly driven from my head, however, when on a signal from Erwin the platoons pulled off the road and took up a parallel course about 120 meters [three hexes] off our right flank. To avoid outdistancing them, we had to slow our own pace to what seemed like a crawl. Visions of those hordes of burning Russian tank platoons flashed across my memory. Were we destined to be caught by the enemy in this confused formation and mauled like sheep? We were already too late under ATG fire to retreat quickly. When I realized that Erwin fully intended to ride through the enemy fire in this abstract formation, my feeling turned to panic. Surely we were all going to die!
the dust raised by the lead vehicles) that no such dust would be raised in the first place. What a vicious circle that! By travelling in staggered fashion, they not only avoided this problem, but also forced enemy LOS to trace through more than one VD in many cases. But the most ingenious tactic was yet to come. Early on I had wondered why the last platoon of MkIIIs seemed to always lag behind. But then, all of a sudden, here they came at full tilt, charging across our right flank three abreast. They received a hearty cheer from us MkIII commanders as they swept past and we realized their purpose—for as they crossed the LOS between us and those enemy ATGs, all remaining Acquisition was peeled from our ranks automatically. Interruption for even just this brief instant by their three dust clouds was sufficient LOS disruption to free us from all Acquisition. Later, when we, in turn, passed this platoon (in the next MPH) all new acquisition fell from us yet again. I was beginning to see how Erwin had gained his reputation.

As if all this were not enough, in any location where the MkII dust screen was incomplete, our own MkIIIs attempted to fire their smoke dischargers. The combination of smoke and dust made for a truly bewildering swirl of visual confusion. Small wonder the "CRACK" of hostile rounds continued to scream all around us to no effect. When
I mentally added all this new information to our 760 meter range and motion. I was pleased to arrive at only a 3% chance ("eyes") of a hit through 40 meters (one hex) of dust—and only improbable hit chances through 80 meters of dust ("eyes" followed by a 1-3 dr). Thus, even on his third and each subsequent shot (~2 Acquisition), the enemy enjoyed only 16% and 3% chances of hitting through one and two hexes of dust. I wondered whether Erwin had worked this out as well, or did he simply "feel" it (an ability many leaders have claimed)? Either way, I realized he commanded the experience to justify his conclusions.

As I noticed the enemy fire beginning to slacken, yet another thought crossed my mind. Because of the very high volume of fire those ATGs had been putting out, it stood to reason that before too long some of them should either deplete their immediate ammo supply, overhead, break down or, for other more remote reasons, simply stop firing. My experiences in Russia and Hedgerow country were that a gun usually took a shot or two and then one of three things happened: the target was eliminated, or the target ran from LOS, or else the target eliminated the gun via direct fire or overrun. Out here in the open, however, those guns could fire at us for so long before that moving attacker could hide or return effective fire that running from LOS or eliminating the gun did not seem like viable options. That left only the option of target destruction, which did not rest too well with me in our current situation. Fortunately, all the To Hit modifiers worked in our favor, and now this slackening of enemy fire was providing yet another bonus. The crux, then, was that the very great number of shots should lead to a great many more gun breakdowns of one type or another than I had seen previously.

Thus, the silencing of an enemy by this means is transformed from something extremely rare (a very real reason to celebrate) to something which could actually be anticipated (an event bound to occur sooner or later). Furthermore, since an ATG with a high ROF expects to average two shots every fire phase without even risking Intensive Fire or Overrun Prevention, loss of one or more of these weapons is a very serious blow to the enemy. The culmination of this continuous firing as practiced here in the desert was that one should assume a 3-ROF weapon to be forced to stop firing within about 45 minutes [nine turns]. Considering how many shots each gun might be entitled to enjoy prior to such a breakdown (from one to 35), this may at first glance seem immaterial. But some of those guns will break down on their first shot, some on their second, and so on. What all this meant to me was that there were not merely three alternatives when facing an ATG as I had thought—but four! The fourth is that by employing an effective screen of To Hit modifiers, one can avoid destruction even to the point of making it more likely a firing gun will malfunction than destroy the target. I did note that use of this tactic might be limited to desert warfare and other situations in which the attacker commands exceptional screening potential.

So the name of this game is to force all those enemy shots at the worst possible To Hit odds. Our motion at long range from ATGs firing through 40-80 meters of dust and smoke certainly went a long way towards limiting enemy hit chances. Add to that the low probability one of those 40mm rounds could penetrate our six frontal armor at this range (~3" Final TK?) and it was an elementary calculation to prove that the probability of a gun breakdown before a kill was actually more than ten-to-one! Even with ~2 Acquisition, we could expect twice as many gun breakdowns. Of course this ignored the inevitable Immobilizations, Shocks and Stuns we would suffer, but since they were not outright kills, those tanks would either return to haunt the enemy by firing at him or else would draw yet more fire, much to the benefit of our still mobile vehicles.

KABOOM!!

Oops! After all that optimism the enemy finally did hit one of our tanks. I turned to look and saw it was a MkIIIG, hit in the side near Flames were leaping from the motionless tank already. I swung my gaze back to Erwin, to see how he was taking it, and was not surprised to catch a perturbed look on his face. Just when you thought it was safe to go out in the desert, something like this has to happen. But as any top-notch commander must do, Erwin quickly turned his attention back to his plan. No time to mourn our losses now; there was work to be done.

We finally were pulling beyond range of that ATG screen and continued to work our way westward, deeper into the enemy lines. The MkIIIs had returned to the road and we were once again making all speed. Casualties in the encounter with the ATGs had been extremely light, only one tank loss thanks to Erwin's proficient desert tactics. I marvelled at this, for even though the enemy ATGs were very small caliber by my standards, I had expected abundant casualties by way of Immobilization and Shock as much as outright kills. But the problem for those gunners was that they could not even hit us, and therefore were denied a reasonable chance of harming us in any manner. This gave me renewed
much to celebrate in smashing a few dozen enemy tanks. Well, I found it thrilling; but, of course, I didn’t have to concern myself with strategic worries. Erwin, however, must shift his energies in many different directions. Small wonder a 10-2 armor leader is so valuable that we barely benefit from his actual presence on the battlefield. I was glad to have to rely only on the enemy before me. Speaking of which, my thoughts were already turning to the next encounter.

We had taken our toll of the enemy and now were on low fuel, heading home. Speed no longer being essential, Erwin took us straight out into the open desert with only the enemy on our minds. Thanks to the fuel to speed past those ATGs as we’d done on the run in. This had to be a low-profile exit. No bows, no curtain calls, just get out and get home. Night would be upon us very soon, and chances of a meeting engagement in the desert at night did not bear extrapolation. Our departure might have been unnoticed, except for a bit of unintended action.

We had to cross an escarpment to reach the desert, and Erwin was concerned about hidden enemy troops in the undulations and wadis of this rugged terrain. At what appeared to be a choke-point in the descending road, he pulled his MKII to the side in order to cover everyone as we passed. Thus, the enemy tanks were exposed, and only my heavier frontal armor toward the enemy. Fortunately, their ensuing Prep fire shots missed since we had stopped while the enemy remained in motion (Case C).

But I wasn’t about to be caught flat-footed. Using the spattering of experience I had gained earlier, I used my AFPh to make a free CA change rather than trying to fire while in motion, pivoting to put my heavier frontal armor toward the enemy. Fortunately, their ensuing Prep fire shots missed since we had stopped while the enemy remained in motion (Case C).

My own fire at the enemy wasn’t even worth risking a gun malfunction for, that with my motion and enemy concealment still in effect. But I did have one tactic at my disposal. Since I hadn’t shot, I was able to again make a free CA change at the end of my DFPh. I used this to align my VCA toward that adjacent wadi. Thus, by foregoing that improbable To Hit risk (which had better chance of breaking my MA than of hitting anything), I was still able to position myself for a fast exit with this free CA spin. Not bad for a rookie. The enemy would not even have time for defensive fire before I disappeared into the wadi.

While I was patting myself on the back I noticed several Crusaders working their way around both flanks to envelop me. That brought another thought to mind. I now had the option of pulling straight into great status instead of moving into that wadi. One of those ATGs, I thought, was looking at me through the field of my tire, and could therefore avoid their immobilizing shots, and at the same time be hull-down to the Crusaders in my VCA, putting them at a disadvantage due to facing my gun with only my turret frontal armor exposed. But I rejected this thought, for the enemy were too numerous and, after all, I did still have an ally to my rear who would be my ticket out of this jam once he managed to rally his crew and re-enter his MKIII. No, getting Erwin’s –2 DRM back into the act was my best bet, so I ploughed into the wadi to draw as many attackers away from my stricken leader as possible.

It was a wild ride up and down through the wadi and I began to despair of ever hearing from Herr Rommel when, to my great relief, his voice came over the radio. “Come back to me now,” he commanded.

I wasted no time around and making straight for the protection of his red-hot 50mm gun. I figured the Crusaders on my tail would give up the chase, but they didn’t seem to know or care who they were facing. They might have easily outmaneuvered us, but no. They were holding back for the kill— but against Erwin they were in trouble. I recognized the clever twist in Erwin’s brand of tactics in bringing me right back into his hex. He gave away a DRM (due to being overstaked), but still commanded superior To Hit modifiers over the enemy. In order for them to get me, they would have to expose themselves to him as well and he was very (very) good. In this manner, side-by-side, Herr Rommel in his immobile MKIII and me in my first real desperate situation in the desert fought against the odds. Firing from the same hex, we took our enemy tanks, forcing the remainder to flee.

In the meantime, my own command had maneuvered round the rear elements of our column had maneuvered to bring those ATGs under attack from their rear. All had been subdued or their crews chased away by the time we finished with the Crusaders. We were left to review the damage: four Crusaders and three ATGs with a scattering of prisoners but, more profoundly, Erwin’s own tank immobilized and three others destroyed. His dilemma now was that we had consumed too much fuel and had several valuable guns which we could use but had no way to tow. He immediately radioed a coded message, and then left a platoon of MKIIIs and some of our own crew to dig in this and hold the position until we could return. We ourselves lurched off for a rendezvous in the desert with Rommel’s secret mobile fuel force (MFF).

I was relieved that our midnight journey and refueling went by without enemy intervention. I needed the time to collect my thoughts on the day’s actions. Remind me to tell you sometime about night combat in the desert, though. Oh boy, is that ever a hair-raising experience!

After we had refueled, Herr Rommel said, “Well, there has been a change of plan. I have a report that our own fuel dump is under a night attack, and I expect it will be necessary to reinforce the raid at dawn, and we will have to hurry to prevent them from destroying our foothold here in this desolate part of the front. It means we will be driving straight at them in the open desert.”

“Excuse me sir, but I have seen what you can do in the worst of situations,” I replied. “I’m sure you will find a way.” Actually, as much as with any real confidence in what I was saying, I felt compelled to respond in this manner simply because the general had deigned to speak to me so openly of his plans.

“Thank you sir, I am sure you don’t know the worst of it,” he answered. “The report mentions the area has had heavy rainfall so there will be no dust, and Heavy Winds are expected so there can be no smoke. To top it off, we have no time to waste and so will be moving into the enemy with the rising sun in our eyes. Now tell me what you think.”

“I am a rookie, sir, but I think you must know something I don’t . . . or else you are going to call this thing off, perhaps.”

“No, not this time. We will have to take our licks. We simply cannot run away from this one. The enemy has outmaneuvered us after all our successes yesterday. It looks like they might be under heavy, inspired leadership. We must crush this bold attack or forfeit all we have gained these past few months. We will fight.”
When he put it like that, I was glad it was not my responsibility to lead so many men into such a desperate battle. So many lives at stake. So little time to think the matter out. I had to wonder how much we were all driven by events; how much control did any of us really have over our destinies in this convoluted existence called War? All such thoughts put aside, we were mounting up once again to make our next (for many, certainly the last) ride into combat. Then we were off and running at full speed across the open desert. There was not much of the night remaining, and for this I was thankful. If we were destined to face the enemy at dawn, I didn’t much care for any extra hours to dwell on the matter. I let one of the crew members handle our trek; I wanted a bit of rest, to clear my head for the coming battle.

We rode into the rising sun in two columns. At a range of 2000 meters, after several of the enemy had foolishly opened up on us, we split the force. Erwin led the column to the right and I was in the one on our left. As instructed, we did not stop to fire at the enemy until we progressed far enough to have targets in our sights which were not obscured by the sun. In this manner, our column on the left flank engaged in the battle just behind Erwin’s group on the right engaged those enemy on the left immediately in front of me. The unfortunate thing about all this was that the enemy were not so hindered by the rising sun, and were piling up casualty points on us as they were effectively able to engage us at close range. We could.

However, the nearer we came, the easier our task became—and it was immediate apparent the enemy were on the horns of a dilemma. Those in our immediate front, who were taking fire from Erwin on the right, had swung their frontal armor around to face him; and the same went for those enemy on the right. So, as we came, crashing headlong, there should have been the enemy flank, due to the positioning of his tanks in that locale we, in effect, were in. Those poor tankers who remained in their current firing and took rear shots from us, and any who spun to engage us took rear shots from Erwin, admittedly still at long range but also still Acquired by the few stationary and immobilized MkIIIs on that flank. The result was a wild melee in which we initially held great advantage and began scoring many kills, which was fortunate since our own losses during that head-on dash at the enemy had cost us dearly.

But we still outnumbered the enemy and wielded overall armor and armament superiority. This combination, brought to bear once again by Erwin’s splendid tactics which always seemed to deliver us at the point of decision in every battle, forced the enemy to withdraw. Precious few of them escaped, and those only because Erwin was more interested in continuing on to save our fuel dump to guarantee its survival.

My exploits with the general are now among my most memorable campaigns. To watch and learn from him is a man is a man, and everyone can tell for miles.

Sports Special

THE KNOCKOUT GAME

By Jim Barnett

Boxing is not normally thought of as a sport which concentrates on statistics. About the only numbers usually available for public consumption are won/lost and knockout records, and those are often of questionable value, especially from obscure fights and locations. At the same time, there is great interest and speculation in how individual boxers, especially from different eras, would match up against each other. An easy way to examine this is through one of Avalon Hill’s most popular sports games—TITIE BOUT. To create such a game, some attempt must be made to reduce the characteristics of the individual and the sport to operable quantities. While the ratings of the individuals will always remain open to the questions of personal judgment and prejudices, the operation of the game parameters should be easy to defend.

As is the case with many of Avalon Hill’s statistical sports studies, the heart of the game system is the “Fast Action Cards”. In TITIE BOUT, there are 80 such cards to represent the various actions that may occur during boxing matches. The cumulative percentage spreads for the Random Numbers (1-80) and Control Factors (1-20). Note that in the deck there is a smooth distribution of these cards (with a 1.25% spread for each step of the RNs and 5.00% for each step of CF). I figured the percentages cumulatively since the pertinent information is usually the chance of drawing a card equal or less than the number desired. (Thus, for instance, to draw a RN card equal to or less than 27, you’ve a 33.75% chance.)

These are not the only evenly distributed numbers on the cards. There are an equal number of results for left- and right-hand punches. The punch numbers themselves are spread evenly over the deck. (In order to preserve this symmetry, make the following change: the L-66 card should be modified to read “RESULT: L-52 and KOR: 4″. The KD, KDR and KOR numbers (all 1-20) each have four cards. Other cards and results are not so clear cut.

There are 19 cards which call for a knockout check (23.75%). There is one card for each of the ten “Cut” possibilities, giving a 12.5% chance of a cut. For those who need to maneuver their fighters, ring position will be determined at ring center 70% of the time, and at each of the other stations only 5%. Judging is quite skewed, with the higher scorer taking half the judges’ decisions, the lower getting the nod 30% of the time, and the remaining 20% of matches ending at a draw.

I will now integrate the above and include the tables found on the board to draw some conclusions on what you can expect during a game. The following approximations must be made. Of the 40 cards available for each round, there will be about three cards used each time control is checked and action is precipitated—about 13 occurrences per round. If we contest a 15-round championship bout between two evenly matched boxers, each can expect to be in control about 100 times during the bout. This gives us an easy method of comparison since raw numbers will reduce to percentages directly. Shorter bouts will have to be scaled by the percentages, of course.

Since all punching is even, we will expect these results to reflect the abilities of each fighter. Knockout/knockdown ratings will be determined with the aid of the following chart:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>KO 1</td>
<td>50.00</td>
</tr>
<tr>
<td>KO 2</td>
<td>75.00</td>
</tr>
<tr>
<td>KO 3</td>
<td>80.00</td>
</tr>
</tbody>
</table>

To compute the chances of a fighter being knocked out in a 15-round bout, multiply the chance of a knockout possibility (.2375) by the percentage number from your opponent’s HP rating in Table 1, then by your own fighter’s KDR and KOR ratings, and then by .5 for the match. (This .5 reflects that each fighter will have control about half the time; if the ratings are different, this figure should be modified in your calculations.) For example, if your opponent’s HP is “7”, your own KO is “8”, and your KOR is “1”, you would have .2375 x .35 x .05 x .0206; in other words, about a 56% chance of being floored. This will be mitigated by other chances during the contest, such as your own KO, any TKO or other fight stoppage. These numbers may be used as they are, or for comparison’s sake. If you wish to know only your own chances for being knocked down, omit the KOR factor in the equation.

A far more prevalent way of ending a match is by TKO. The next table shows the possibilities for effects to a boxer on the TKO and Condition Chart. These chances are listed for all effects (“A-1” and for “I” only (an immediate stoppage). While this chart is only consulted upon a 20-point or greater round, the odds of survival once this point has been reached for you are not good. Naturally, the individual ratings of your boxers will determine if they are even capable of this high a score. Not included in this table are the chances for an “Automatic” TKO and the fact that a fighter has a chance of injury in one of eight bouts.

<table>
<thead>
<tr>
<th>TKO Rating</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI 1</td>
<td>50.00</td>
</tr>
<tr>
<td>AI 2</td>
<td>75.00</td>
</tr>
<tr>
<td>AI 3</td>
<td>80.00</td>
</tr>
</tbody>
</table>

The next table shows the chance of a “Cut”, by comparing one boxer’s CO to another CH value. While this table is not as important as the previous, it should be considered since a fighter who is susceptible to cuts is at jeopardy of a stoppage at any time. Indeed, more bouts between top-notch boxers are ended due to cuts than KOs. CO numbers of greater than “6” have not been included since they

Continued on Page 34, Column 2
The final way to lose a fight is by “Foul”. The foul chances by “Foul Rating” are summarized quickly, classified as to expected chance of foul and warning, and the number of foul cards based on the expectancy of drawing 1.25 Foul cards per bout and are an indication of the number anticipated in 15 rounds. These results are not that prevalent, but occasionally might influence a fight. In short, an “A” Foul Rating gives you a .28 chance of committing a foul and a .23 chance of a warning; “B” gives you .36 and .31 respectively; and “C”, which might influence a fight. In short, an “A” Foul Rating gives you a .28 chance of committing a foul and a .23 chance of a warning; “B” gives you .36 and .31 respectively; and “C”, which might influence a fight.

The following are just a few suggested rules additions which could increase your enjoyment of TITLE BOUT:

1. Since few fights are stopped by TKOs while the fighter is in his chair, keep count of the points required for an automatic TKO per the round chart. When the boxer has equaled or exceeded the total for one, two, or three rounds, the bout is stopped immediately at that point. Cards are counted per the TKO time chart to determine the time.

2. If a fighter is knocked down, reduce his AGG number. A good flooring should give a hint to even the most dedicated calculator.

3. Fighters and managers have no real idea during a bout how the scoring is going, so why should you? This is true in the ring and can be reflected in the TITLE BOUT scoring system. Instead of drawing for the score at the end of each round, wait until the end of the match. This puts more pressure on the managers in a close match to keep up with the action. You will have a rough idea of the standings from the point totals, but the suspense just adds to the excitement. Also, if you are going 15 rounds, you have something to do with the forty cards left over.

The following is a summary of the new rules in effect for the latest release of Boxer cards. All are optional, and it will be difficult in some cases to change the older cards to adapt the new features. As usual, use your own best judgement when assigning values to older cards.

**Table 3: Expected Cuts Per 15-Round Bout**

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<tr>
<th>CO</th>
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**AREA TOP 50 LIST**

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**MEET THE 50 . . .**

Mr. Tim Deane is 32, married and father of two, holds a BS degree in Business Administration, and is owner of M.O. Hobbies in Jefferson City, Tennessee.

**Favorite Game:** SL Series

**AREA Rated Games:** ASL, SL, COI, COD, GI

**AREA W-L Record:** 19-2

**Game Time/Week:** 6 hours

**Hobbies:** Backpacking, Whitewater Rafting

**Pet Peeve:** Players who claim a win is due only to luck.

**Play Preference:** PTF

Mr. Deane offers his views on Advanced SL:

“The ASL system is the most expensive game system I own, but it’s the only one (along with its sister) that I have played consistently for the past 10 years. I enjoy playing ASL with all levels of players, whether I win or lose. Keep up the good work on the system. One thing I would like to see in The General are possible set-ups and attacks for the various ASL scenarios.”
STORMING SMOLENSK
VIA THE POSTAL ROUTE
PANZERGRUPPE GUDERIAN By Mail

PANZERGRUPPE GUDERIAN employs some different gaming concepts for conflict on the Eastern Front in World War II. The possibility of overruns during movement that are not automatic victories is an integral part of the game for the German player. The untried status of the Soviet armored and infantry divisions is another intriguing aspect of the game that greatly influences tactics. Until tested in battle, the reliability and value of some of these units is uncertain, and a vital Russian defensive position could collapse at the first sound of approaching German panzers if manned by zero-value divisions. Even though the large scale tactical scope of the game and the fact that individual hexes are numbered are factors making the game appropriate for play by mail, the possibility of overruns and the untried status of Soviet units (plus the fact that combat results can be either step losses or retreats) would initially give the impression that playing the game by mail is going to be difficult—if not impossible. In actuality, the game does not require a face-to-face confrontation for play, even when most parts of the game system are used.

OVERRUNS
The tactic of overrunning enemy units during movement could complicate PBM games. The phasing player might have to send out sequential mailings at times as movement progresses. If there are constant overruns, a single Movement Phase could take months! Fortunately, such is not the case. Soviet overrun attempts will be few in the game, although they may be critical to the final outcome. As a result, few additional mailings will be required during Soviet movement. The German player must use overruns more frequently if he is going to have a chance to win the game, but he cannot do so indiscriminately. A negative result ends all movement for that phase, and retreats by the attacker (routes determined by the defending player) could leave units isolated and vulnerable to counterattacks. During the regular German Movement Phase such overrun attempts will be limited; and if they are at different sectors of the front (for example, one north of Smolensk and another near Roslavl), the results can be checked simultaneously. The remainder of the movement can then take place. It should be noted that, under this type of system, units may be moving simultaneously for part of their movement allowance, overruns can occur, and the movement of several units is finished. It is not necessary for one unit to use all of its movement points before a second unit moves, as would be the case in FTF play. Such joint movement is realistic and will speed up the game. Units may even attempt multiple overruns in a Movement Phase, but the cost in movement points will limit the number of such attempts. Other overrun attempts will come at the end of the Movement Phase, permitting all the results to be checked with one mailing.

Thus, in the Movement Phase, the German player will often move some of his units, mark the overrun attempts, list stocks and choose a future CTD, and then mail the partial move to the Russian player—much as he would in the case of first impulse movement in RUSSIAN CAMPAIGN or FORTRESS EUROPA. Having checked the results of these attempts from the stock page on the appropriate CTD, the German player then continues with his movement, which may include additional overrun attempts. If there are no additional overruns, the German player will then undertake regular combat. A regular Movement Phase might take a week to complete in some cases, although in many turns there will be no overrun attempts by German units. Units attempting overruns have their combat factors halved, the attacking units must begin movement in the same hex, and the defending units must all be attacked from one hex—all of which limit the odds that can be achieved. These limitations on the strength of the overrun attempt usually make it more worthwhile for the German player to wait to attack during the Combat Phase at full strength and from multiple hexes. Overruns may still be attempted, however, since such attempts—if successful—will open holes in the opposing line and permit defending units to be surrounded in the Combat Phase.

Overrun attempts will be more frequent in the German Mechanized Movement Phase, but generally most of those attempts occur at the end of the phase. The Mechanized Movement Phase is typically used to surround Russian units, placing them out of supply and cutting off retreat routes. The overruns against these isolated units will then effectively attrition the Soviet forces. While the German units attempting these overruns still face the same disabilities as in the regular Movement Phase, there is no following Combat Phase in which better attacks can be mounted. The German player can also hope that the Russian defenses have been weakened in the preceding Combat Phase, thus permitting better odds on any overruns that are attempted. As a consequence, in the Mechanized Movement Phase, often all the overrun attacks can be taken at the same time by listing stocks, a CTD, and mailing the material to the opposing player. If there are overrun attempts prior to other movement, this phase will of course require extra mailings.

While overrun attempts will lengthen the game somewhat (given the need for additional mailings), the time involved will not be prohibitive, particularly since the game itself is only twelve turns long. There is no rule of thumb on the number of extra mailings that may be necessary on a given turn. At times the overrun will be so critical that all other movement will have to wait until the result is checked; but players can usually keep the number of mailings within reasonable bounds if they try.

STEP LOSS OR RETREAT
The fact that there is a choice between step losses or retreats on the CRT introduces another problem for PBM gamers. This combat results table is not a bloody one, and retreats are the most likely choice when they are possible. Since retreats are decided upon by the opposing player, within certain limitations, there can be additional problems if the attacker should be the one to retreat and his movement is not over. Russian overrun attempts are most likely against German units that cannot retreat. In the Combat Phase (since there is no Russian Mechanized Movement Phase), the German player can check the results of combat and decide whether or not he wishes to retreat or take a step loss for each battle. He can also allocate the paths of retreat for the Russian units if his opponent has indicated that a retreat is in order.

German retreats during the various phases of his move will normally not present any major difficulties. For overrun attempts in the regular Movement Phase, the German player can usually
determine the least preferable retreats for his attacking units. Infantry divisions will retreat to undoubled terrain and away from the German lines, limiting their ability to join in future attacks. Mechanized divisions and units will not be retroceded to favorable positions on roads; they definitely will not be positioned to flank Russian lines. If possible, they will be moved to locations where they begin the Mehanized Movement Phase out of supply. Mechanized divisions will be split up so that they cannot combine for overruns during the Mechanized Movement Phase. In addition, the restrictions on retreat routes limit the options available to the opposing forces. The chances of using the 'wrong' retreat route are somewhat limited. The Russian player will have the option of disagreeing with the suggested retreats the German player lists for his overrun units. When he gets the mail, he can check and send back an alternative that will be used if the German player actually got a retreat result on his overrun attempt.

In the German Combat Phase, much the same situation will be present. The German player can specify his assumptions about the retreat routes for attacking units, aware of what are the least useful final positions. If the German player has initiated the action of advancing after combat, the German player might also list the assumptions that he is making for them—"advance" or "stand firm". If the Russian player disagrees, he can again send alternatives when he receives the mailing, sending back a change of orders that the German must implement if the retreat actually occurs as a result of combat. The German player may then have to redo his Mechanized Movement Phase if it is already in the mail, but this type of occurrence is unlikely.

The German Mechanized Movement Phase will have fewer problems of this sort since most of the overruns will occur at the end. There is no advance after combat, and the Russian player will have the option of retracting German units to positions he desires. The two consistencies are preventing the occupation of double terrain and dividing the German mechanized divisions so that they will not have the advantage of divisional integrity for defensive purposes or for conducting overruns during the next German regular Movement Phase. The Russian player will also be able to make any choices necessary in terms of retreat routes for his own units and whether or not he desires to retreat or lose a step when that option is present.

The Soviet defending units in combat or those occupying hexes during overruns will usually have an obvious choice as to whether they should retreat or take step losses. Surrounded units must take step losses. A single Russian unit (all Russian units have but one step) will of course retreat if it can. Stacks of multiple divisions may at times create some ambiguities for overruns in the regular Movement Phase or for particular combat situations. The German player will normally have to note that he will assume either step losses or retreats in his mailings in terms of whichever seems less preferable to him. If it is not obvious what the Russian player would prefer in the event of certain results, the German player will simply specify his best guess as to what action the Russian opponent would choose in that situation. He may pick a CTD a few days further ahead in time than normal to give his opponent an opportunity to reflect upon what his choice would be and to respond if it is different. When the Russian player gets that mail, he can specify areas where he disagrees and send that information to the German player.

From the above, while there may be occasional problems in terms of choices between step losses or retreats, they should not prove numerous. The Russian player will have to be careful to look at the board and the situation while the German partial moves come in, and he will have to let his opponent know if he is going to be unavailable for particular periods of time. With good will on both sides, however, all these situations can be resolved. The Russian player will obviously be less active in the game, just as he would be in a FTF situation, but he will at least know that his German opponent has to take into account the possiblities to play their own side! Seriously, the smaller amount of gaming activity for the Russian side in this game suggests that PBM opponents play one and then switch sides for a second simultaneous game. They might even decide that whoever has the most victory points as the German in the two games wins the overall match (say, for AREA considerations).

**UNTIED DIVISIONS**

The fact that all the Russian divisions are initially untied is an integral part of PANZERGRUPPE GUDERIAN. The divisions first enter the game in an untied state, and additional divisions that appear late in the game will be drawn from the eliminated unit pile—all in an untied state. This process can create obvious difficulties for PBM gamers. The problems, however, are definitely not insurmountable. If the German player is attacking or overrunning an untied division or divisions, he simply provides stocks for determination of which Soviet units are actually present as well as a stock for the overrun attempt or for combat. For example, if the Russian division is armored (tank or motorized), he chooses a stock and divides the sales in hundreds by "20" to identify the unit that is present according to the ID number given in my Table 1. Alternatively, he could simply use the last two digits of the sales in hundreds to ascertain the identity of the armored division that is present according to the ranges listed in this table. If the Russian division is an infantry unit, Table 2 provides the means of identifying it. The sales in hundreds is simply divided by "78" to determine which one is actually in place. (Again, alternatively, the last two digits of the sales in hundreds figure can be used to find the appropriate ID, with any results that are in the 79+ range are ignored and a backup stock used.)

**TABLE 1: IDENTIFICATION FOR UNTIED SOVIET ARMORED DIVISIONS**

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<th>ID Number Division</th>
<th>Similar Units</th>
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**TABLE 2: IDENTIFICATION FOR UNTIED SOVIET INFANTRY DIVISIONS**

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<td>10 45 Inf</td>
<td>3-6-6</td>
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<tr>
<td>11 41 Inf</td>
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<td>12 43 Inf</td>
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<tr>
<td>13 44 Inf</td>
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<tr>
<td>14 55 Inf</td>
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<tr>
<td>15 56 Inf</td>
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<tr>
<td>16 60 Inf</td>
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<tr>
<td>17 64 Inf</td>
<td>2-6-6</td>
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</tr>
<tr>
<td>18 21 Inf</td>
<td>2-6-6</td>
<td>1</td>
</tr>
</tbody>
</table>

**Difficulties with this procedure could occur if the chosen division is already in play, or has been eliminated in earlier turns while there are still divisions in the unused reinforcement pool. If either of these two situations is present, there are a number of ways to resolve the problem. One possibility is simply to list enough additional stocks so that if the division selected is not available, a second division is chosen by using the next stock. In Figure 1, a sample of two attacks against untied infantry divisions in the Combat Phase is given. IBM is used to select the first variant (infantry division which turns out to be the 25th Infantry). ATT provides the second variant "2-0", but the 93rd Infantry has been previously eliminated. The third stock is then used to identify the 42nd Infantry, which is available and is then placed on the board. The remaining division is then selected by the use of as many additional stocks as are necessary. There is a second method that may ultimately prove to be more convenient to use. If the division in question is not available (already on the board or previously eliminated), an equivalent unit appears. If, say, the 93rd Infantry is unavailable, any other 0-0-6 infantry division is taken in its place. Table 1 indicates how many armored units of different strengths are available, while Table 2 has a listing of all the infantry divisions by offensive and defensive strengths. (Note that Table 2 does not appear in the summary on Page 1 of the rules booklet, which is somewhat incorrect; the values for Table 2 were taken directly from the counters themselves.) Even if the method of equivalent strength unit substitution is desired, it may be possible that no substitute unit is available. In these rare situations, the easiest way to determine which division appears on the board is to select the next available unit by moving up the ID number list if the stock is even and down the list if the stock is odd. Say the 93rd Division is not available. All other 0-0-6 units have already appeared and been eliminated. Since the sales in hundreds was 1743, the player moves down the ID number list on Table 2. The 91st Infantry is chosen if it is available. If it is already in play, then the 91 Infantry comes in, and so forth. Again as an example, if the 276th Infantry and all other 4-5-6 divisions are not available, and since the sales in hundreds was even, the player moves up Table 2 until the listed unit is available. (For purposes of moving up and down the numbers on Table 2, "78" follows "01" when moving up the table and "01" follows "78" when moving down.) Perhaps an even simpler procedure would be for the players to decide to take the next available units with a higher ID number in the table even when equivalent units are available. (In all cases, note that care should be taken to ensure that the correct 172nd Infantry Division is put in play.)
Of course, much the same procedure for identifying untried divisions can be accomplished with a random number table (including digits from 1 to 9999). The stock identifies the starting point on the table and two digits is unavailable or the digits are between 79 and 89; the actual units that have not been revealed, or even counters from another game. The actual units are placed when they come into play, and there will be little difficulty in keeping track of them. Blank counters could be used for untried units that have not been revealed, or even counters from another game. The actual units are placed when they come into play, and there will be little difficulty as a result. At least with PBM, there is no danger of accidentally turning over a counter in the course of movement as can happen in FTF play. If a player lacks blank counters or other counters from a different game, he can at least bring the Russian units on the board according to the order in which the units are listed in Table 2. It will at least be easier to find the divisions in question when they do appear.

**TO THE POST OFFICE**

The above suggestions should make it much easier to play PANZERGRUPPE GUDERIAN by mail. In a typical PBM game, the players can make their own OOBS for the game. The Russian OOB should contain a number of 7-6 and 7-1 odds for selection. I would advise against this method in the interest of fairness; the 0-0-6 infantry divisions and other armor that will come into play all too often if this method is used.

Another "rule", if you will, should be mentioned. In any given player's turn, Russian or German, no Russian unit is added to the eliminated pile until the end of that player's turn. Thus, any unit eliminated in the German Movement Phase by an overrun cannot reappear until the Russian Movement or Combat Phase; and it can only appear then if all the untried units have been entered onto the board already. Thus, the players will have to have three groups of Russian units offboard. There will be the initial pool of untried units, infantry divisions eliminated in the present player turn (all phases), and infantry divisions previously eliminated. (Since there are more armored divisions than needed, they will never reappear.) Once all the infantry divisions have entered the game for the first time (by Turn 7, even if the Southwest Front reinforcements are not taken), the process will be even simpler.

Admittedly, it will be a bit awkward to check the identities of untried infantry divisions when so many of them may already be face down on the board, and before specific units have been placed in hexes. (The armored divisions are so few in number that there will be little difficulty in keeping track of them.) Blank counters could be used for untried units that have not been revealed, or even counters from another game. The actual units are placed when they come into play, and there will be little difficulty as a result. At least with PBM, there is no danger of accidentally turning over a counter in the course of movement as can happen in FTF play. If a player lacks blank counters or other counters from a different game, he can at least bring the Russian units on the board according to the order in which the units are listed in Table 2. It will at least be easier to find the divisions in question when they do appear.

**FAME & FORTUNE**

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Artillery is often described as the “king of battle”, yet it is the least glamorous, and certainly the least understood, of the combat arms. This is probably to be expected of a weapon that includes survey equipment and sliderules among its essential equipment. Further confusion is created from the variations in artillery use from one army, and era, to the next. So it is no surprise that many wargames are not entirely accurate when simulating artillery on the battlefield. PANZERBLITZ, PANZER LEADER and ARAB-ISRAELI WARS are regarded as “tank games”, but they do include rules for the uses of cannon, rocket and mortar in some detail. Further, the designs of these games are sufficiently flexible that very few rule alterations are required to improve the simulation of artillery. So, with a little understanding of just what capabilities are used as it’s possible to better simulate the historical use of the indirect fire weapons.

My intent is not to give a complete education in field artillery. It is to orient the reader to the historical use of the artillery depicted in these games. I’d caution anyone against applying this information to any other game system. This discussion is intended to cover all three games, and the various additional scenarios that have been seen in The GENERAL. The suggested additions, and changes, can be taken whole or in part as the player may be inclined.

But, before plunging in, a few definitions are needed:

By Artillery I’m referring to all weapons commonly used for indirect fire: mortars, cannon and rocket launchers—the M and (H) weapons. Actually, nearly every 20th century cannon is capable of some form of indirect fire, but the training and specialized equipment is lacking. As recently as the Vietnam War, U.S. Army and Marine tanks were occasionally used in this manner under the supervision of field artillery commanders.

Indirect Fire is a target, which cannot be visited by the weapons crew, or which is beyond the range the sighting equipment mounted on the weapon can be used. It is usually controlled by someone who can see the target, and communicating information to the crew. It can also be accomplished by “firing off a map” without sch an observer. This unobserved fire is commonly used for indirect fire: mortars, cannon, and rocket artillery. The observer is normally placed in a location where a target can be seen by the weapon crew, or which is beyond the range the sighting equipment mounted on the weapon can be used.

Forward Observer can be a member of the artillery unit, a leader in a maneuver unit who is expected (and is trained) to direct indirect fire onto targets before. One of the tasks of planning a wargame is to fight the battle with the resources that were available at the time. Simulating specialized, transitory or misunderstood usage of a weapon at the expense of its more common role is poor gaming.

Planned Fires are artillery attacks arranged, but not executed immediately. In the current rules of the three games we are considering, an indirect fire attack may be designated for any artillery unit each turn. The rules then require (except in PANZERBLITZ) that the attack be made in the following turn. But frequently in the real world such attacks may be assigned to the artillery but are not to be executed immediately.

HARDWARE & MISAPPREHENSIONS

One thing that has always bothered me since the early days of PANZERBLITZ are the truncated ranges printed on the (H)-class counters (Figure 1 compares the printed range factors with the maximum range values I am proposing). The (H)-class cannon, such as the French 75, proved to be excellent anti-tank weapons and suggest that these weapons were generally used in most scenarios. The range values I am proposing are averages based on standard conditions for the theaters these weapons were generally used in.

The 76.2mm anti-tank gun included in the Soviet countermix is a special case of mislabelling. The Soviet and German armies did use this weapon effectively as an AT asset. But, as the primary divisional artillery piece of the Soviet army, it was capable of other weapons of this calibre of indirect fire. Although after the debacle of 1941 the Soviet crews frequently lacked the technical ability to make use of the full capabilities of this cannon, the potential was there and was used when possible. The five-inch range assigned reflects its effectiveness strictly in a direct fire role against point targets, as does the A classification and attack factor. An attack factor of “24” and (H) classification (as well as the range shown in Figure 1) would be more appropriate. Note that when used against hard targets, the altered values are generally as effective as the original.

Occasionally some author will point out that certain cannon, such as the French 75, proved to be excellent anti-tank weapons and suggest that counters should be included representing them as such. It’s true that the 75 was better than the AT guns designed during the twenties and thirties. But, it was inferior to the weapons built specifically as anti-tank guns during the war. Further, the batteries used in this role by the French were used thus at the local commander’s discretion. They still were as capable of inflicting damage as any other specific anti-tank cannon when engaging a target with such. However, smaller cannon batteries that couldn’t reorient and begin firing in that time would be ready for a new commander.

A variety of rocket artillery are included in these games—such as the Mauler, Nebelwerfer, and M13. These weapons have been allowed to fire every turn. But, it required more than a minute or two to reload the launchers to full effect. For example, studies show the BM 21 represented in ARAB-ISRAELI WARS required eight minutes to be reloaded for the next firing. A rocket artillery piece should be required to spend a turn “reloading” after any attack before being allowed to attack again.

NATIONAL PECULIARITIES

Like other arms, different armies use their artillery according to a variety of methods to reflect certain theories of how a war is to be fought. These divergent methods can be simulated easily in these three games.

Aside from the loss of technical ability during the disaster of 1941, Soviet artillery was handicapped through the use of the WW1 method of deploying fixed observers and observing fire. After overseeing the positioning of his weapons, the battery commander would move forward to a vantage point. From there he would direct the battery’s fire, assisted by a few NCOs. The battalion commander could send an observation team even further forward, as could the commander of an artillery regiment. Usually they did so and often had these teams replace the battery commander’s team. In this case, the fire of several batteries were controlled by one observation post through the battalion or regimental command post. The observers did not work directly with the infantry or armor during the course of an engagement. They occupied an isolated observation post from which the intended targets could be seen, and remained there.

Coordination between the infantry/armor and artillery was accomplished either accurately at the divisional level, and to a lesser extent at the infantry regimental headquarters. The artillery commander and the divisional staff would work out the fire plan before the attack. A portion of the artillery support could be allocated to a regimental commander for use as he saw fit, and he could assign some of that to his subordinates. But, company and battalion and regimental commanders were expected not to request additional attacks from artillery not
allocated to them.

A second problem was lack of communication equipment in the Red Army. Radios were only available for the most important formations. The observers communicated by wire or visual signals. Liaison with the supported infantry or armor depended on wire, messenger, pyrotechnics or face-to-face meetings of the commanders. Communication was achieved by connecting several batteries to their commanders, observers and division headquarters with a field phone system could take hours. Neither could this system be adapted quickly to a fluid battle. In the poorest-equipped formations, only the simplest wire system was possible. Very seldom was the observer able to communicate with other than his own battery or battalion.

The result of these WW1 methods was to make Soviet artillery slow in response to unexpected events. Artillery attacks were planned as far as possible in advance, and executed exactly according to plan. Control was centralized at the highest possible headquarters (usually the division). Massing artillery fire was preferred, but the lack of communications equipment and skilled staffs to assist the artillery commander meant extensive preparation times were required. These shortages also resulted in such haphazard methods as guns up hills or even on hill tops to hub and firing WW1-style barrages. Certainly the elite Guards formations were better equipped than the average, as were some of the heavy artillery brigades and divisions that supported Army commanders. But still, effective Soviet artillery fire required hours, or days, of advance planning.

Many other armies of the time, including the French of 1940, were still tied to this older method of controlling artillery fire. Although the French were able to provide more observation teams than the Soviets. Centralized control was as important to French as it was to the Soviet. The concept of task organization was not usually practiced by French divisional artillery chiefs, and the artillery commanders at corps and army level similarly kept a tight rein on their weapons. To be fair, this centralized control did allow the large-scale massing of artillery fire. But the execution of such concentrations was a slow methodical task. Unlike their Soviet counterparts, the French had the luxury of sufficient trained staff personnel and telephone equipment, but this asset was not used as well as it might. Direct and continuous liaison between the infantry and artillery commanders was absent below the regimental level. More like the Soviets, the observation teams did not work directly with battalion or company commanders. Were a company commander to call in a request for an artillery attack during the course of a battle, the call would be passed to his regimental commander, who might pass it on to the artillery officer or even kick it upstairs to divisional headquarters.

What all this means in game terms is that command post markers should be required as spotting units for all indirect fire for the French and Soviet artillery, and only CPs may spot. For the Soviets, this would be a ratio of one CP per two artillery batteries, or when the marginal Soviet formations are represented a ratio of one-to-three or even one-to-four would be realistic. For the French, a one-to-one ratio is about right for the better divisions. These CPs are not intended to represent every observation team that theoretically could have been fielded. Rather they simulate the capability of the army in question to conduct indirect fire in the context of these games. The CPs should be allowed to spot for more than one artillery unit, and to spot attacks on two or more hexes in the same turn. When such multiple attacks are made, there should be a two-turn delay between the designation of the attack and the execution.

The 81mm and 82mm mortars are an exception to the above rules. Organic to the infantry battalions, they were more responsive to the infantry commanders’ needs, so CPs need not be required for spotting indirect fire for these weapons for the French and Soviets.

The Germans were the equal of the French in technical ability. This was enhanced through the greater availability of radios for communicating between artillery and maneuver units. More important, the German observation teams worked much more closely with the battalion and company commanders of the tank and infantry units. And, they trained their officers and NCOs of all arms in the basics for observing artillery fire. In theory, now any platoon could call in supporting fire, though in actual practice it wasn’t nearly that easy. One significant difference between the Germans and their early opponents was the doctrine of decentralized control. Each regiment had its own light artillery batteries organic. Batteries from the divisional or corps artillery batteries were frequently placed under the direct control of lower commanders. This practice was especially prevalent in the Panzer formations, where regiments were regarded as administrative and logistic channels, and task organization was practiced with a vengeance. The result was more responsive artillery support than the French or Soviets could expect. The trade-off was that it was more difficult to mass two or more artillery units on the same target. Organizing large artillery attacks wasn’t nearly as slow as with the Soviet army, however. But the French did have an advantage in that respect.

In Panzerblitz and Panzer Leader, the German artillery is fairly well represented. When the scenario order of battle indicates separate regimental or task-organized formations (for example, in PL Situation 17), units from one group should have an extra turn delay to spot indirect fire for artillery of another. When separate divisional areas of operations are indicated (PL Situation 15), spotting for artillery of the other division should not be allowed at all. CPs for the Germans need not be required for spotting indirect fire.

The Americans and the British may have had inferior tanks and armored doctrine to the Germans and Soviets, but the artillery was entirely a different matter. The U.S. adopted French artillery methods during WW1, but lacking the constraints of tradition immediately began considering improvements. By 1940, doctrine and equipment had been refined to the point where under centralized yet flexible control, both mass and responsiveness were attained. The British methods differed in detail, but the effect was the same. Like the Germans, the Anglo-Americans strove to place as many observers as possible with the maneuver elements. Headquarter staffs were large and capable. There were numerous technical support formations for the artillery. The artillery was lavishly equipped, especially with trucks and transportation. This motorization could not be overemphasized. Unlike the Germans, whose artillery was still 75% horse-drawn in 1944, the Anglo-Americans were entirely motorized and mobile.

It is fashionable to criticize the Anglo-American armies for their extensive formations of non-combat personnel. There were some inefficiencies in U.S. Army organization, but no more than in the German or Soviet infrastructure. The fact that there were enormous numbers of rear service personnel in American uniform did not mean that the armies were especially “fat”. Both German and Soviet services made extensive use of non-uniform manpower to accomplish similar support tasks. The difference is that Americans placed the support personnel much closer to the fighting man in terms of organization.

There were also technical capabilities available to American division and corps commanders that their Soviet counterparts could not even dream about. It took the Soviet artillery chief hours, or even days, to mass the fire of his cannon. The American was provided with far more target information, rapid communications, and the necessary

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The French, Germans and Soviets produced several models in the same calibre, but of distinctly different performance. The numbers shown here represent the types that were used at the divisional level, or lower. The others were usually controlled at Corps or Army level and would be better represented by off-board artillery if they appear at all. The Soviet and Arab 122mm cannon represent the M30 and the D30. The former is the Panzerblitz weapon and was used by the Arabs. The D30 appeared in the Soviet inventory around 1963 and has since been acquired by some of the Arab states.
equipment to do the same within minutes. During the battle of Okinawa, a Marine Corps observer was ordered to direct artillery fire on a Japanese infantry company that had just been spotted occupying a hill. The call for fire was overheard on the communications net by the executive officer of the artillery regiment, who ordered a mass fire mission on the registration point. The observer and an infantry commander who requested support (unaware of this) were surprised to see the simultaneous impact of projectiles from over thirty cannon less than five minutes after the request had been given to the observer. What is so exceptional about this one incident is that such responsiveness was fairly common for the Americans and British.

As with the Germans, PANZER LEADER fairly well reflects the capabilities of the U.S. and British artillery. The only restriction is that units of differing nationalities should not be allowed to spot for each other's artillery.

The Israeli artillery use during the 1950s was similar to the British style of World War II and oriented to infantry support. For this reason, the armored brigades of the 1954 war were not well supported. Many of the problems were rectified by 1967. Particularly important was the addition of self-propelled artillery to the armored formations. But one deficiency that persisted to 1968 was the lack of any tactical headquarters higher than brigade. Although there were nominal division headquarters present in 1954 and 1967, they had little capability to organize multiple battalion artillery attacks. Fire support coordination at divisional and higher levels has been developed since then, although not always steadily. Between 1967 and 1973, the idea that tanks could operate without artillery and infantry support became prevalent, and was reflected in Israeli mobilization plans. In the opening days of the Yom Kippur War, the tanks proved ineffective alone against the entrenched Egyptian infantry. Consequently, a rapid return to the concept of combined arms was made (incidentally, by quite a few armies other than the Israelis as well). Suli, the Israeli Defense Force does not seem to place the same emphasis on artillery support as does NATO or Soviet doctrine.

Generally, ARAB-ISRAELI WARS reflects Israeli artillery capabilities well enough. As with the Germans of World War II, units of one brigade should not be allowed to fire artillery assigned to another. In situations earlier than 1965 (Situation S1 for example). Where the allocation isn’t clearly specified in set-up, players should allocate the batteries beforehand.

The quantity of artillery provided the Arabs in certain scenarios (S-8, say) shows the influence of Soviet doctrine and logistic support. The Arab states were committed to Soviet methods in 1967, ’73 and in the case of the Syrians and Iraqis into the 1980s. The result was that their large quantities of artillery were often of little use in the fluid battlefields of the Middle East. When the Israelis moved as anticipated (which was seldom), the carefully planned artillery strikes did much to disrupt the enemy tank brigades. More often, however, the Arab fire attacks struck at empty desert or Israeli infantry. The Egyptian artillerymen did enjoy a period of relative success in 1973. A careful Egyptian analysis of Israeli armor suggested the combination of a variety of AT rockets and indirect artillery fires to break up the Israeli attacks. It is significant that the only point of major Israeli success in the Sinai was the gap between the Second and Third Egyptian armies, where there were insufficient weapons to create the “Fire Sacks” or “Grenade Barrage”.

The Arabs should be required to separate CP type markers to represent the observation teams. Not just any platoon commander could call for artillery fire. A ratio of two batteries per observation team marker would be just about right for the better quality Arab batteries (with B level morale) and a three-to-one ratio for those poorer (with C and D morale). As with the Soviets, a single observation team can spot for two or more indirect fire attacks simultaneously. When doing so, a two-turn delay should be required.

TECHNIQUES & TACTICS
If by this point, one has gotten the impression that planned fires are the bulk of indirect fire missions, you are entirely correct. The astute commander will provide the artillery with as much target information as possible long before the assault begins. Consequently, most attacks by infantry or armor begin with a schedule of artillery barrages, which can continue well after the assault is under way. These are many scenarios in these games where planned artillery fire is appropriate—so how to simulate it is the next question.

Planned fire can take two forms. There are targets that are identified in advance as to location, ammunition and attacking unit and then fired later upon command. These are referred to in current U.S. jargon as “On Call Targets”. This type of planned target can be attacked quickly when the order is given, since the most time consuming of the preparations have already been completed. A collection of planned targets that are to be attacked together at the same time are a “Group”. A group of planned targets can be attacked, though not all at the same time, is referred to as a “Series”. Several groups can also be fired as a connected series. Either a group or series can be initiated on call, or according to a schedule. Such pre-planned artillery fire may be easily simulated in the games with minimum of score keeping. (Figure 2 shows an example of a artillery fire schedule written for PB Situation 12.)

On the surface, all of this may seem very simple, but like controlling indirect fire as an observer, it’s not so easy in real life. Planned fires can be used on the game board with the following restrictions. When indirect fire attacks are running on a turn basis, not more than three on-call targets per battery may be designated. During the course of the game, not more than one on-call target per battery per turn can be designated. Once an on-call target is designated, it can be executed as soon after notation as desired. For example, an on-call target assigned for Turn 3 is ordered to be attacked in the indirect fire phase of Turn 5. The attack may be made in the same indirect fire phase rather than in the subsequent turn, as would be required if the target were assigned for Turn 5. The perceptive reader has likely guessed by this time that many of the scenarios begin after the battle, or at least the artillery part, is underway. Thus, Turn 1 coincides with the start of infantry/armor assault with all the preliminaries skipped over. Players can experiment with adding a turn or two to the start of any game specifically for executing planned artillery attacks.

A second technique that has not been addressed yet is that of attacking suspected enemy locations. Attacking an unspotted hex is prohibited in all three of these games, with the sole exception being the “Interdiction Fire” of ARAB-ISRAELI WARS. However, commanders commonly plan, schedule and execute artillery fire attacks on locations where the enemy is suspected to, or may later, occupy. Indirect fire should be allowed against unspotted units and unspotted hexes. Since such an attack would be less effective, the “X” results on the Combat Results Tables should be read as “DD”, and “DD” should read as “X”. These results will still apply normally since they represent a reduction in morale rather than elimination or significant damage. Projectiles landing 100 meters away would still have as considerable effect on morale as those landing 20 meters away. If the hex is unspotted, as well as any unit there, then the drift table should also be used (see the Letters of Vol. 24, No. 4). Finally, unspotted hexes should only be attacked by indirect fires planned before, or during set-up of the game. Of course, if the scenario is of the umpired “double-blind” variety, then one may fire blindly away at unspotted hexes.

DISPLACEMENT
Much more could be said about the use of artillery and indirect fire. It wouldn’t be hard to write an additional rule book, or create an entire game, on the subject. What I have presented should help orient you with a minimum of score keeping. The efficient combination of all according to each specific situation won battles. The colonels and generals who understood this were far more likely to emerge the winners, and tactical defeats were likely through failure to achieve the correct combination. “It’s not what you have, but how you use it,” is the maxim that can be proved over and over again. Hopefully this essay has spread a little enlightenment concerning the forgotten arm, and enabled the players of these games to understand the battles simulated a little better. And if the variant rules presented above increases the enjoyment and challenge, so much the better.
UP FRONT WITH SGT. ROCK

American Problems in the Patrol Scenario

By Stephen Harvester

Face-to-face wargaming has been revolutionized by the advent of the UP FRONT/BANZAI game system. A generation inured to sitting idle for an hour at a stretch while observing opponents’ moves may not yet realize what has happened. But a revolution once set in motion cannot be turned back. As conventioneers wander the halls between innumerable boardgame moves, their attention is inevitably drawn to the excited cries from the UP FRONT tables. As they watch in amazement while an entire closely-fought battle is begun and ended before their opponent calls them back to the board, the conversion process has taken root in yet another gamer’s heart. The initial price and that awful portrait of a Nazi on the box cover (Mr. MacGowen’s fine hand at work) may delay the result, but in a relatively short time UP FRONT will be their pre-eminent choice for face-to-face play.

In my own gaming group, we recently completed a round-robin UP FRONT tournament in which four of us played 11 scenarios in two three-hour sessions. All the games were Distinger played, with several being resolved on the turn of a single card. Rules questions were rare and always resolved quickly with the aid of a superbly thorough and well laid-out rulebook. Waiting between moves? Sometimes wish there had been more time to calculate the consequences of a newly-drawn hand before it was my turn to play again.

In no other wargame is the sense of uncertainty and tension so high as in UP FRONT. If I make a 2-1 attack in AFRIKA KORPS, I know that there is a 16.7% chance I will be eliminated. But when one group moves forward UP FRONT, no such precise calculation is possible. My opponent may be clean out of ammo and/or obstacles, affording me a free trip to the next relative range. Or, I may end up caught in wire, mired in a stream, or disappearing under the weight of a deadly crossfire. A well-prepared hand can mitigate these perils, but there are very few “sure things” on an UP FRONT battlefield.

A further charm of the UP FRONT system, and the focus of this article, is the scale of play. With each “unit” representing a single combat soldier (with his own unique name, rank, morale, close combat value, and weapon capability), conflict reaches an intensity rarely seen this side of a role-playing game.

In one recent play of the Parasite Drop scenario (JR), my German squad landed near the British (on Crete, we decided). My three highest morale men landed adjacent to both British groups and took an F8 attack in open terrain. Sgt. Distinger and Pvt. Wolff were DOA, but Pvt. Bernhoff (Morale 5), though pinned, survived. For the next half-hour, Pvt. Bernhoff single-handedly held off that entire British squad. If he was pinned, he would rally. When he had a Fire card too high for his Mausch, he picked up Distinger’s “burp” gun and fired that. Finally, it looked like curtains. Bernhoff’s position was infiltrated by two Limeys with bayonets while he lay pinned in his freshly-dug foxhole. But Bernhoff turned heroic! Leaping up with doubled firepower, he pinned his attackers, breaking the infiltration and putting the British back to where they started. By the time Bernhoff finally went down for good, the rest of my squad was in a winning position. I awarded him the Iron Cross with oak clusters—posthumously.

Another favorite story of mine is that of Japanese Sgt. Okimoto, the only Morale 6 character in the game. I once used his superior infiltration and close combat value (CCV 11) skills to dispatch three Marines in the six-turn turns before he slithered away to safety. And I have a Private Harvester (Morale 3) in my American squad. Why should Avalon Hill’s playtesters be the only ones to project their fantasies onto these marvelous character cards?

It was my enjoyment of such doughty warriors as Bernhoff and Okimoto and Harvester which helped crystallize my one dissatisfaction with UP FRONT. The basic American squad (#1-#12) is lousy. Worse than that, it is dull! In short, it has no personality. When I think of the basic German squad, I think of Bernhoff and the hard-bitten Sgt. Distinger (Morale 5). When I look at the Russian, I find three Morale 5 berserkers who, while they rarely win, always go down with bayonets fixed. When I think of the British, I see the thin red line putting out amazing firepower for their numbers. When I play the Japanese, I think of Okimoto, infiltration and the bazan charge. But when I think of the Americans, all I can remember are Smith and Watson.

Privates Smith and Watson, otherwise known as the “Blues Brothers”, make up the only pair of Morale 1 men in any nationalities’ basic squad. These two clowns cannot hide successfully. No matter what the Americans try, Smith and Watson will find a way to foul it up. Consider the following cases.

The “normal” American setup in our group’s Patrol (Scenario #A) matchups is a high-morale four-man maneuver group in A and an eight-man firebase (with FF9 or FP10 at RR1) in B. The FP is nine if the ASL is kept with the firebase for smoke and rally purposes. The FP is ten (permitting use of an extra F4 and F5 card, plus numerous combinations) if both Thompsons go into the maneuver group. If that group can reach RR5 to the enemy, it will wield a respectable FP16. In theory this organizes a peaches and cream set up for the standard six-man German firebase and its RR1 FP of nine. In practice, it’s usually a horrid mis-match.

The game begins with the German playing first from a five-card hand. With a FP of four at RR0, there are twenty useless Fire cards available to the German, or about an alignment of the deck. Thus, 51.2% of all Patrols will begin with a German fire attack on an unentrenched, low-morale, eight-man American group. Even if the Yanks have found some starting cover, the targets are so many and the morale so poor that an attack, even an attack of “0” or “-1”, will likely pin someone in the group. Unable to play and discard simultaneously, the GIs will often throw away Movement cards, terrain cards, usable Fire cards in a desperate search for a Rally card. Of course, they remain unentrenched. Once the firebase is in disarray, the Germans are free to advance into good terrain at their leisure, slowly chewing the Americans to pieces at RR1.

Other formations are equally unpromising. We can put Smith and Watson into the maneuver group and replace them with sturdy fellows, bringing the firebase morale up closer to that of the German’s. But there are still eight targets for any attack, making the odds for someone getting pinned 25% higher than an equivalent attack on the six-man German firebase. A course of action is the Blue and Brothers making it uncathed to RR4 for the victory are next to nil. With this formation, the “maneuver group” is actually the “find-a-Guilty” group. They can only hope to reach RR1 to challenge a rush forward by the Bernhoff. Not too likely.

A third option is to put Watson alone with Sgt. Burnett in Group A, hoping to win with sheer firepower out of a massive Group B. But with ten targets to draw cards on, including two Morale 2 men and the craven Smith, this oversized mob will rarely do more than look around for Rally cards.

For a long time the most hopeful, and interesting, strategy was to throw the Blues Brothers away in a separate Group A, going with a six-man firebase of FP7 or FP8 at RR1 (again depending on where the ASL is placed) and a four-man maneuver group in C. The American is then essentially playing a ten-on-ten game with the German player. Unfortunately, this too usually falls short (see Don Greenwood’s try with in the Series Replay in Vol. 21, No. 1). An American firebase of FP7 with smoke protection of FP8 without is simply not going to stand up against the German FP9 at RR1 and FP10 at RR2. That one or two FP difference translates into six or twelve chances over the course of three decks for the Germans to play an F4 or F5 card on their opposite numbers—a card which they need not fear themselves. It also means any successful flanking move will permit the Germans to use any Fire card in the deck, right up to and including those game-ending F8s.

Most recently, a viable alternative to the traditional groupings has emerged. The “Harvester Spread” calls for a firebase in the unconventional Group A position, consisting of the four highest morale riflemen and the BAR. The Blues Brothers occupy Group B, and the two Thompsons start with one or two FP. As two Morale 2 riflemen in Group C. With the first available Movement card, a lateral group transfer is made to Group D. (The Russian Variation of the “Harvester Spread” has also proven effective, with a starting alignment of 6-2-2-5 and no group transfer necessary.)

The theory is that the six-man German firebase in Group B (with firepower at ranges 0-5 of 4, 9, 10, 15, 17, and 23) is unbeatable in a direct confrontation. The only way the American can match German firepower is with a hopelessly big and fragile eight- or ten-man group. The “Harvester Spread” forces the German to choose which American group he will be adjacent to. The other one will enjoy a −1 range differential relative to the German firebase.

If the German shifts his firebase to Group C, following the maneuver group, the American Group
In preparing this article, I realized (sadly) that some of the younger readers might not be familiar with "Sgt. Rock". I checked my current comic book stands to see if he was still around. The situation was worse than I had feared. The only soldier comic on the stands was "G.I. Joe"—a doll for crying out loud. Joe has just defeated a bald-headed guy named "Serpentor"—bloodlessly? The Vietnam War has, in my opinion, improved America's approach to foreign policy. But it has wreaked havoc with our comic books.

Sgt. Rock of Easy Company" was a staple of my pre-adolescent, pre-Vietnam childhood. Muscles but no brain. Never even knew, for instance, that what he wanted to do to parents, teachers and schoolyard bullies. He annihilated them! No A-Team prision-taking for Sgt. Rock. He killed people. Hand grenades flew into pillbox gun slits at forty yards. He dodged machinegun bullets like Jim Brown dodged tacklers. He thrived on jumping into trenches and kicking the inhabitants into unconsciousness. His favorite tactic (this seemed to happen every other issue) was to leap down onto the turret of a Tiger Mk VI and fire his Thompson down the hatch. Inevitably, the turret would rip clear off the chassis as the ammo blew up inside, with Rock leaping clear at the last moment.

Ah, sweet memories. Clearly, what the American squad in Up Front needs is nothing less than the ol' Rock himself. Not just to make the American squad competitive, but to make it fun. I can just take so much of the history lesson in my gaming. Remember, game designers—most of us gamers have been "realistic" all day long. When it's game time, for one want to play. Everyone is of course free to develop their own Sgt. Rock, but mine has been playtested and found very satisfactory. Without him, the Americans cheer when they reach RR1. With him, every game is an adventure.

My Sgt. Rock is armed with a Thompson, but it is no ordinary gun. It never malfunctions (in fact, I don't think I ever saw it run out of ammunition in the comics). And against AfVs, its ammo-seekling bullets give Rock the equivalent of a Demo Charge (+4) in any attacks. Sgt. Rock's firepower at RR5 is FP9, but that's because of the Thompson. At close range, Sgt. Rock fires one-handed from the hip while whipping grenades with the other.

Sgt. Rock's morale is "8"—a wound or KIA for any lesser man. The rationale here is simply that Sgt. Rock never actually dies for cover, but he get knocked down by the concussion of a shell blast or by slugs bouncing off his helmet and/or dogtags (a result of "8" also inevitably rip the shirt off Sarge's chest, revealing his massive torso). Unlike in the comics (we must be fair—you do have an opponent), the Rock can be killed. His KIA is "9", or "10" when pinned.

Rock's Morale 8 plus CCV three for the Thompson gives him a CCV of "11", equal to Japan's Okinawa with a rifle. His Morale 8 means he automatically passes all morale checks prior to infiltration or close combat.

Sgt. Rock is never routed, and he never panics. Once per game, Sgt. Rock may, without the play of any card, declare himself a Hero. He may conduct any action that a Hero card allows in the player's one turn. He now has the potential, at RR5, of using any Fire card in the deck all by himself.

The effect of Sgt. Rock's insertion into our Patrol encounters has been dramatic. Smith and Watson are still around for slapstick comedy, but a true American hero is a saving grace to any day. All the American strategies discussed above are still valid, but now they pack offensive dynamite. Let's review them, with Sgt. Rock in charge:

1.) The four-man maneuver group at A backed with an eight-man firebase with FP9 or FP10 now moves forward with a RR5 fire potential of 18 or 20. Instead of the Morale 4 Sgt. Burnett (sorry Jim), approaching under the most ideal conditions, we have Sgt. Rock who might even leave pinned men behind in order to close with the enemy. If some of the fire-base is pinned, as it usually is, not to worry! At least no need to sit idly by for Rally cards. Rock moves forward without covering fire, shrugging off attacks of 5FP, 6FP or 7FP along the way.
2.) The ten-man firebase with two-man throwaway is now a ten-man launcher for a two-man torpedo. Sgt. Rock and Pvt. ("Bulldog") Myres, who is a Morale 5/CCV10, can stomp on any four-man German group that gets in their way. As they move in, they will draw fire otherwise headed for the firebase, which now has a vastly improved chance to reach RR1 in good terrain and to start mauling people with their FP11. Once the Germans are pinned, Rock and Myres infiltrate and quickly dispatch the survivors with their fists and high CCVs.

3.) Leaving Smith and Watson behind in Group A and going for the end run with a four-man Group C now takes on a whole new flavor. Instead of an under-manned firebase and a mediocre maneuver group, we now have a Green Bay Packer power sweep. If the Germans don't shift to follow an American lateral group transfer to D, they'll never be stopped. If they do shift, they risk the old Wire/Stream-in-the-six-card-hand trick forever. If they pass this hurdle and succeed in knocking out a GI, thus denying the group its victory conditions, they must contend with an enraged Rock passing them by to achieve a natural flanking position. If that happens, you can kiss your gute Schicksal goodbye.

Enthusiastic language and humor aside, the presence of a Sgt. Rock type does not unbalance the Up Front Patrol scenario—it balances it, and makes it much less predictable. None of the above tactics provide a guaranteed win with a Rock-led American squad. In our games, the two-man attack group was as likely to go down under sheer weight of numbers as to win the game. Similarly, Rock can lead an overly-aggressive four-man group to disaster. If the American player starts to think his whole squad is bullet-proof like the Rock, he will get into big trouble quickly. Sometimes the mere threat of a Rock attack is more potent than the actual event. For this reason, the automatic Hero power should be hedged, never being unleashed until the results will almost certainly be lethal. Besides, if you have the option of waiting, an actual Hero card may find itself into your hand, leaving you with the opportunity for a two-turn orgy of heroism.

Up Front by its nature as a personality-level wargame allows room for imaginative involvement that other games can't approach. Can we really get emotionally involved over the fate of the 4th Guards Infantry? But the survival of an isolated Chemenko, bravely brandishing his jammed bolt-action rifle, can matter a great deal. I hope that this article will lead some doubters to try to brighten the world of Up Front, and might lead in time to other personality-scale wargames.
The heroic defense of the Arnhem bridgehead by elements of the British 1st Airborne Division has been well documented in many books and games covering the battle in Arnhem had been conspicuously absent until the publication of STORM OVER ARNHEM. It proved to adequately fill the void, and to be personally pleasing for me due to my longstanding serious interest in the battle. After playing the then new game and reading the following the helpful Series Replay in THE GENERAL (Vol. 19, No. 1), I was favorably impressed by this unusual simulation of street-fighting. Don Greenwood and Courtney Allen had created a game which combines playability with realism in an enjoyable wargame with many facets. The purpose of this article is to briefly review the game's strengths and to recommend, at length, a few revisions to enhance the historical accuracy as well as maintain balance and ease of play.

My interest in the action at Arnhem was first sparked in the 1960s by the publication of several excellent accounts of Operation "Market Garden". Books written by H.blett, Bauer and Urquhart provided useful detail for wargamers interested in accurate descriptions of the Arnhem operation. Inspired by these books, I visited Arnhem in 1968 and in 1972 while on summer vacations in Europe. I carefully toured the battlefield, from the landing zones to the bridge—both on foot and by bicycle. While visiting the town, I was gratified that the Dutch inhabitants were pleased to share their wartime experience with me; the British and Americans are highly regarded as liberators of the region by those who remember the war. Guided by some of the remarkable photographs of the action, I observed that most historical points of interest are surprisingly well-preserved and marked by monuments, plaques, and even a small museum in Oosterbeek. Aside from several city blocks completely rebuilt after being demolished in the war, most key battlefields remain unchanged. For those enamoured by military history, the immaculate Airborne Cemetery in Oosterbeek containing 1300 Allied graves and the simple monument at the reconstructed Arnhem bridge are somber reminders of the sacrifices made there. True wargamers can imagine my emotions as I stood on the bridge and contemplated the river which appears so narrow, yet proved so wide in 1944.

Gamers familiar with the battle at Arnhem bridge realize that the small unit clashes in the streets and buildings do not lend themselves readily to simple simulation methods. Most squad-level wargames are too complex for my taste, so I found the mechanics of play for SOA to be a pleasant surprise. The game recreates streetfighting abstractly with rules that are enjoyable dimensions possible by recreating the entire battle in the town. I cannot accept the suggestion that a complete simulation beginning on September 17th must be unbalanced, unnecessarily long or unexciting. I believe the opposite to be true in fact, since the extra turns are well worth the historical accuracy, enjoyment and flexibility they generate if organized properly. Any game of Arnhem which omits the first 12 hours of the battle must be revised!

I especially disagree with the designer's statement that, "The German garrison had no chance to seriously impede the British advance at the outset." Such an explanation for the omission of 12 hours of combat suggests that the designers have improperly evaluated the ability of small German units to interfere with the airborne advance into Arnhem on September 17th. The unexpected presence of well-armed and determined German troops throughout the area was directly responsible for the small number of British men who did ultimately reach their objectives. Repeatedly, small German units delayed the advance of entire British companies by using aggressive tactics at key points. C Company, 2nd Battalion was surrounded and destroyed in the dark near Arnhem station on the 17th, only a few minutes march from the bridge. By sheer chance, the lead elements of Frost's battalion missed contact with Graebner's Recon Battalion as it crossed the Arnhem bridge heading south at about 7:30 Sunday evening. If even a portion of these units had clashed then, the battle would have certainly evolved quite differently. The spirited defense by German troops in buildings #2, and on the bridge itself ruined British plans and could have been disastrous for Frost had he not dealt so successfully with them. The movement to the bridge, battle for control of it, and the establishment of the perimeter were essential to the success of the German resistance. The 12 hours of play they represent can be enjoyable to simulate, directly affect dispositions and are a vital element of any credible Arnhem game. Each commander must be permitted to control the actions or his troops on September 17th as part of the "standard" game—not as a variant afterthought.

The publication of "The Crossing" (Vol. 19, No. 1) and the references to it in the original rules book suggests that the designers were aware of this element. The publication of the game in Area #2 is accurately reflected. Turn B is a night turn during which substantial British reinforcements joined Frost to combat the earliest German arrivals. Daylight Turn C provides for Graebner's attack and the arrival of the last certain British support. I believe a three-turn addition is much superior to the two-turn variant because it more accurately reflects the piecemeal build-up of opposing forces, provides more opportunity for creating combat that did occur, and—above all—requires very little additional rules modifications. To permit combat on the bridge, an additional area (#31) must be created adjoining areas #4 and #5 encompassing the bridge. The addition of this area, which is treated in the same fashion as all others in the game, permits the normal application of all game rules.

The game begins during Sunday afternoon, September 17th, with the game turn marker on "A" and the British player in possession of the Tactical Advantage. If he does not make use of it, the British player will control the Tactical Advantage until the start of Turn 3 when it will switch to the German automatically. The German player is in control of all Victory Point areas at start (Turn A) and may receive Victory Points for any areas he still controls at the end of turns A, B or C—but cannot receive points for reducing the British perimeter until Turn 1.

1.0 ADDITIONAL UNITS:
1.1 PILBOX [4-X-0] is set up in Area #4 to start the game. The pillbox may only attack/be attacked during the Close Combat Phase. Only those units in Area #4 which are designated to attack it may be attacked by the pillbox. Therefore, regardless of who controls the Tactical Advantage, the British player must designate his Close Combat in this area first. The pillbox does not affect enemy movement or stacking limits in any way. (EXC: British units may not enter Area #31 until the pillbox has been eliminated in Close Combat.) The pillbox does not count as a German unit for control of Victory Point areas.

1.2 ARNHEM GARRISON consists of two 2-5-5 infantry units and a 2-6-5 HQ unit which start the game in Area #23. If all three units fire together, they do receive a +1 DRM for platoon integrity. These units function in the same manner as all other infantry units and HQ units throughout turns A, B and C as well as for the remainder of the game. These units affect British movement according normal game rules throughout play.

1.3 9SS Recon consists of two 3-3-10 PSW 231 armored car units, four 3-2-8 SPW 250 half-track units and three 4-6-6 Infantry Recon units. The one 9th SS armored car unit in the original game setup is removed and must enter the game instead with the other 9th SS Recon units in Area #31 as in Rule 3.41. The 9th SS Recon infantry units must enter the game in Area #31 as in 3.41 as well. The 9th SS Recon infantry do not qualify for platoon integrity.

2.0 SETUP:
2.1 TURN A: The following British units set up in Zone E A Co, A Co HQ, 2nd BN HQ, one unit
of AL AT Bty, 1 Para Sqn RE, 2nd BN HQ Co (four 5-8-5s; see the comments below). The German Plarck is set up in Area #4 (as per 1.1 above). The Arnhem Garrison is set up in Area #23 (as per 1.2 above).

NOTE: All German and British units move according to their normal movement factors; but during their initial turn on the mapboard, British AT units have a movement factor of "5", reduced to "1" thereafter.

2.2 TURN B: The following British units set up in Zone E: C Co, C Co HQ, one 5-8-5 RECON Sqn, RECON HQ, 9 FD Co RE, RASC Platoon, DEF Platoon, Bde HQ. The following German units set up in Area #31: one 9th SS Recon 4-6-6 and one 3-3-10 armored car.

2.3 TURN C: The following British units set up in Zone E: B Co, B Co HQ, and one unit of AL AT Bty. The following German units set up in Area #31: one 9th SS Recon 3-3-10, four 3-2-8 halftracks, one 4-6-6 infantry and 2-7-6 Recon HQ. The following German units set up in any white area or in white areas designated number on a black circular field: the 10th SS Armored Recon Company (nine 4-6-6s and HQ); these units may be set up in any combination of areas desired even if occupied by a British unit (apply all normal rules for movement after).

2.4 TURN 1: The British receives no additional units. The German Bocholt Training Battalion is placed in Zones A or B as in the standard game. The remainder of the 10th SS (less the Armored Recon units above) commence play as listed on the Order of Battle.

3.0 SPECIAL RULES:

3.1 All British and German units commence play uncommitted. All British and German units move at normal rate and with normal movement factor. (EXC: The two British AT units have a MF of "5" during the initial turn they are in play, reverting back to "1" thereafter.)

3.2 Neither side may enter a perimeter zone during Turn A (except, of course, during set-up). Movement is allowed in all zones thereafter.

3.3 The Random Events Table and Setting Fires rules are not applied until Turn 1. All other rules are enforced normally.

3.31 British artillery and AT fire may be used against German units in Area #31 according to normal rules. British artillery fire is available commencing on Turn 1.

3.32 German artillery fire is available commencing on Turn 1; but German S-Area artillery fire is available commencing on Turn C.

3.34 All German and British units set up uncommitted in the zones or areas indicated, even if occupied by an enemy at the time. Movement into or out of a set-up area or zone occupied by an enemy unit is governed at all times by normal movement rules.

3.5 At the start of Turn 1, the six British perimeter control counters are placed by the German player on any six areas currently occupied by the British. These areas cannot be Victory Point areas but may contain German units if there are not enough areas solely occupied by British units. If the British player does not currently occupy six such areas, the German player may select other areas which are currently unoccupied but were last transited by the British to fulfill the limit of six perimeter areas. If the German player is still unable to specify six perimeter areas, he receives two VP for each counter not placed. Under no circumstances may the German specify more than six perimeter areas.

3.6 Each player may have a maximum of three infantry and three armored units in Area #31 during any movement/fire phase. Only during set-up of new units may stacking limitations of Area #31 be exceeded, and stacking limitations must be satisfied during the first available Movement Phase. Retreat is not possible from Area #31 if enemy units are present in Areas #4 and #5.

3.7 The game continues normally from Turn 1 as in the Basic Game rules, noting only the alteration for the German plarck.

4.0 VICTORY CONDITIONS: The German player begins the game with his Victory Point marker in the -2 block as a play-balance adjustment.

These revisions differ from "The Crossing" in a variant of a number of important respects. The addition of Area #1 covering the bridge allows play to be to the standards and provides both players with optional methods of conducting the battle for the bridge. German units may elect to fire from Area #31 (representing the bridge and its southern approaches) or enter Areas #4 and/or #5 to execute close combat. The special movement capabilities of any surviving armor may prove troublesome and keep the British guessing. On the other hand, the British player may use artillery or anti-tank fire against armor remaining in #31, or attack infantry there with normal fire. Of course, a close assault is also possible in an emergency—but the occupation limits of the bridge by the German player must move first. The variety of courses of action open to both players may result in differing casualty levels and troop dispositions each time the game is played. Attention will be focused directly on the bridge in the earliest turns—which is precisely in order historically. Obviously, the German player has little hope of achieving success in those early turns, but the diversion of resources by both sides to the bridge itself is a key element in the simulation. Important historical considerations have been recreated with a minimum of modifications.

I would like to address the rest of this article to a discussion of a number of deficiencies in STORM ORDER OF BATTLE. The British and German OBs are certainly accurate according to unit type and parent designation, but I question the number and strength of units. The various accounts of the battle fall into the exact composition of all combat forces, nor does the information that is available necessarily agree. This is, in large part, due to the isolated and ferocious nature of the engagement during which accurate unit records were nearly impossible to maintain. Nevertheless, I find a number of assumptions and estimates puzzling in light of the detailed information that is accessible in some instances. I have long suspected that some strength assignments made by the designers were intended to modify play-balance.

For example, careful study of source material suggests that the strength of the British Recon Squadron, Para, Ambulance and Headquarters company, as well as the German tank and mortar units were inadequately assessed. Further, the designer's use of the figure of 600-700 men for the total strength under Frost (per the British Official History) can only be achieved if: 1) the troopers of the isolated Co C 2nd Battalion are included, and II) every British unit is at full strength. Obviously Frost never benefited from these, and a more commonly accepted figure of a maximum of 600 troops (Wilmot's 'The Struggle for Europe') would seem more realistic. Indeed, other sources suggest that Frost's effective strength was reduced to 350-500—so the figue of 700 simply is an oversimplification.

The inclusion of the 16th Para Field Ambulance squad as a combat unit places it in a role it never performed. British airborne medics often were conscientious objects specifically chosen to perform non-combat roles (see Crookenden, 'Drop Zone Normaly). The Red Cross operatives were respected throughout the Arnhem battle, and I have not located a single instance of medics participating in battle. Clearly, this unit should not be included in the order of battle. Trying to flesh out the British forces? Well, it could be the mainstay of the Royal Artillery Signals squadron, which eventually joined the street fighting after wireless contact broke down. This unit clearly occupied a defensive position (according to Urqhart's book) and would be far more realistic to include than the medics. The RAS can be substituted in as a 3-6-5 infantry unit.

The evaluation of the strength of the Recon Squadron under Major Gough is especially suspect; the squadron in the game has too many units and the individual units are too weak. Major Gough's alone unit represents five squad plus an HQ, or approximately 60 men with five men to a jeep. This force would be much reduced in vehicles, or almost a third of the entire squadron—far too many. Urqhart states that Gough's command jeep was escorted by only one in the final stages of his attempts to locate the division commander. Eventually, Gough drove along the river road into Arnhem where he joined Frost, who described his force as a "party"—hardly 60 men. Gough was joined by one other jeepload of troopers to bring his force to a total of 18 men, only a fraction of the expected force (Fairley, 'History of the Reconnaissance Squadron').

Note that these totals can be arrived at only by counting every possible man with all units at full strength. Considering the documented losses which occurred during the airlandings and the march to the bridge, it is obvious that the figure of 700 men is too high (as is 600). It is the basic game as designed with such strong forces would be improper (especially considering the battles at the bridge during the early hours—turns A, B and C). It is important that the actual strength of the British forces be carefully reflected if the game is to be considered accurate. It is not required that they be correct in detail, nor even in generality if play commences on September 18th. Only by beginning the game on September 17th, before the first battles, can the current OB be considered roughly accurate.

The German order of battle is much more accurate and its unit strengths appear to be reasonable. However, I believe the capabilities of the tank and heavy weapons (mortar) units are not properly reflected. The tanks of the Bocholt Battalion are represented by only three 4-5-8s, which gives them the firepower of only a single British infantry platoon. Even considering the protection provided by the special armor rules, the relative weakness of the tanks (and all other armor for that matter) leads to a distinct lack of realism in the game. The German mortar units are inadequately armed, and this is reflected by the armor was always at a disadvantage in urban combat. The tanks and all other armor for that matter) leads to a distinct lack of realism in the game. The German mortar units are inadequately armed, and this is reflected by the importance of the engineer and tank units, and in-
Now take a minute to appreciate the set-up restrictions for the situation, and in general. Especially review Section XIV, B.4. Applying B.4 means that your placement can impair the German set-up. He can't begin in hexes in which you can spot his units (see Experimental Rule D in the accompanying sidebar, however). Every approach into the area is open to observation. It's up to you to take advantage of setting up first and to place units in hexes overlooking the approaches. Observers on the main ridge and hilltop areas are vital. They can keep the enemy from beginning at the edge of the board and can spot for your artillery (see Experimental Rule E).

Unfortunately for you, the set-up rules force your American guns to begin on board D. That not only places them within easy reach of marauding Kraut scouts, but howitzers in forward positions offer unusually attractive targets to a veteran panzer lieutenant who can call in only one heavy fire support, so you'll have to remove them to safety. Having the guns out of action for several turns is bound to be hard on the GIs.

As you can see from the scenario's OB, over half of your infantry lacks transportation. For at least three turns they're doomed to the front lines, while the halftracks and trucks scramble to make a return trip. If your infantry is jumped at the outset, they are in deep trouble without guns to support and transport to escape. So your set-up is critical any way you slice it. American antiarmor defense is mostly short-ranged (light caliber guns with only a single company of M4 Shermans for real backbone). Your infantry would like to displace with the guns, but most of them are stuck for awhile. You don't have the strength to hold up front, but one hand is tied.

Illustration #2 depicts a tactical version of Napoleon's "central strategy". Napoleon understood the strengths of concentrating his troops on superior lines of communication. In other words, he knew that holding the best road net made his forces more mobile and took that edge away from the enemy. The GIs hold Nece in strength for precluding those reasons. Your troops are concentrated to better withstand a sudden major attack and can move rapidly to any other sector along the shortest routes. That's critical if superior forces compel you to withdraw or react to threats in other areas.

Take a moment to appreciate the particulars of this set-up. Screening the flanks are the scouts. These cavalrymen occupy key hexes for observation or to deny early German access to draws, villages, roads or a bridge. Grouped well forward to strike hard at an enemy advance on the main road to Nece are your American tanks. Their positions allow them to call fire to prevent initial fortifications that gave the enemy a chance to return fire. The infantry and a 75mm section deny first-turn access to Nece from their prepared positions (see Experimental Rules E and F), which also lets them regroup swiftly. All mounted elements are ready to move immediately, except for those moving around Caverge. An additional infantry company is ready to march into Grancelles where they can meet returning transports or hold off pesky German scouts. Finally, the mortars are stationed in support and spotting positions, while the 105s and remaining AT guns are poised for relocation to sites around the exit area (or elsewhere).

A central strategy could induce your enemy to avoid the American concentration and try an end run. Suppose he decides to swarm through the northern border of the battlefield to capture Caverge for a speedy exit. His entire force will be mounted and moving with vulnerable scouts preceeding and the even more vulnerable trucks, laden with mortars and AA guns, in the rear. Infantry-laden halftracks also present appealing targets, especially if strung out in open terrain. Your M8s force him to begin several hexes away from the edge of board D. That means the Germans will spend at least two turns getting across. By the second turn, you can have ample force gathered to execute a game-winning play I call "Biting Off the Tail".

On Turn 1, all your M20 scouts plus a troop each of Shermans and Stuarts assemble south of the Merden ridge. The M8s in Merden were likely trapped and made to fight in place. On the second turn, the enemy is driving west above Einkel. Your scouts should charge over the ridge, down the slope and overrun any vulnerable stacks of trucks or halftracks. The Shermans occupy a slope hex on the ridge's northern face to threaten long-range fire and spot for 105s. The Stuarts either charge like the scouts, or get into Merden to add their own direct fire threat. Let the presence of German tanks determine the best course for the light tanks.

Meanwhile your howitzers must swing into action from the Nece area. Get them ready for a second fire mission and protect them with some infantry. The rest of your troops head for Caverge. You've got to occupy the exit area in strength by the end of the second turn. Aim to shatter the German scouts before his tanks can arrive. Stuarts can reach the area on Turn 1 with your mobile infantry and AT gun. Any Rollys dumb enough to enter Caverge will be in for a nasty shock, especially when ten Shermans roll into range on Turn 2.

From Turn 3 on, the game then becomes a slugging match. If your charging scouts wiped out a pair of stacks near Einkel, you'll be in good shape to pummel the M8s with an explosive victory. Keep your howitzers firing on the weakest German stacks, and pick off other targets with direct fire until you win.

If your bite on the German tail yielded less dramatic results, you'll have to be really aggressive at Caverge. Push an infantry company into hex AP4 to help keep the enemy spotted. While the Germans vie for the northern half of Caverge and begin to exit, keep most of your troops out of sight or under cover in woods hexes until conditions are right to execute decisive charges with your armor. Include overruns by surviving scouts. These charges and supporting infantry attacks should coincide with thinning German numbers especially when golden opportunities come up to nail stacks of halftracks or trucks. If none of the thin-skinned targets can be reached, ride down a stack of infantry or even a company of Mk IVs. Remember not to give the enemy a chance to shoot your cavalrymen to bits as they charge home unless you can afford the losses and enough of them will survive to eliminate the target. You might have to fire a smoke screen to shield your charging units, but between howitzer barrages and counterattacks, the American should emerge the decisive winner in a northerly end-run engagement.

A German try along the south edge also leaves his weakest units open to counterattack. But, you'll have to fight each stack and unit as precisely as you
An M20 scout on DY7 forces your opponent to set up in the covered hexes southwest of St. Athan. In the first turn, Panthers will mob the ridge southeast of Artain. From there, they can cover recon elements as they secure the woods southwest of town. Your M20s will deny German access to the bridge, but you'll have to move fast to keep ahead of his scouts. Recall your M8s and send them into the woods southeast of Grancelles. Chances are your M20 observer will be lost, but send it along with another to join the M8s if it's still around. The last M20 should block the ridge behind Artain to again deny German access.

While your scouts screen the southern flank, get your howitzers into safe firing positions north of Nece. Such a tantalizing target inside Nece is sure to ignite a panzer leader's interest. Why not spare your artillery a hail of 75mm shells by towing it to DN3?

Since German tanks can be in Caverge within three turns, you have no time to waste. At the close of Turn 1, have all mobile infantry and anti-tank guns inside Caverge or the adjoining woods. Immediately drive the trucks and 'tracks back to Grancelles and Nece on Turn 2 for more infantry and the remaining 57s. Cover Grancelles with your Stuarts and Shermans. Watch out for long-range direct fire from the Panthers on the slopes beyond Artain. You'd like to place the Stuarts in the southern tip of the city to pick off advancing recon cars, but that "4 x 16" equals certain death. You'll be better off placing the light tanks out of danger along the other southern hexes. Their mission there is to counter attempts by the Pumas and company to slip around or into town. Advancing enemy vehicles east of Grancelles can be riddled by your own 75s.

Unfortunately for your Shermans, "4 x 16" also means near certain disruption and eventual death if you rush them into forward city hexes. Try hex DW1. Can Panthers at DFF7 spot them? Just for fun, suppose your Shermans hug the trees and cannot fire east of due-south. Your infantry at Nece mainly awaits transportation, but they also protect your howitzers. Keep some in town, but send two platoons southwest through the woods. By Turn 3, they can help spot for the guns and mortars. The 81mm barrels could also move south to gain spotting and direct lines-of-sight.

The battle continues in a move-forward/countering-move phase. Your Shermans might KO some impetuous scout cars, but a prudent panzer leader won't expose any thin-skinned units while your main battle tanks have yet to be run off. The best your M4s are likely to accomplish is a killed infantry-bearing tank. Against panzers, take sure kills over simple disruption. If the enemy is foolish enough to send his scouts forward, blast them with both tank and M8 fire. Overrun pinned stacks with your scouts next turn after the guns have pasted them. It'll be a lot easier to eliminate the Krauts as they advance than it will be once they're inside Grancelles.

Do not fire your mortars until the German trucks begin crossing the open en-route to Grancelles. Mortars are made for truck destruction.

Panzers may enter eastern Grancelles in force by Turn 3. That's when your tanks have to stick and move. Try to disrupt a stack or two. If you are successful, you might hang tough in the same hexes. If not, you'll have to draw back into the city out of sight. Keep your flanks covered by the scouts and infantry to prevent the enemy interfering with your transports as they shuttle between Grancelles and Nece. (Illustration #3 shows the American armor delaying in the streets of Grancelles while the infantry redeployes.)

By Turn 6, you may have to quit the city. Most of your troops can fall back one last time to the
Cavergue area, but your Shermans and an infantry or Stuart platoon may make a stand in hex A5W. Fire from there into western Granclelles will force the Germans to spend time reducing the hex. Otherwise, you might be able to withdraw the medium tanks into the woods without withdrawal preserves the threat of a later counterattack.

Cavergue is your final stand. You'll need at least two infantry companies with MG platoons, plus all the AT guns. Rather than present hard targets in tooth hexes, simply run the troops into the woods with the defenders to force the enemy to engage at half-strength. Any German units driving down the road for Cavergue weaker than a Panther will be instant scrap. Again, an experienced German player won't advance with anything less hard than a main battle tank. Not only will he have time to shell likely defense hexes prior to advancing. Against such a veteran, you may have to settle for a single disrupted stack or just one panzer platoon ablaze.

The last third of the game becomes attritional. Keep the road spotted for the 105s so they can pick off halftracks or careless truck stacks and scouts. The last ten minutes see your remaining chances to overrun existing stacks of vulnerable transport. Despite mounting losses, risk giving the enemy his last four or five kills when you stand to gain a decisive victory. Tank charges and infantry veteran, you may have to settle for a single.

You plan for meeting a head-on attack by superior forces is something you've lost sleep over since seeing Scenario #12. The first thing to do is get the artillery in place in protected positions. The buildings of Cavergue and the exit area blocking force all ammunition and gunners out of there. Once the bridge is over, they contact some German trucks which halt off into the forest before the Americans can get their .50s into action. The other M20s cautiously advance over the southeast bridge and through the trees. Meeting no opposition, they head south.

The only other German unit that moves into town is a company of paratroopers. They have more requests than they can handle. An infantry platoon in the Nece woods can spot the Panthers which just wiped out the anti-tank gunners. Another can see the MK IV's scaling the ridge on the other flank. The mortars in D4X can see the tanks and TDs closing in. But it's the paratroopers that don't have the exact range, or don't see your foxholes since you've held your fire.

South of Granclelles, your scouts report that another group of 234/1s and five small Lynxes have crept up to ADD9. You must order your men back into the city. You can't afford to risk them when half the German tank platoons of the Panzer IVs and Stuks there. The Stuks while the other units are trying to protect his fire group. More to his satisfaction surely is his iron grip on your infantry before Nece. His tanks pump salvos of high explosive into the trees to soften up the target. Incredibly, the footloggers escape serious injury. Maybe the Krauts don't have the exact range, or don't see your foxholes since you've held your fire.

The Panthers at CQ2 can spot your Stuarts taking places beyond the town, but can't engage; the light tanks are out of range. The Panthers must advance to D6P to close the range, and that takes them right past the 57s at D7T. Your AT gunners hold their fire at first. They wait for sure kills on halftracks, but when the first Krauts begin dismounting on the far side of the trees, the gunners have no choice but to try for one of the Panther platoons. Their shells crash home on five of the jugging tanks and they are off the road range. But you know their light pieces haven't finished off the big tanks. And their fine shooting is bound to be their downfall.

German tank destroyers and MK IVs gain the ridge south of Nece as the remaining Panzers annihilate the brave AT crews. The Americans in the forest can only quietly watch the panzers churn up and over the slopes on both sides. Their sight is about to begin in earnest.

The 81mm mortars at DW5 know exactly what's bound for the ridge—18 TDs bearing a company of German infantry. They'll be on top in minutes. All three companies in the Nece woods can spot the German infantry. Their mission is to screen the city until the armor can displace. The scouts north of Nece shape up in Merden for a combat patrol. You want them to hunt out the German supporting guns. But the most immediate hazard for any of your scouts or your forward positions. You must order them to their holes since you've held your fire.

Panzers and MK IVs have shifted to gain better lines of fire. Three Panzers on D75 only cover the woods battle, but support the recon elements south of Granclelles. With all the Panzers in position, the panzer leader is sure to lose a haul of steel with the next 'grenadier attack.' But even while the enemy is about to crash your GIs, he's forced to deal with a thorn in his behind. Your scout patrol has his fire support in imminent danger. He can use this situation to help shell the Nece defenders. The enemy decides to load up his valuable units, but this activity enables your patrol to spot them. Despite fire from the AA guns at CUU3, the scouts radio the map coordinates to both the 105s and your own mortars. For good measure, the M8s drive into D6V where they contact the German 20mm rearguard.

But your mortars dare not fire. Those at D7V have to move away from the nearby Panzers. Those at DV5/4 stay put, stay concealed, and also stay alive. Only the howitzers can fire, but they are busy trying to support the trapped infantry. The patrol's call must wait a few moments.

Holding their positions in Granclelles, the embattled American troops hear the 105 shells
The other Stuarts and an M8 withdraw into AY6. The rest of your light tanks concentrate in AY6. Their guns can turn on them. With the destruction of the Kraut AA guns at CQ5, your scouts now head for the west— their mission accomplished. They must race back through Wilm and Merden on their circuitous route to Caverge and an appointment with the enemy’s main body.

Having lost contact with the defenders at Nece forces you to shift the Granuckles units. To better meet the onrushing enemy, the Shermans in Nece move into AW7 to back up those in AV9. The crewmen jockey into their new positions only to hear over their own idling engines the sounds of the advancing Panthers. Your opponent is moving swiftly to concentrate his troops for the assault on Granuckles. The 'grenadiers remount their halftracks as they can to catch up with the panzers. The Hetzers and StugIIIIs reload their infantry riders too. After a brief pause to destroy the American mortars at DW1, the M4s get away. The German drivers floor their accelerators to careen toward Nece before your guns can turn on them.

The cost for holding up the Germans for nearly six turns has been heavy. The 114th Infantry is now down to one-third of its strength. Between the concentrated armor fire and the two-to-one odds enjoyed by the German troopers, your men have been overwhelmed. With them went the mortar section at DV5. The US mortar crews at DW1 are pinned. (Illustration #5 shows the end of American resistance in Nece.) The panzer leader is over halfway to his decisive victory, but he must move forward now to deliver the coup de grace. His panzers roll ahead even as the last grenades are exploding in the woods and the last GIs are rounded up as prisoners.

With the destruction of the Kraut AA guns at CQ5, your scouts now head for the west—their mission accomplished. They must race back through Wilm and Merden on their circuitous route to Caverge and an appointment with the enemy’s main body.

Your defenders lean into action. The Shermans and a troop of Stuarts immobilize the Krauts in AUS. Your available infantry company jumps into close assault on the pinnned armor, but scores no kills. The Shermans and Stuarts fall back into the south side of town (to AW7) and avoid retaliatory fire. The rest of your light tanks concentrate in AY6. Their job is to hold off the Germans who will soon be attacking the south side.

Lacking visible targets, the panzers must advance into the city. Panthers and tank destroyers are joined by the engineers and the panzergrenadiers to press in from north and south. Redoubled German might is sure to hammer the defense. Your tankers in AW7 again spit steel. Again their fire shocks the enemy. A stack of Hetzers, Panthers and infantry in AV9 is pinned by two troops of Shermans. The rest of your tankers pour fire into AUS, but this time cause little damage. Again the tankers pull back; too many panzers are left unpinned to let your men hold.

The Shermans and Stuarts move back into AW6 while the other Stuarts and an M8 withdraw into AY6. Meanwhile the entire western edge of town is held only by scouts and halftracks. You’ve smart enough to realize that any further stand by the infantry would be suicidal. The tank infantry’s bullets ping and splatter off the sides of trucks and halftracks as the GI’s pile aboard and make haste for Caverge.

Back at the exit area, your artillery stood idle (for Turn 7 and 8) due to a lack of spotted targets that remained in place long enough to hit them. An infantry platoon slipped into AQ4 to help spot Germans moving into the city, but the guns couldn’t catch the ‘grenadiers before they gained the cover of the buildings. On the other side of the city, the lone surviving mortar platoon also moved into spotted positions, but had similar luck in calling in fire missions.

Reports from your armor retreating into western Granuckles reach you just as the scouts return to Caverge from their combat patrol. With the deteriorating situation in the city, you hastily cram the nearby woods with the arriving scouts and the withdrawing infantry. More troops fill up the northern half of Caverge. It won’t be long now.

**EXPERIMENTAL RULES**

The experimental rules mentioned in this footnote may be used to add extra dimension to many of the situations in the PL/PB system. We’d be interested in hearing your views on these, and how they may affect your play.

**Rule D: Woods hex Conspicuum Potential.** The table below sets forth the number of units, vehicular and non-vehicular, which may set up unspotted in hexes containing partial wooded cover. Cover is defined by the fraction of the hex which is cover by printed tree symbols. Mounted non-vehicular units count as vehicular.

<table>
<thead>
<tr>
<th>Wood Percentage</th>
<th>Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>0</td>
</tr>
<tr>
<td>33%</td>
<td>1</td>
</tr>
<tr>
<td>50%</td>
<td>2</td>
</tr>
<tr>
<td>66%</td>
<td>3</td>
</tr>
<tr>
<td>75%</td>
<td>4</td>
</tr>
</tbody>
</table>

Use of this rule simulates attacking forces having moved into their jump-off positions under cover of darkness or adverse weather.

**Rule E: Designated Targets.** It was common practice for defenders who were in an area for more than a day to coordinate with available indirect fire support for pre-arranged fire missions. Defenders would register test barrages in areas through which enemy attackers would likely be advancing and arrange short code numbers for each target. Supporting guns and mortars would then be able to react quickly for such missions. Therefore, any player who sets up defensively, but not in a "hasty defense", may record any agreeable number of pre-designated hexes for on-each turn to pin down the opponent. Designated targets must remain spotted during the mission, but such barrages may be called in as Opportunity Fire. (This is an exception to the rule prohibiting indirect fire as Opportunity Fire.)

**Rule F: Prepared Positions.** The first thing an infantryman did on reaching any new position, unless it's behind a heavy vehicle or not a "hasty defense", may record any agreeable number of pre-designated hexes for on-each turn to pin down the opponent. Designated targets must remain spotted during the mission, but such barrages may be called in as Opportunity Fire.
before your armor pulls out.) The Shermans loose everything they’ve got in one last volley into the panzers in hex AW7, but fail to deter the enemy. Their fire does hold open the escape route for long enough. The Stuarts and M8s from AY6 zigzag through the narrow streets en route for Caverge. When the light tanks break into the open, your 105s rip into the earth around the menacing Panthers just heaving into sight at AW4. 57mm shells from AT guns and 37mmms from scout cars in AR4 join in. The German armor sheds every shell as if you were throwing spitballs. The Panthers proceed to atomize the first troop of Stuarts before they can reach the village. Your M8s make it to safety, but the second troop of Stuarts is held up by the exploding wreckage of their friends.

Now, the last remaining American tanks must evacuate Grancelles. They frantically motor past the Panthers which just blew apart the Stuarts. Some of the 105 shells fall short of their target and threaten the Shermans, but your tanks make it to AU3. The last GIs out of town are a rearguard of halftracks and M20 scouts. They gain Caverge seconds before the Germans occupy western Grancelles in the last turn.

So the panzer leader gains only an absurd climax. He possesses the city, but none of his units (aside from the panzers) dare try to advance further. Thanks to the stubborn American delay in the city—and particularly in its western half—your opponent’s only choice is to run the gauntlet of waiting guns, or concede the game. In the face of your concentrated and carefully husbanded guns, he’s sure to lose enough of his thin-skinned units to hand the Yanks a decisive victory—while he may or may not achieve a marginal win himself. All you’d have to do is hold fire until his trucks and halftracks come into your sights at half-range.
The American "stick-and-move" tactics can rob the enemy of the one thing he is always short of—time. You are outgunned, outmanned, and yet can pull off a decisive victory in Situation #2. Tenacity enables the American player to exchange places with the panzer leader, and put him between "the rock and the hard place".

As PANZER LEADER enthusiasts know, any set of tactics or any one strategy is simply a rung on an evolutionary ladder. It’s my hope that this set of ideas merely allows gamers to play on my most recent landing step. Whether that’s a rung up, down or sideways for you—happy gaming!

Prelude... \*Cont'd from Page 45

first, suppose that the 9th SS Recon had left elements behind to secure the Arnhem bridge when it crossed heading south to Nijmegen; second, what might have transpired if the 2nd Battalion C Co had avoided ambush at the station and arrived intact at the bridge? I suggest that both the situations be played at the same time by providing the German with the ability of setting up 9th SS Recon units (three 4-6-6, two 3-3-10, four 3-2-8 and the 2-7-6) in any area containing a red circle with a white numeral. Then add C Co (nine 4-7-5s and the 2-8-5) to the set-up list for the British and have it commence play in Zone D on Turn A. An engagement will develop immediately which will force the British to risk all to reach the VP areas and hold them. Use German VP determination on Turn I as per the rules of "The Crossing". This is a simulation of what might easily have transpired, and is fascinating and fun to play since it alters the battle’s complexion.

In closing let me say I have chosen these points of discussion in hopes of constructively criticizing some portions of the game which I feel lacked a degree of authenticity. The revisions may appear to be serious, and admittedly they will alter some aspects of play. Nevertheless, I have attempted to keep my suggestions within the basic framework of the game’s mechanics—which are the heart of this unusually well-designed simulation. I am very conscious of the designer’s desire to keep STORM OVER ARNHEM short, playable and realistic: I believe my revisions support that end.

BACK ISSUES

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

14-3: AFW—H, DN, S, Q; TRC—S, SR; STAL—SR; WAS—V, PB—Sc
14-5: SL—H, A, DN, Q; WSIM—A; TRC—S; MD—S, SST—S, SR—S
15-2: PL—V, Sc; STAL—V, SR; DD—DN; RB—S; VTP—S
16-1: AZ—Sc, S, DN, JR—E, PF—V, PB—SR; 1776—S, DIP—S
16-6: DUKE—A; DIP—V, O–V; AZ—DN, Sc, SR, PB—A, PBM
17-4: FE—S, P, DN, V; MD—V, Q; COI—SR; VTP—S; 1776—S; WO—A, SST—V, NAP—S
17-5: CM—E, V, Q; RW—V, Sc—V; STAL—V; PL—S, JR—S, SR; CAE—V, KM—S; MR—S
17-6: STAL—S; WSIM—V, Sc; WAS—V; JR—SR; SL—S; TLQ—C, Sc; VTP—V, TRC—S
18-1: FITW—A, Q; BIS—S, SL—S; DUNE—V; DIP—S; AK—A; PB—SR; AL—S; WAP—S
18-2: AF—A, Sc, Q; AK—V; SR—DN; TB—V, SL—S; Sc; AW—V; VTP—S; DIP—S; DD—S
18-3: GOA—S, DN, V, Q; AOC—V, Sc; AK—V; VTP—V, SL—S; Sc; WSIM—SR, P; DIP—S
18-6: FT—A, Sc, V, DN, VTP—V, Q; MD—S, Q; 507th—A, Q; SUB—BL—V
19-1: SOA—A, V, DN, Q; TLQ—A, Q; 3R—S, Q; DWTQ—DN; TB—A
19-2: BB—H, Sc, S, DN, TLD—A, Q; SL—V; 3R—S; SOA—SR
19-3: GSL—A, Sc, V, S, Q; DIP—A; RW—Sc, GE—V; 1776—S; LRT—Q, V; SL—A
19-4: CTY—A, V, DN; CM—V, DIP—A; GL—V, AL—V, TR—Sc; WO—Sc; SLA—3R, Q
19-5: SON—A, S, H, Q, WAP—Q, Sc; DIP—A; WAT—V, WSIM—Sc—A, SL—A
19-6: VTP—BPM, SR—V, Q; DIP—A; FT—V; BS—V, NW—A, Sc—K; SUB—V, Sc
20-1: GI—A, DN, V, Q; VTP—VIR
20-2: ITA—A, DN, S, Q; MR—V, LRT—A, SL—Sc; WAP—V; GOA—Q; DIP—A; PL—V
20-3: FRED—S, V, Sc, Q; PB—A; 1776—S; DWR—V; V, Q; DIP—A; CON—V, S
20-5: BR—SR, S, H, Q; LRT—V, DIP—A; GSL—Sc; GE—A; WSIM—Sc; SON—Q
20-6: B17—A, V, Sc, QR; AV—V, LF—V, LS—V; FE—V, DIP—A; MD—S; BR—SR; GOA—Sc; SL—A; PL—Q
21-1: UP—S, A, BR, DN, Q, SOA—S, GI—H, S; TRC—S; DD—S
21-2: NAB—S, DN, WAP—A, S, Q; NAP—S, Q; DIP—A; FR—S, FE—S; 3R—S; BFI—S; 1776—S, SL—A
21-3: BR—SR, Q, JR—S, SL—A, H; SOTN—V; DIP—A; FRED—S; FE—S, Q; SST—Q, TLD—S; PL—Lc; 1776—Q, SOA—Q
21-4: PGQ—S, Sc, PB—A, JR—S, TRC—S, V, Q; DIP—A; FT—V, STL—S, SC—PK—Q
21-5: HW—S, V, A, MR—S, Q; OR—A; DIP—A; 3R—A; RB—S; CON—V; CIV—S, SL—A
21-6: FP—H, V, SR, AW—S, Sc, BL—V; TAC—V, Q; SL—A; PK—Q
21-7: PAA—A, Q, TB—V, A; DWTQ—DN; TR—V; GSL—BPM; DIP—A; AOC—S; WAS—Q, Q; 3R—V, CIV—S, 3R—S, Q
21-8: BANZ—A, SR, Q; FT—A, S; SUB—Sc; VTP—Q, Q; AK—Q
22-3: BR—SR, S, Sc; SR—V, Sc; SOA—Q, Sc; DIP—A; 3R—S, V; TB—V, SC—DIP—A; AL—V, DIP—A; SL—S, TLD—S
21-11: PL—V, VL—V; B17—V, DN, HW—V, Q; VTP—V; 3R—S; TT—V; LW—V, SST—V, RW—V
22-3: ASL—A, S, Sc; QR; BR—SR; UP—S, DIP—A; PL—A
23-3: SUB—V, Sc; ASL—S, Sc; BV—SR, HW—V, RL—V, Q; BB—A
24-4: EAA—S, DN, WAP—V, S, WSIM—Sc; SC—V; NAP—S, LS—S; YS—S, 3R—S, Q
24-5: KOTA—DN, Sc, Q; CAT—V, A; B17—V, Q; 3R—S; RW—V, AL—V, SL—Sc; WTP—V
24-6: JASO—DN, S, V, Q; FF—Sc; BB—S, DIP—BPM, CBM—S
24-7: ASL—A, S, Sc, Q; SOP—SR; TRC—S; FF—Sc; RP—S, DN, PGM—S
24-8: ASL—A, S, Sc, Q; SOR—SR; PL—S, 3R—S; DD—S, FE—S
24-10: DIP—A, A, H; HW—V, E; EIA—E, DE—E, VQ—Q; KOTA—Q
24-11: RW—H, D, A, SR, V, Q; ASL—V, Sc; FE—S; 3R—S
24-44: SASS—H, S, BR, Q; E17—V; ASL—S, Sc, Q; ASL—A, PG—G, 3R—S
25-1: 25th Anniversary Issue; KREM—S, DINO—S, MOV—DN, ASL—DN, Q
25-2: TAC AIR—H, S, SR; FP—Sc; PLA—S; MBT—DN, TRC—PBM, ASL—S, Sc, Q; AFW—S, AREA Revision
Dear Mr. Martin,

I've been poring over the 25th anniversary issue of The GENERAL for the past couple of days, and reminiscing and philosophizing. Thanks for a terrific issue!

Personally, I’ve spent most of my twenty wargaming years on the sidelines, keeping a low profile. I've never played a game in which the “perfect wargame” would appear. During much of this time, I've relied on The GENERAL to keep me in touch with the latest ideas, to buy and try a number of games I would otherwise have never heard of; and it has given me enough encouragement to try them that I've been able to consciously avoid buying them. And, as some of the writers in the anniversary issue aptly express, The GENERAL has also made me a part of the wargaming community all these years, that's been important.

If you think about it, I met Dr. John Green- wood for me that I was glad to see dinosaurs in my wargaming magazine (though I have no attention of buying the game), I was even glad to see the “Sports Special” column, though I didn’t read the articles themselves. The magazine for sports is roughly equivalent to my love of snails in the garden. And a feature article on KREMLIN, in my case, it was my father’s war stories that I’ve had a military history buff for as long as I can remember. But it’s only one phase of human adventure. And I think that a significant reason for my interest in wargaming is that I have a love for reading. And maybe The GENERAL’s influence is responsible for my variety of interests, and for the fact that I have looked at so many different wargames available. And I’ve been fortunate to find a few others of my kind. In high school, my wargaming partner there lived in a far reaches of the city, quite competitive. I had read a “perfect plan” article in The GENERAL and decided to give it a try. My mind’s eye and I don’t mind “perfect plan” articles, or probability analyses, or series replays. But come on—my “perfect plan” article gives me the chance to win the game! The several articles by the wargaming luminaries in the anniversary issue are all excellent, but they are written for the game—wargame discussions and thinking about wargaming’s experience.

In other words, there’s a place for descriptive articles as well as analytical ones. I’d be more than happy if the feature article simply described KREMLIN and me and the “Trills” and the “Tactical Advantage” and the “Historian’s Guide to Avalon Hill Wargames” and the “Gamer” and the “Socializer” and the “Historian” and the “Tactician” and the “Collector” and the “Tactician’s Guide to Avalon-Hill Wargames”. And I’ve been more interested in reading about the historical event that a wargame is based on; but nothing could be more interesting than to read about the history of the world. These two players happened to distort the historical outcome in this particular case, and one of them happened to win the first time. The GENERAL could feature a description of a gaming session on a new game without the mathematical or strategic analysis. Or maybe there could be cartoons, or another Alan Moon-type feature—something to break up the rigidity of the Competitors. Anyway, I really wrote this just to say thanks. You guys are doing a terrific job, and The GENERAL is better than ever. Best wishes for the next 25 years!

Patrick Carroll
New Hope, Minnesota

The Dreamer, who does not exactly cor-
respond to any of Freeman’s types, is into wargam-
ing for the刺激 of the antithesis. He is the antithesis of the Competitor, in that (he the Dreamer) lives for the “Trills” and prefers to remain “flush on” the “rigidity of the Compe-
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These are the three types of gamers I’ve encountered most often. But the “Dreamer” is probably the least common. And I’ve been fortunate to find a few others of my kind. I’ve met a few of my kind. And I’ve been fortunate to find a few others of my kind.

Dear Mr. Martin,

Being a loyal Avalon Hill fan and a subscriber to The GENERAL and a “Gamer”, is in it for the excitement and the enjoyment. For the Dreamer, a wargame is a vivid experience in imagination. He constantly wonders what would this situation look like in real life?

In case you discarded my solution as “not worthy of consideration”, here it is again: the object is to get two players happened to distort the historical outcome in this particular case, and one of them happened to win the first time. The GENERAL could feature a description of a gaming session on a new game without the mathematical or strategic analysis. Or maybe there could be cartoons, or another Alan Moon-type feature—something to break up the rigidity of the Competitors. Anyway, I really wrote this just to say thanks. You guys are doing a terrific job, and The GENERAL is better than ever. Best wishes for the next 25 years!

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Letters to the Editor...
As you study the horizon, you observe the scanty American positions on the Ghost Front. Beyond them lie the towns and villages that are your immediate objectives in your sudden thrust west: St. Vith, Malmedy, Houffalize, and, of course, Bastogne. Beyond those towns glisten the azure waters of your goal—the River Meuse. So you’ve carefully positioned your regiments, precisely calculated combat factors to maximize the impact of your initial attacks, anticipated your response to each and every potential combat result. All is in readiness to launch the great counterblow which will throw the Allies off the Continent. But before the thunder of rolling dice heralds the beginning of another game of BATTLE OF THE BULGE ’81, step back and ask yourself, “Do I really know what I’m doing here?”

My intent, in this article, is to offer some suggestions and hints on attaining those objectives that will bring about German victory in the “Outbreak/Tournament” scenario of BULGE ’81 (although many of them will be applicable to the longer Campaign Game as well). I harbor no pretensions that my offerings will guarantee the capture of Liege or the crossing of the River Meuse, nor do I profess that this work is exhaustive. Rather, I wish to illustrate how the German player can breathe new life into his game when it otherwise would be headed against a stone wall.

GERMAN STRATEGY

But before I get into tactics, I want to touch on a bit of strategy—for tactics are merely the tools which one utilizes to achieve a goal and are worthless by themselves unless those goals are clearly defined. In BULGE ‘81, those who would assume the role of von Rundstedt must recognize that the game system places a strong emphasis on movement, or to be more accurate on road movement. Equipped with a preponderance of mechanized units, the German is totally reliant on the vast highway network crisscrossing the Ardennes to maintain supply to his forces, to ensure the capability to redirect the offensive to certain specific sectors when necessary, and to ultimately deliver him to the Meuse. Of equal importance, the German must recognize that his opposite number is similarly dependent on the same road net, not only to convey reinforcements to the front but also to laterally reposition his defensive forces so that he presents a balanced front.

To the American player’s benefit, the road net (which incidentally was expanded and improved by the Belgians during the peace between the great wars to promote tourism) has more of a north-south flow than an east-west one. Moreover, many of the critical road junctions are located in towns conducive to the defense. Since the muddy terrain conditions in the early stages of the campaign will effectively deny mechanized off-road movement to the Germans, virtually all combat will take place for possession of these highway arteries. If the German can succeed in denying the Allied player free access to the road net through a conscious effort to interdict road junctions, either through direct occupation or with zones-of-control (ZOCs), then he will have disarmed the Ami’s ability to shift his forces to areas where they are most needed. The German will then have gained a small advantage which might later pay large dividends. Always keep this in mind: wherever possible, inhibit the movement of Allied units!

As an example, examine the mapboard in this context and note how important the town of Manhay is to the Allied defense. Without it, the American is divided in two. Should he desire to send a unit from the north to the south, or vice versa, he’ll probably have to take it out of his defensive line in order to perform the transfer, due to the lengthy alternate journey which the unit must undertake. Other road junctions deserve similar consideration, and one of my favorites to strike at is Trois Ponts. Envision how the Ami player must detour his travel between Malmedy and Werbomont if the Boche are able to exert a ZOC into Trois Ponts.

In short, the German strategy should be one to achieve a local superiority in a particular region of the front by not only attempting to eliminate defenders in the locale, but also to prohibit the appearance of reinforcements or reserves which can move in to fill the void. With that in mind, I’d like to propose that the German player give thought to developing a schwertpunkt which places maximum strength on the Bastogne-Trois Ponts-Malmedy axis. St. Vith is in an impossible position, and should be captured easily because the American cannot afford to defend it without jeopardizing other portions of his defense in the early stages of the campaign. Malmedy, on the other hand, is critical to the German and cannot be underestimated. Not only does possession of Malmedy deny the Allied player important supply points, but it also triggers the release of two SS panzer divisions that the German needs to sustain his drive west.

Looking further west, I reiterate that it is only necessary to exert ZOC into Trois Ponts; enter it, and you risk the consequences of watching the EE9 fuel depot explode in your face! (The loss of the Stavelot FOL depot can be tolerated because it’s difficult to seize anyway.) But to the southwest of Trois Ponts is the main focus of the German’s attention.

Historians have generally criticized Hitler’s decision to support 6th Panzer Army’s continuous series of unsuccessful assaults on Elenborn Ridge,
especially after it became evident that von Man-
tueffel's 5th Panzer Army had been successful in
breaching Allied defenses, and so deserved the
assistance of OB West's armored reserves. I sub-
mit that the German player should place emphasis
on instituting a strong drive in the southern sector
of the map from the onset. Only four American units
enter the southern map edge before 22 AM, so
opposition can be constructed only with the sur-
vivors of the Allied initial setup, plus whatever units
the Allied player assigns to the southern region.
A rapid thrust in that district might catch the Allied
player off balance and may cause him to demure his
northern shield as he addresses the southern
problem. A key artery is the Werbomont-Aywaille-
Ligne highway; a sustained drive in that direction
would pinch off the Hohes Venn and create a cer-
tain collapse in the north. Even if you decide not
to turn north, your foe will still be faced with the
difficult task of stretching his lines further west as
you head in that direction.

If you are fortunate enough to rupture the Allied
line, throw everything you can into the gap. Fan
out to expand the bulge, especially in the direction
of the Meuse. Don’t give your opponent time to
catch his breath. Every additional hex that you cap-
ture is one less upon which the American player can
rebuild his line.

**TACTIC: BRIDGE DEMOLITION**

Now that I’ve drawn an overall strategic pattern
to be pursued, I’ll touch on the first tactic which
the crafty German must consider as a valuable asset
in his arsenal. In the **BULGE Series Replay** (pub-
lished in Vol. 21, No. 3 of The **GENERAL**), the
German player attempted to demolish the bridge
spanning the Vesdre River at hex CC5 during the
20 PM turn. Frankly, I’m surprised that the German
player waited so long to do so, because the unit
positions of both sides clearly indicate that the
German could have tried such demolition during his
17 AM player-turn. In the early stages of the game,
when the Americans are hard pressed to construct
a cohesive barrier, the German has usually the
opportunity to attempt bridge demolitions.

The rules for demolition attempts are simple: draw
a supply road route from a friendly map-edge,
unfettered by enemy units or their ZOCs, to within
three hexes (four for the Allies) of the bridge you
wish to destroy, and ensure that an enemy unit is
one, two or three hexes from the bridge in ques-
tion. Tactical air power assigned to road interdic-
tion missions have no effect on the supply route.
Thus, if the Army is not able to exert a ZOC into
every road leading from the east map-edge toward
the west, then the German will have his supply roads
in the Allied rear. (On occasion, the German player
will create a supply road gap in the Allied line by
either eliminating a unit, or by driving off the unit
in a high-odds attack.)

But let us return to the bridge over the Vesdre.
It has been my experience that a demo attempt can
be tried at CC5 after the 17 AM German round of
combat, with the 16th Regiment of the “Big Red
One” in CC2 nicely serving as the trigger mechanism.
Lest you discount the meaningfulness of that river
crossing’s destruction, keep in mind that the 17 AM
American reinforcements will be somewhat limited
in their options if the Ami wish to send them south
towards Bastogne. Of equal importance, the Ami will
encounter difficulty later in the game when he
wishes to shift his forces across the Vesdre in order
to prepare a defense in the Spa-Verviers vicinity.

Bridge demolition can also be an effective means
of eliminating American combat command and
armored regiments. Under the **BULGE’81** rules,
armored units are not permitted to ford unbridged
rivers. Under the right conditions, it may be possi-
ble to blow up bridges immediately behind those
unit types, thus trapping them against the river.
In one game that comes to mind, three combat com-
mands were eliminated when the bridge in their im-
mediate rear was destroyed. The only possible escape
route was for those units to rebuild the bridge.
Needless-to-say, they never made it out of the
pocket.

A second advantage which the German may reap
through utilization of bridge demolitions is an ele-
ment that is a key facet in game playing, yet is
rarely addressed. I speak of the psychological aspect
that magnifies an action beyond its real or intended
effect. Like the “scuttlebutt” bred by the the
**SIEGFRIED** line, the American player is
inundated with rumors of enemy intrusions or
attacks, and is always faced with the possibility
that he may be the victim of a double cross. Dic-
ting the arrival of German units, the American
player will be faced with the psychological task of
struggling to believe the reports of invasion.

When the Americans are hard pressed to construct
their defense in the Spa-Verviers vicinity, they will
create a supply road gap in the Allied line by
playing the CRT requires a retreat (see Figure 1). Granted,
this "retreat forward" which I am advocating does not
provide the flexibility of a nice “Blitz 3” or
"Blitz 4" result; but it does impose the possible
intrusion of a German unit into a gap in the Allied
lines and makes the “Attacker Back” result more
palatable. So, as with the Blitz tactic, we will
threaten to undermine the American defense; hope-

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**TACTIC: BLITZKRIEG**

In any discussion of **BULGE’81**, it is inevitable
that the topic of the “Blitzkrieg” attack will be men-
tioned. I’m being less than precise in using the term
“attack” to describe the blitzkrieg tactic, because

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**Figure 1:** The German 326/751 Volksgrenadier Regiment attacks the American 1/26 at 2-1 odds. On a die roll of “3-6”, the Volksgrenadiers on the right would destroy it. The German supply source at the moment of retreat, the Germans may “retreat forward” in that direction. Otherwise, the unit is obliged to retreat back to St. Vith.

**Figure 2:** The American 3/32 armored regiment in Huy is attacked by German units; three are located in N7 and one is positioned in N6. An “Attacker Back 1” is rolled. The German player opts to retreat to 07, but he rolls the 1SS2. That unit must now retreat to 06. In the following turn, the 1SS2 could move off the north bank of the Meuse River.

**Figure 3:** The 18th Volksgrenadier Division’s 294th and 295th regiments attack the 106/423rd at 1-1 odds with a -1 die roll modifier. If an “Attacker Back 1” is rolled, the 295th must retreat to Pmm. The 294th, however, can retreat into either RR18, SS19 or TT18. By retreating into RR18, the 294th will force the 106/423 to expend a considerable amount of movement factors to escape the Schnee Eifel pocket.
fully, the Ami will, in turn, react by either readjusting his defense to minimize this possibility or will withdraw sections of his defense line to more manageable positions. Either way, the German player has gained another small advantage which down the road might make the difference between a win and a loss.

One variation of the `retreat forward` tactic involves the interrelationship of retreats and stacking restrictions. Rule 19.1.2 states that retreats are conducted one unit at a time. So try to sequence individual retreats so that one of your units is forced to move into a hex more suitable to an offensive posture in the next turn (Figure 2). A second variation can be employed to inhibit the movement of the unit you assaulted (Figure 3).

While I’m on the subject of retreats and advances, I’ll touch on one of the more frustrating experiences that the German will encounter when playing BULGE ’81. The situation: the German makes a high-odds attack against an American unit, only to have the unit receive the “Defender Back” result. The German cannot advance because the Ami has “backstopped” the defender with a second unit directly behind the defending unit, but the defender is allowed to execute the “Defender Back” result in a variety of ways. Occasionally, the defender will be in a position to fall back into a town or other location suitable for the defense, and will fortify himself in the American player-turn. To minimize the likelihood of this happening, the German must always ensure that he has positioned his units to limit the available retreat routes should a “Defender Back” result be rolled. Additionally, friendly non-combatants can be utilized to disrupt the retreat routes which Allied units might use to fall back upon suitable positions. The rules do not prohibit the defender (or attacker) from making a “Defender Back 4” result only a three- or two-hex actual retreat, so do your utmost to dictate the route through which the Allied units can be retreated. (See Figure 4.)

**TACTIC: CRT**

So far, everything I’ve discussed here has dealt with the significant effect which the road network can have, either directly or indirectly, on the play of BULGE ’81. But this exercise, one way or another, has been also related to the CRT. I’ll now address that table; without mentioning it, you will still not comprehend the nuances of BULGE ’81.

I’m in strong agreement with Bruno Sinigaglio (the game’s designer) when he states that the CRT is “bloodless”. Indeed! What other “classic” wargame offered by The Avalon Hill Game Company allows the defender a 50% chance of surviving an attack at 8-1 odds with nary a scratch? No “Automatic Elimination” to be found here! An inexperienced German player will find that (barring incredible rolls of the die) utilizing the approach of moving his troops forward, attacking at the highest possible odds, and praying for “Defender Eliminated” and “Defender Back” is not going to cut the CRT simply yields too wide a variety of combat results to generate any kind of consistency.

In order to achieve success, the German must evaluate, on a per-turn basis, the overall Allied defense. Only then can he determine how and where he should attack. But the attacks must compliment your overall strategy, or, otherwise, you’re simply striking out blindly hoping to achieve a breakthrough somewhere. This approach will not do. The German player does not have the time to bludgeon his opponent; he must employ a rapier-like thrust to disorganize the defense of his enemy and then breach his lines while resistance is minimal. To do this, the German must allocate sufficient resources to those areas deemed paramount to the achievement of his strategic aims. Some attacks may warrant high-odds attacks along with the allocation of heavy artillery (20+ factors) and air support; others may require only nominal odds to secure possession of a hex. If you need to capture a hex, then an unmodified 7-to-1 attack will do the trick. Don’t employ 8-to-1 odds, because I’ll wager that those additional attack factors could be better used elsewhere. If you can’t afford to suffer an “Attacker Back” result in a particular attack, then suck it up and gather the forces necessary to obtain 3-to-1 odds.

Secondly, Allied infantry are vulnerable to being locked in an “Engagement”. Accordingly, consider directing low-odds attacks at these unit types to immobilize (and later eliminate) them. To do so, the German must have the foresight to move friendly units on one/both flank(s) of the defending infantry. If an engagement occurs, you will be in a position to surround and destroy the enemy infantry in the following turn. But be aware that the units participating in the initial attempt to engage must be placed to accommodate the stacking of stronger units needed to finish off the engaged defender in the next turn. It would be rather embarrassing to be successful in gaining an engagement, and then find there’s no place to put reinforcements.

On other occasions, the German might deny his opposite number a local reserve by attempting to engage infantry in a region, while simultaneously attacking other units at high odds. The American will be pressed to plug gaps in his line when some of his units are tied up in engagements. Finally, keep in mind that German armor can occasionally attack infantry in doubled positions at 1-to-1 odds to freeze the defender in place; in the subsequent turn, the armor can move off while other units finish off the defending Americans.

The “Exchange” combat result, in most cases, benefits the German because the Ami start the game suffering from “unit starvation”. Keep him hungry! Unless you have a particular reason for not doing so, make the effort to ensure that an exchange is possible in each of your attacks. Furthermore, try to keep the more expendable Volksgrenadier regiments at hand to suffer the required loss.

**TACTIC: UNIT CAPABILITIES**

An understanding of unit capabilities should be beneficial when plotting the movement of German forces. Each unit type has its strong and weak points. As an example, the Volksgrenadiers can serve in several supportive roles.

As you advance west, you’ll have to strip off units to garrison the roads that lead off the northern and southern edges of the map. Otherwise, the Allied player will be able to draw supply lines in your rear. To initially construct the line in the south, you will find that three Volksgrenadiers are needed to secure the O034-Z33 entry hexes; one must be placed in WW34 to foil the entry of 4/8 22nd Regiment. (Don’t site the unit in Echternach or the Composite Regiment will enter at WW34 and attack at 1-to-2 odds; if it incurs a big retreat, you’ll have to weaken your front to chase down the intruder in your rear.) A second unit can be placed in either MM31 or MM32; I prefer the former. The third unit should be located in either Z31 or CC31; Z31 is desirable to negate the Allied threat of bridge demolition, but you may need to occupy CC31 to avoid the creation of a supply route from Redange through HH28 into your rear unless that bridge was destroyed. (As you can surmise, on a few rare occasions one can actually benefit from losing a river crossing.)

One other advantage which the Volksgrenadiers have over their motorized cousins is the ability to move rapidly across clear terrain. The quickest route from Houffalize to La Roche is overland, so have the infantry on hand to probe across such expanses of clear terrain. I’ve already spoken about the vulnerability of infantry to “Engagement”. Try to remain adjacent to as many of them as possible, lest they improve their positions. A formidable wall of forts/improved positions is one indication that the Allied player is getting the better of you.

The armored cavalry and the combat commands have a common deficiency: they cannot maneuver through wooded terrain. Keep your eye out for such a unit when it can be cornered against a forest. The armor have an additional “Achille’s Heel”—a lack of mobility. While many of them have large combat strengths, you might be able to isolate them from the overall defense by trying to infiltrate around their positions or by securing a “Contact” or “Engagement” when they are off-road. Even if the armor can move away, its poor off-road performance will leave it out of sync with the defense and may allow it to become a target for elimination.

The Allied corps artillery are a powerful asset to your opponent. Most likely, you will see them positioned directly behind the infantry/armored unit to which they are allocating defensive fire support. In this manner, they thwart any possibility of advance combat. I can only suggest that you carefully look for the opportunity to execute the 6-to-1 “Artillery Overrun”, especially in the early stages of the contest. A real nightmare presents itself when the Allies begin to ravage your line with the artillery firepower they have amassed.

Keep your own artillery out of harm’s way too. This won’t be too difficult with the ranged weapons, but the Nebelwerfers pose a problem because they must move right up to the line to attack. Always have them accompanied by a non-artillery unit, and
be certain that you've considered how you will perform an exchange or advance when the Nebelwerfers are present. The Ami will swoop down on them, if they are left unattended, like a hawk on a brood of chicks!

CONCLUSION

My final remarks relate to the all-important first turn of the game. Simply put, you've got to get out of the blocks quickly while the gettin's good. If momentum cannot be generated at the start of the campaign, it will be extremely difficult to sustain as the match progresses.

Most of my BULGE '81 games are played through the mail, and the Einheit Stellung optional rule cannot be readily incorporated into those games. To compensate, the German player is given the "SS Panzer Commitment", the Von Der Heyde paratrooper, and the 150 Brigade optional rules. The Allied player is allowed the favorable "Armor Attack Restriction" option, as well as the advantage which PBM naturally bestows upon the defender by allowing him to review all combat results before performing required retreats.

Bob Beyma's opening assault (published in Vol. 19, No. 2) is quite solid. I can offer only two minor adjustments which I feel further enhance its potential. The first is that which I noted earlier on the attack versus 99/394. The second requires that the 5/15 Luftwaffe mechanized regiment be put in T24 in the attack on 9th CCA. The 5/15 contributes little to the original attack on 28/109. Its placement farther to the southwest allows the German to threaten the road to Martelange, especially if 28/109 and 4/12 are both locked in engagements.

I hope that my offerings will spark a renewed interest in the game I consider to be one Avalon Hill's better efforts. More importantly, I trust that you'll be able to include my suggestions in the German offensive repertoire with good results. You can take them to the bank . . . of the River Meuse!
The "Anniversary Issue" of The GENERAL (Vol. 25, No. 1) brought a wave of letters, and a 2.89 Overall Rating. Not surprisingly, Don Greenwood's reporting of a KREMLIN game to introduce this fascinating design dominated the polling, with twice as many votes as any other single article. Another method I use to judge interest in what we've presented, however, are the letters from readers; if they have taken the time and expense to write personally, then obviously we've managed to excite them. This time, we received quite a few letters about "The Editors Speak" and "An Anniversary Smorgasbord," as well as debating the views of Mr. Owen and Mr. Rivas. If nothing else, besides being fun, this issue caused some to give thought to who we wargamers are and where we are headed. Speaking for the 25 authors (21 in the "Smorgasbord") along with the three editors and Mr. Rivas) who contributed, I am sure this was the intent. Based on a random sampling of 200 responses, the ratings for all the articles are as follows:

**BLOOD IN THE POLITBURO** ........................................ 394
**AN ANNIVERSARY SMORGASBORD** .......................... 186
**THE EDITORS SPEAK** ............................................. 111
**A HISTORIAN'S GUIDE TO AH WARGAMES** .......... 97
**DINOSAUR HUNTING** .............................................. 79
**PUTTING SPICE IN SPACE** ....................................... 61
**THE TOP TURRET GUNNER** .....................................
**DOESN'T ANSWER** ................................................ 49
**COMING ATTRACTIONS** .......................................... 43
**AH PHILOSOPHY** .................................................. 22
**SECOND FLEET EXPANSION** ..................................... 18
**SPORTS SPECIAL** .................................................. 15
**COMPUTER CORNER** .............................................. 10

Mr. Steven Wheeler's in-depth look at the Bulge scenarios for the old favorite PANZER LEADER has brought him the Editor's Choice Award for Vol. 24 of The GENERAL. "Fighting the PANZER LEADER" appeared in the second issue of last year and (response to it encouraged Mr. Wheeler—thankfully—to produce more on this classic game, including the article in this issue). As always, the competition was most impressive, and Mr. Wheeler's effort just barely edged out fine articles by Mark Nixon on THIRD REICH and James Werbaneth on FIREPOWER. Mr. Wheeler will receive a $100 bonus for the award, plus a lifetime subscription to The GENERAL. The complete list of nominees and their percentage of the total votes cast by responding readers is as follows:

**FIGHTING THE PANZER LEADER**
by Steven Wheeler ........................................ 20.6%

**AXIS SOUTHERN YEARNINGS**
by Mark Nixon ........................................ 17.8%

In Contest 143, the best chance to save of Leonid was to play the "Visit Sanatorium" card on him immediately. But only two of the many respondents to our KREMLIN contest thought of that trick—David Belado of Burnaby, BC, and Gerald Daiker of Duarte, CA. And that gave them control of Karrienko. The sneak assassination of Palaverian and denunciation of Schukroff immediately followed. And both winners in Contest 143 used the "Cuban Missile Crisis" right after the Health roll to bring Bungaloff back for his attempt to Wave at the end of the fourth turn, something we'd overlooked.

Contest #144 posed the most basic of problems for TAC AIR—how to set up the American units in Scenario 1. There are, as Craig Taylor noted in the Series Replay (page 12 in Vol. 25, No. 2), two approaches to defending T22: a "tight" defense and a "forward" defense. Regardless of which was chosen, any solution must begin with all units in supply and in command to be considered valid. With this as a starting point, each approach can be refined:

- **Tight**
  - 9th Engineer:
    - O16
  - 223rd Helicopter:
    - Q20 P16
  - 3/7 Air Def HQ:
    - R21 R21
  - A/3/7 Air Def:
    - T21 R20
  - 3/7 Supply:
    - Q20 O21
  - 2C HQ:
    - T22 S18
  - 2C Artillery:
    - T19 S16
  - 2C Art Supply:
    - R20 S17
  - 2C Helicopter:
    - X20 W16
  - 2C Armored:
    - V21 R14
  - A/C Cavalry:
    - W18 Y12
  - B/C Cavalry:
    - T18 T11
  - C/2C Cavalry:
    - Q18 N12
  - 2C Supply:
    - T20 S15

Regardless of which approach was taken, certain other precepts were also expected. The artillery and air defense units are placed so as to cover all ground units. An enemy approach along the east bank is to be guarded against. The 9th Engineers are placed so as to defend Dresacheckigdorff, making maximum use of their special abilities in this regard, from which they could fall back to blow bridges should the need arise. Helicopters were placed to guard and extend the flanks. Headquarters and supply units were placed in well-protected locations, and with the ability to retreat away from enemy penetrations. As stated in the contest there are many minor points to be considered—and a great deal of latitude was allowed in judging the entries so far as these are concerned. But the above should govern the American defensive set-up, regardless of whether "tight" or "forward."
5th Fleet examines the strengths and weaknesses of the Soviet and American navies, plus their respective allies, in the vast expanse of the Indian Ocean. Far from their home bases, each superpower’s capital ships, attack submarines, and limited air assets must be protected from the devastating firepower of modern missile, torpedo, and bomb attacks while inflicting maximum damage on the enemy. The shifting military and political alliances in the area and the presence of the modern Indian Navy are variables that will strongly affect future war in these troubled waters. 5th Fleet, with its multitude of options and strategies, continues VG’s line of realistic simulations of modern naval combat.

Included in 5th Fleet are three 22" x 32" maps, 480 playing pieces, 260 information markers, rules booklet, two charts and tables booklets, two logistics roster pads, two strategic air displays, three scenarios set-up cards and one decimal die. Nine Basic Scenarios and Three Advanced Scenarios.
WHAT HAVE YOU BEEN PLAYING?

Top ten lists are always in vogue—be the subject books, television, shows, movies or even games. The public seems never to tire of seeing how its favorite way of spending their leisure time stacks up against the competition. So, to cater further to your whims (and to satisfy our own curiosity), this is THE GENERAL’s version of the gamer’s top ten. From the responses to this form the editors produce the regular column “So That’s What You’ve Been Playing” found elsewhere in this issue.

We aren’t asking you to subjectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or fewer) games which you’ve spent the most time playing since you received your last issue of THE GENERAL. With the culling of these responses, we can generate a consensus list of what’s being played by our readership. This list can serve both as a guide for us (for coverage in these pages) and others (convention organizers spring instantly to mind). The degree of correlation between this listing, the Best Sellers Lists, and the RBG should prove extremely interesting.

Feel free to list any game of any sort regardless of manufacturer. There will be, of course, a built-in bias to the survey since the readers all play Avalon Hill games to some extent, but it should be no more prevalent than similar projects undertaken by other periodicals with special-interest based circulation. The amount to which this bias affects the final outcome will be left to the individual’s own discretion.

CONTEST #145

List the unit to act (and its initial hex location), and its movement or combat. If moving, the final hex occupied must be listed. If firing, the target and odds. If engaged in close combat, both movement and combat must be listed. If additional space is needed for your response, please append an extra sheet and follow the format below:

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<th>U.S. Unit/ Location</th>
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<th>Target Attacked &amp; Odds:</th>
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Issue as a whole (Rate from 1 to 10, with “1” equating excellent and “10” terrible).

To be valid for consideration, your contest entry must also include the three best articles, in your view:

1. 
2. 
3. 

NAME

ADDRESS

CITY STATE ZIP

Name

Address

City State Zip

Opponent Wanted

50c

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2. For Sale, Trade, or Wanted To Buy ads will not be accepted. No refunds.
3. Insert copy on lines provided (25 words maximum) and print name, address, and phone number on the appropriate lines.
4. Please PRINT. If your ad is illegible, it will not be printed.
5. So that as many ads as possible can be printed within our limited space, we request that you use official space and game abbreviations. Don’t list your entire collection, list only those you are most interested in locating opponents for.

NAME

PHONE

ADDRESS

CITY STATE ZIP

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ADDRESS

CITY STATE ZIP
BRING UP THE GUNS

ASL SCENARIO G7

COEVorden, HOLLAND, 10 May 1940: The German 1st Cavalry Division, attached to the 18th Army, had taken up positions along the frontier of eastern Holland. The division’s 1st Mounted Regiment had drawn the task of protecting the divisional artillery, and insuring that it rapidly reached a position from where its support could be called upon by all elements. The regimental commander, Lt.-Col. Wachsen, determined to crack through the 20-kilometer deep Dutch defensive belt at Coevorden, an important frontier post. The second squadron was given the task of silencing the rather large garrison of border guards stationed there. As soon as this was accomplished, the first batteries were to gallop forward onto enemy soil.

BOARD CONFIGURATION:

BALANCE:

\( \checkmark \) Shorten playing time to 6 Game Turns.

\( + \) Delete LMG from Dutch OB.

VICTORY CONDITIONS: The Germans win immediately when they have Exited \( \geq \) three wagons towing 75mm guns off the west edge of board(s) 4/33.

TURN RECORD CHART

\( \checkmark \) DUTCH Sets Up First

\( + \) GERMAN Moves First

** Frontier Guards [ELR: 2] set up within six hexes of 33R8, but not on east-of hexrow Q: \{SAN: 4\}

** Elements of 1st Mounted Regiment [ELR: 4] enter on Turn 1 on east edge: \{SAN: 2\}

** 2nd Battery, 1st Mounted Regiment enters on any one turn on 33A6:

SPECIAL RULES:

1. EC are Moderate, with no wind at start.
2. Wire may not be set up in Road hexes.
3. The German guns have no crews, nor may they be unlimbered or fired during play.
4. Due to the nature of the paved roads, a wagon towing a Gun expends only 1MF to enter a new hex by crossing a road hexside.

AFTERMATH: The troopers of the squadron, who had not seen action before but had a youthful sense of adventure, treated the attack as a mere exercise. Galloping forward, their initial rush was checked by a light scattering of fire from the Dutch border guards. Shocked at actually being fired upon, it took a few minutes for German NCOs to corral their charges and get them dismounted. Once in place, however, the cavalrmen made short work of the opposition and white flags broke out at the border post after only 15 minutes. Mounted up, the German troops waved the artillery through and then followed after, leaving only a dozen wounded behind to guard the prisoners—whom no one seemed to want to take responsibility for. Within 30 minutes, the 1st Regiment had penetrated a full three kilometers into Dutch territory, often trotting over ground that would have been impassable to motor vehicles. By evening, the entire 1st Cavalry Division had reached all objectives; and after the first two days of the war, had covered 180 kilometers against disintegrating opposition.
### FIRST CRISIS AT ARMY GROUP NORTH

**ASL Scenario M**

Northeast of RASENIAI, LITHUANIA, 25 June 1941: When Army Group North moved toward the River Daugava (renamed Dvina by the Soviets), the Russian command responded by detailing the 3rd Mechanized Corps to meet and destroy Manstein's units. On June 24th, the Soviet armored force made contact with the 6th Panzer Division, the spearhead of XLV Panther Corps. Over a hundred of the Soviet tanks were the super-heavy KV models. The size and power of these stunned the panzer crews and baffled the AT gunners; neither seemed to possess a gun that could penetrate the armor of their opponents. The German advance was halted and the 6th Panzer Division cut off. The following day, the 1st Panzer Division was ordered to relieve and reinforce the 6th, while the Soviet force moved to continue its advance. These two efforts immediately collided.

### BOARD CONFIGURATION:

![Board Configuration Diagram]

### VICTORY CONDITIONS:
The Russians win immediately upon exiting three AFVs with functioning MA off the west edge of the mapboard.

### TURN RECORD CHART

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<th>TURN</th>
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<th>4</th>
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<tr>
<td><strong>GERMAN Sets Up First</strong></td>
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<td><strong>RUSSIAN Moves First</strong></td>
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### Elements of Panzer Division 1 [ELR: 4] set up on/west of hexrow Q: {SAN: 3}

![Panzer Division 1 Diagram]

Enter on Turn 1 on the west edge:

![Entree Diagram]

### Elements of 2nd Tank Division [ELR: 3] enter on Turn 1 on the east edge: {SAN: 2}

![Tank Division Diagram]

### SPECIAL RULES:

1. EC are Moderate, with no wind at start.
2. The German crew must set up loaded in a SPW 251/1, with the 37mm AT in tow.
3. No unit may use Road Bonus (B3-4) nor the half-MP road rate.
4. Bore Sight is NA.

### AFTERMATH:
The Soviet heavy tanks outclassed the German defense and simply drove through the German units toward their objectives. The German armor commanders responded with careful maneuver and precision fire, turning their tanks around to follow the Russian advance while the infantry attempted to close assault the Russian behemoths. These tactics eliminated a few Russian vehicles, but the rest continued their steady advance until they ran into German AA and artillery positions in the rear. Unlike the AT and tank guns, these weapons had a fair chance of penetrating the thick armor of the Russian tanks. The Soviet advance ground to a halt. A rapid German counterattack threw the confused Russians back about two miles and ended the crisis.
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