The end of yet another year comes upon us and as is traditional, it is time to collar the designers and find out what they have in store for us in 1987. Despite their natural reticence, I managed to pry the following brief descriptions out of them. Each of these games bodes to be a great hit, a remarkable statement given the gamut of these:

After several interruptions, our WWII solitaire tank game, PATTON'S BEST, is nearing completion. The remaining work consists of smoothing out problems found in playtesting, correcting and designing the various charts and tables, and completing the rules. PATTON'S BEST should be available in February.

Another project planned for February release is BRITANNIA, an enjoyable multi-player game about the invasions of Britain from 43 AD to 1066 BC. Each of the four players controls several nationalities, which arrive on the British coast at different times. Each turn a nationality survives it has the opportunity to grow in population, attack its enemies, and control larger areas of the island. Victory points are gained by each for control of special areas, destroying Roman forts, eliminating opposing armies, and for being elected "Bretwalda" or King. Game victory goes to the player whose nationalities have totaled the most points. We have found BRITANNIA to be

Continued on Page 36, Column 1

**War in the Shallow Seas**

Adding the Little Ships to SUBMARINE

By Rex A. Martin

**The Lone Wolves**

The British in SUBMARINE

By Charles Markuss

**Squad Leader Clinic**

Reserves

By Jon Mischcon

**Stalin's War**

Variant Scenario for HITLER'S WAR

By James Meldrum

**Total Krieg**

NBC in BLITZKRIEG

By Robert Harmon

**Series Replay**

BEYOND VALOR, Scenario 8, Part 2

By D. Chappell, J. Blick, C. Kibler

**Kampfgruppe Peiper**

Towards a More Realistic BULGE '41

By Danny Parker
At dusk on 21 May 1941, the German pocket battleship *Bismarck*, accompanied by the heavy cruiser *Prinz Eugen*, slipped without fanfare from her base in Bergen to open one of the most dramatic chapters in naval warfare. Her orders: clear the Atlantic of Allied merchant shipping. Success could mean the isolation of beleaguered Great Britain. Defeat would mean the loss of Germany’s only operational battleship and the collapse of the Kriegsmarine’s strategic timetable.

*BISMARCK* is organized into three games of increasing realism and increasing complexity, appealing to both the beginning gamer and the true aficionado of board wargames. The Basic Game concentrates on the British attempt to locate, track and sink the *Bismarck*. Using counters representing the ships and planes available to the Admiralty, the British player must scour the North Atlantic while his opponent tries to elude him. The Intermediate Game introduces a number of optional rules: weather, fuel expenditure and refueling, torpedoes for tactical combat, ammunition expenditure, submarines and destroyers, air attack, and the merchant convoys the *Bismarck* was seeking. The Advanced Game is a miniatures oriented approach, concentrating on the details of tactical naval combat. Here the experienced wargamer will find a host of factors to consider—gun size, armor strength and construction, fire control, damage control, and every factor that the captains on the spot had to contend with. A separate game by itself, the Advanced Game can be used with the Intermediate Game to simulate the outcome when the *Bismarck* is at last brought to bay by the British fleet.

Two search boards make the game one of hidden movement, the first “blind” system to gain popular acceptance. Engagements are fought on the Battle Board, or on any convenient large surface in the case of the Advanced Game. Over 300 counters represent all the major ships that took part or could have taken part in the operation, as well as planes and various system markers. A hit record pad, range finders, movement gauges, six player aid cards places every facet of the game at the player's fingertips.

*BISMARCK* is available for $16.00 from the Avalon Hill Game Company (4517 Harford Road, Baltimore, Maryland 21214). Please add 10% shipping and handling (20% for Canadian orders or 30% for overseas orders). Maryland residents please add 5% state sales tax.
An elegantly simple system has made **WAR AT SEA** the best introductory wargame around. Somewhat surprisingly, it has also become a favorite among experienced wargamers as well due to its ease of play and complex strategy.

**WAR AT SEA** abstractly portrays the Battle for the Atlantic during World War II between the Axis and Allied navies. The British and Americans must establish the blockade in the North Sea and Barents to stop German raiders from escaping out into the sealanes vital for British resistance. The Germans must find a way to hit and run, keeping their escape routes and options open. To the south, the British and the Italians are locked in a deadly battle for dominance of the Mediterranean.

Every capital ship that took part in the action is represented. The famous—the *Bismarck*, *Hood*, *Tirpitz*, *Ark Royal*—as well as a few that never sailed such as the German aircraft carrier (the *Graf Zeppelin*) are all here. Combat is resolved by die rolls after determining each individual ship's attack and defense factors, and allocating fire. Other rules cover submarines, Russian ships, convoys, neutral ports, refueling at sea and air power. Every facet of the strategic war for the sealanes of the Western Hemisphere is handled, and the decisions that players face are many and varied.

The perfect game for beginners and experienced wargamers alike, **WAR AT SEA** is available for $10.00 from The Avalon Hill Game Company, 4517 Harford Road, Baltimore, Maryland 21214. Please add 10% for shipping and handling (20% for Canadian orders, 30% for overseas). Maryland residents please add 5% state sales tax.
WAR IN THE SHALLOW SEAS
Adding the Little Ships to SUBMARINE

By Rex A. Martin

1.0 INTRODUCTION

The bitterest naval encounters of the Second World War were those of the “little ships”, the highly maneuverable motor torpedo boats. Small enough to slip unseen over moonlit waters, penetrating minefields and coastal defenses to take the war to an enemy’s home seas, and fast enough to fire their torpedoes and speed away before enemy guns could be brought to bear, they were deadly weapons in shallow waters. Too small and numerous to be given the dignity of names, they were known by numbers—to the British as MTBs and MGBs, to the Americans as PT boats, to the Germans as S boats and Italians as MAS boats. They saw action in every major theater of war: in the English Channel and the North Sea, among the dreamy islands of the Aegean and along the coasts of Italy and North Africa, in Burma and Malaya, in the South China Sea, and across the Pacific to the final liberation of the Philippines.

Night was the time of their hunting. By day, because weight had been sacrificed for speed, they were vulnerable. Rapid maneuverability, a low silhouette and smokescreens were their primary means of protection. Guns were mounted, but these could only be really effective against craft of their own size. At rest, the boats were squat and ugly. But at speed they were things of beauty, planing over the water at forty knots or more, with bows lifted, slicing great waves from either side of their hulls and leaving foaming wakes far behind. Battles when the small craft of opposing sides met were fought at closer quarters and higher speeds than any other naval action.

The main purpose of the motor boats was to strike at enemy shipping. But they were used in numerous other ways. Apart from escorting their own coastal merchant shipping, they took part in combined operation raids, transporting troops and giving covering fire. They raided enemy harbors, dropped downed pilots from the waves and attacked enemy submarines. They laid mines in shallow waters and swept safe lanes along friendly coasts. Their only limitations were range, due to the high fuel consumption of their powerful engines, and their inability to take punishment in heavy seas.

In three main areas of conflict the motor torpedo boats played a significant role; and, in broad terms, their operations reached a peak at three distinct stages of the war. First, there was the fight for dominance in the “narrow seas” off the east and south coasts of the United Kingdom which, with Germany’s occupation of the coastline of Western Europe, was as grim and desperate as the great air battle raging in the skies overhead. This was their greatest theater of operations. Not only were motor boats of Britain and Germany used for attacking each others’ merchant convoys by mine and torpedo, but there was continual direct confrontation as they strove to defend as well as attack. Here the little boats were in their element, weaving among the mines and shallows where the submarines and capital ships feared to go. Included among the Coastal Forces of Britain were crews and boats from the Dominion and European allies and, at a later date, from the United States. It was not until early 1943 that the Allies began to reach equality in terms of quantity and quality with the OKM Schnellboote, perhaps the most successful of all motor torpedo boat designs. The fight grew in intensity in 1943 as the Allies carried the battle to enemy waters and again in 1944 with the Normandy landings; it continued until the very end of the war when German boats, although greatly outnumbered, were still harrying Allied coastal shipping.

The second area of conflict was in the Mediterranean, where the naval war followed the progress of the land battles as they extended from North Africa to Sicily, Italy and the Balkans. Here also the small ships attacked as well as defended convoys, as both sides fought to keep open lines of supply to their land forces. Malta figured prominently in this bitter struggle, both as a base for Allied MTBs and as a target for MAS and S boats. But the whole canvas of the Mediterranean was on a larger scale and gave greater scope for the lone role that suited the individualistic temperament of those who served in small boats. Either singly or in small formations, the craft would set out from their bases for days at a time to strike at enemy convoys, take part in commando raids, or cooperate with paratroopers or agents behind enemy lines by night and hiding amongst the numerous islands by day, sheltering in quiet bays and inlets. As in English home waters, Coastal Forces included Dominion and American crews and boats. For awhile, an American PT squadron was the sole representative of the US Navy in these waters. In the early stages, the large numbers of Italian boats dominated the sea lanes; Italy had given more attention to the military application of such craft before the war than had the other powers, which tended to concentrate on the development of big ships to the neglect of smaller ones. In early 1943, after a passage through the inland French waterways, German S boats reached the “warm sea”. For the next two years, these would contest Allied control of the Mediterranean.

The third, and last, area to come into prominence was the Pacific and Far East. Although British Coastal Forces were employed to a limited extent off the coasts of Malaya and Burma, this was primarily an American theater of operations in which the use of PT boats during the island-hopping strategy to liberate Japanese-occupied territories was, perhaps, the most successful and spectacular of all. As well as being utilized to strike coastal supply routes, the PT boats took part in some of the great fleet battles of the Pacific war and proved effective against Japanese warships up to the size of heavy cruiser. In the initial stages of the war, trapped by the rapid Japanese advance, the British MTBs and American PT boats were sunk by air-
boats built for the Imperial Navy. It was an MTB-the small craft. Most of the crews, officers and ratings alike, were civilian volunteers, often from small countries, unable to afford large ships. In all these regions, and more, the little ships operated, the most common of all the vessels of war, armed and dangerous, ready at a moment’s notice to go into action.

Motor torpedo boats of all major powers depended greatly on the development by private companies of motorboats for sport and pleasure. Gentlemen such as Sir Malcolm Campbell and Henry Segrave, with their record-breaking achievements over water, provided valuable knowledge for research into speedboat design. Because most of the major navies of the world had paid so little attention to the possibilities of motor boats, even though they had been used dramatically and successfully during the First World War (especially by the Italians in the Aeglian campaign), there was much room for ideas between nations which were to find themselves on opposing sides in the coming conflict. Too, the smaller countries, unable to afford large ships of war and unable to contest the deep-sea commerce lanes, were eager to explore the potential of the coastal craft. Thus, firms like Vosper, Elco and Thornycroft built launches for many foreign navies. And so, at the beginning of the war, the few British MTBs that were in service were powered by the fine Italian Isotta Fraschini engines—which immediately became unavailable; the German Schnellboote was based on the American design of a motor launch built privately by the Lusser yard for an American sportsman; Thornycroft boats built for the Yugoslavian navy were captured by the Italians and used by them against the Allies; an MTB design by the British Power Boat Company was used as the basis for the first American MTB; the American Packard engine to be the thrust power unit for all British MTBs; a Thornycroft design was sold to Japan to become the basis for most of the boats built for the Imperial Navy.

There were similarities, too, in the manning of the small craft. Most of the crews, officers and ratings alike, were civilian volunteers, often from the ranks of pre-war yachtsmen and power boat enthusiasts. To a great extent they were regarded with scepticism by those of the regular navies. This attitude was modified after the small boats had proved their worth; but the tactics involved in fighting in such craft had to be developed by the volunteers themselves through trial and bitter error. The similarities in the roles of the men and the aircraft of the First World War are striking. Daring, individualistic, quick-witted with quicker reflexes, honorable, and with great respect for their opponents who fought in similar craft; they had often known the enemy personally, from international competition and correspondence before the war. These sailed apart. The small boats and small crews were, despite their differences, an elite brotherhood—and viewed themselves as such.

Diverse as they were, what all small boat operations proved—and this has been true of every war in this century—is the vital importance of coastal waters. It is not solely that through such waters every merchant ship carrying supplies from overseas must pass, but often coastal convoys are the only practical manner of transferring materials from one part of a country to another. These ships must be protected, while equally there is a vital need to attack those of the enemy. Equally, from the military point of view, coastal waters are a crucial factor in mounting any expeditionary raid or invasion. This applies to defense as well as an assault, whenever it involves the transporting of a large body of troops by sea. Thus, the domination of a nation’s sea space is as vital to modern strategy as the domination of its air space.

It is impossible to assess accurately the results achieved by the motor torpedo boats and their contributions during the Second World War. For one thing, actions invariably took place at night when visibility was poor and were fought at such high speeds that it was often difficult for the crews involved to know exactly what happened. Claims were made in all good faith which cannot be confirmed by later examination of enemy records. Many a MTB or PT boat or Schnellboote came limping back to base, heavily damaged and crewed by wounded men, hours or days overdue, after having been claimed as sunk by the opposing side. Such craft showed a remarkable ability to survive even heavy damage. Nor are the action reports reliable guides to the losses of enemy merchant vessels; even from these an inaccurate, incomplete picture develops. Many of the vessels sunk by MTBs in the Mediterranean, for instance, were caiques and fishing craft, used by the Axis for a variety of purposes and too small to be included in lists of merchant shipping losses. With the exception of major warship losses, such as carriers and destroyers of which there can be no doubt, no such figures can be regarded as entirely accurate. When it comes to losses of minor warships, losses of 100 tons or less (such as motor torpedo boats) and small merchant ships and barges or tugs, it is often impossible for a researcher to verify what caused the destruction.

Although the American PT boats played such an important role in the Pacific campaigns, they were seldom directly opposed by similar craft and there was little basis for comparison here between the performance of these boats of the American and Japanese navies. It is in the North Sea, English Channel and Mediterranean Sea that the major confrontations took place between craft designed for the specific purposes of torpedo attack—the British MTBs and the German S boats—and it is on the record of their performance that the most realistic assessment can be made.

The strength of British Commonwealth Coastal Forces at the end of the war totalled 1383 craft. Losses during the war totalled 222 boats—115 MTBs, 28 MGBs, 79 MLs and HDMLs. Confirmed German and Italian warship losses credited to MTBs totalled 70 ships of 3455 tons, including one cruiser, five minelayers, one armed merchant raider and one submarine; of the remainder, most were German S and R boats. Merchant shipping sunk by Coastal Forces in the home waters totalled 40 ships of 59650 tons, and in the Mediterranean some 100 vessels of about 70000 tons.

Including those built before the war, the German brought into service in 1940 244 S boats and 326 R boats. Losses totalled 146 S boats and 163 R boats. (Of the 41 MAS boats seized by Germany after Italy’s surrender, 24 were destroyed; of the remaining 103 Italian MAS boats commissioned, 50 were destroyed in combat, 20 were scuttled and the rest fell into Allied hands.) British warships lost in the Mediterranean alone were estimated at some 40 ships of approximately 25000 tons including two cruisers and seven destroyers; Allied merchant ships losses to small boats totalled 99 ships of 229676 tons.

What emerges is that the German boats were, overall, more successful against Allied shipping than the MTBs, while the MTBs achieved a greater degree of success against their enemy opposite numbers. But this should be viewed against the number of targets available to each side. British coastal convoys comprised about 40 ships usually, up to ten miles in length and often escorted by no more than two destroyers and a few MLs. The German convoys, on the other hand, usually had no more than a half-dozen merchant ships, heavily escorted. Had the situation and strategy been reversed, the totals would have been reversed.

Assessed against the records of the war at sea as a whole, motor torpedo boats played a relatively minor role. For example, the direct successes by torpedo attack of the German S boats accounted for only 1.1 per cent of the total Allied merchant ship losses of 21.570,720 tons (as against 68.1 per cent by submarines). But the story does not end there. It is as if all Allies turned increasingly to a policy of amphibious warfare by combined operations that the small boats came increasingly into their own, when command of enemy coastal waters became important—and as vital as the defense of those at home. Such raids as that on St. Nazaire were not only strategically successful in their own right, they led directly to tactics employed in the larger invasions of North Africa, Sicily, the Pacific islands, Italy and finally to the greatest of all—Normandy.

After the war, the small boats suffered much the same fate as they had in 1918. These boats that had given such strenuous service were broken up or sold, some being taken up by private racing careers as gun-runners or smugglers, others to end in a more gentle manner as pleasure craft, where an ex-volunteer on holiday might chance upon one suddenly and wistfully recognize her for what she had been. For now only memories remain of the glory and the grimness, the triumphs and the tragedies of the war in the shallow seas.

2.0 COMPONENTS

All game components found in SUBMARINE are to be utilized. In addition, the following items supplement these components, allowing the players to recreate small boat actions of the war.

2.2 Unit Counters

Necessary to the play of the variant is a collection of counters representing the small boats (49 to 116 feet in length, displacing 12 to 105 tons; hereafter referred to as ML/MTBs). Each counter carries identifying information essential to the play of the variant. A ML/MTB counter always occupies one hex on the mapboard.

ML/MTB

2.3 Explanation of Terms

SMALL BOAT TYPE—

MTB—Motor Torpedo Boat
ML—Motor Launch
MGB—Motor Gun Boat
PT—Patrol Torpedo
HDML—Harbor Defense Motor Launch
S—Schnellboote
R—Raumboote
MS—Motosilurante
VAS—Vedette Anti-Sommergibile
MAS—Moto-Anti-Sommergibile

2.3 Tables and Charts

A set of National Data Charts provide players with the information for all available small boats. All accompanying variant tables are designed to be used in the Advanced Game.
2.4 Ship's Log Pad
All essential ML/MTB data and information necessary for movement and weapons employment are recorded in the Log. Data for ML/MTBs is designed for use on the Escort Log Sheet.

4.0 FILLING OUT THE LOG SHEET
4.2 A player must fill out a Log for each ML/MTB he controls. All characteristics for that vessel will be recorded in the Log.

4.3 The accompanying National Data Charts are designed to be used in the Advanced Game.

4.6 ML/MTB Log Sheet
The characteristics for all ML/MTBs are recorded on the Escort Log Sheet.

4.6.1 In space 1, enter the damage capacity of the ML/MTB.

4.6.2 In space 2, record the types of anti-submarine weapons that the ML/MTB can use. Check the Weapons Availability Chart on the National Data Cards for the exact types of weapons available during the period designated in the scenario introduction. Normally, ML/MTBs were fitted with the most recent weapon types.

B. K-gun indicates the maximum number of K-gun counters that can be fired from the sides of a ML/MTB in any one turn. This value is invariably equal to the total number of K-guns charges available for the entire scenario in play.

A. ML/MTB always has the same number of K-guns on each side.

C. Stern Rack Depth Charge (D.C.) indicates the maximum number of D.C. counters that can be dropped from the stern of a ML/MTB in any one turn. This value is invariably equal to the total number of D.C. available for entire scenario in play.

4.6.3 In space 3, enter the Surface Gunnery Strength of the MLIMTB firing forward, broadside and aft. Values printed within parentheses represent small calibre weaponry, effective only against submarines and other ML/MTBs. Values without parentheses represent standard naval armament, suitable against all types of shipping. Both values must be entered in the appropriate sections if available.

4.6.4 In space 4, enter the Crew Rating if utilizing Rule 49.0.

4.6.5 Space 5 is left blank. Only a few specially modified ML/MTBs were equipped with either sonar or radar (and these were drastically inefficient). Such equipment will be noted in scenario special rules.

4.6.6 In space 6, record the Victory Point Value of the ML/MTB.

4.6.7 In space 7, enter the Defense Type of the ML/MTB.

4.6.8 In space 8, enter the maximum Speed of the ML/MTB.

4.6.9 In space 9, place the ML/MTB's identifying number.

4.6.10 The current speed of the ML/MTB will be recorded in the corresponding turn box in space 10.

4.6.11 Directly below "D.C. AVAIL.", create an entry "TORP AVAIL.". Enter the number and type of torpedoes available for the ML/MTB. As with anti-submarine weapons, utilize the most recent torpedo type available.

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### ADVANCED SURFACE SHIP DATA CHARTS

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5.0 SEQUENCE OF PLAY

Once the set-up is completed, play begins. Each turn is now composed of 11 sequenced phases. Each phase must be completed in the exact order as presented below:

- Phase 1. Movement Plot Phase
- Phase 2. Surface Gunnery Phase
- Phase 3. Star Shell Phase
- Phase 4. Convoy Movement Phase
- Phase 5. Escort Movement Phase
- Phase 6. ML/MTB Movement Phase
- Phase 7. Visible Submarines Lost by Sonar Revert to Hidden Status
- Phase 8. Torpedo Launch and Movement Phase
- Phase 9. Submarine Movement and Depth Charge Phase
- Phase 10. Anti-Submarine Attack Resolution Phase
- Phase 11. Visible Submarines and ML/MTBs Out of Visual Range of Radar Depth Revert to Hidden Status

5.6 ML/MTB Movement Phase

ML/MTB movement occurs immediately upon completion of the Escort Movement Phase. ML/MTB movement is completed in two distinct stages. In the first stage the defensive player, as indicated in the scenario special rules, moves any or all ML/MTBs under his command as he desires, within the restrictions imposed by the rules for Ship Movement (6.0). In the second stage his opponent, the offensive player, moves any or all ML/MTBs under his command he desires.

6.0 SHIP MOVEMENT

All rules for ship movement apply to ML/MTB movement except as amended below. The bow of an ML/MTB must always face a specific hexside. Should a ML/MTB in play violate this precept, the opposing player may turn the ML/MTB to face any hexside that he desires.

6.6 A ML/MTB may change its facing as many hexsides as desired. The small size and high speed of ML/MTBs made these craft extremely maneuverable; a 180-degree turn could be completed with a forty-yard radius in less than ten seconds. This change of direction is made by pivoting the ML/MTB counter so that the bow faces a different hexside.

6.7 ML/MTBs are not restricted to only one turn for each hex entered nor are they subject to a movement limit of three hexes or less in the current turn.

6.11 ML/MTBs must move if unable to slow speed sufficiently to halt momentum.

7.0 PLOTTING OF MOVEMENT

The movement of ML/MTBs is not plotted. The ML/MTB player(s) must decide how to move the ML/MTBs during the ML/MTB Movement Phase.

8.0 CHANGE OF SPEED

8.1 A ML/MTB is not required to move the number of hexes indicated by its maximum speed; it may move any number of hexes not exceeding its maximum speed and within its allowed change of speed.

8.2 At the completion of the movement of each ML/MTB the player must record the number of hexes the vessel moved (its current speed) in the Escort Speed Section of its modified Log in the current turn box.

8.2.1 On any given turn, a ML/MTB may never increase its current speed by more than five hexes over its speed in the previous game turn (e.g., a MTB that moved at a speed of "6" in Game Turn 7 could not increase its speed to more than "11" on Game Turn 8).

8.2.2 On any given turn, a ML/MTB may never reduce its current speed by more than five hexes below its speed in the previous game turn (e.g., a MTB that moved at a speed of "6" in Game Turn 7 could not decrease its speed to less than "1" on Game Turn 8).

8.2.3 In the first turn of the game, a ML/MTB may move at any speed not exceeding its maximum speed, unless restricted by the scenario special rules.

10.0 COLLISION

10.1 When a ML/MTB enters a hex that already contains a surface ship or a surface ship enters a hex that already contains a ML/MTB, a collision immediately occurs between these vessels. The ML/MTB involved loses one-half (½) of its initial damage capacity and one-half (½) of its initial maximum speed (rounded down) immediately. If damage due to the collision causes the ML/MTB to lose all its remaining damage points, the ML/MTB sinks immediately and the opposing player is awarded the victory points for the ML/MTB as if it were sunk in combat. The surface ship, if in collision with a ML/MTB, suffers no damage and is not "dead in the water".

10.2 In a collision which involves a submarine and a ML/MTB, the submarine player rolls on the "3" damage point column of the Damage Table to determine the amount of damage the submarine receives. The ML/MTB in collision still suffers the effects described above (10.1).

10.3 No collision occurs if all vessels in the hex are ML/MTBs. Thus, one or more ML/MTBs may occupy or pass through a hex containing a ML/MTB without penalty.

10.6 A surface ship or submarine will collide with a ML/MTB which is stationary or "dead in the water". The results of such collisions are as above (10.1 and 10.2).

10.7 If a collision with a ML/MTB does occur, the surface ship or submarine involved must continue its movement to completion in the current phase. The ML/MTB may continue its movement to completion or terminate its movement immediately (negating 8.2.2 if necessary) at the ML/MTB player’s option.

11.0 LAUNCHING TORPEDOES

11.1 Some ML/MTBs, depending upon class, have a certain number of torpedo tubes from which torpedoes are fired. These tubes are invariably located in the bow of the ML/MTB, facing forward. All torpedo tubes of a ML/MTB are considered loaded when it enters play and may not be reloaded once fired.

11.2 During the Movement Plot Phase, a ML/MTB may plot to launch any number of torpedoes from none to the total currently loaded in the torpedo tubes.

11.3 Each torpedo to be fired in the current game turn must have its move for that turn plotted in the Movement Plot Phase. This plot is entered immediately following the "TORP AVAIL" notation in the modified Escort Log.

11.4.1 A torpedo which is fired in the current turn from a ML/MTB must be plotted to enter hex B only at its first hex of movement as marked in the diagram on page 7 of the SUBMARINE rulebook. In all other respects, a ML/MTB-fired torpedo may be plotted as per those from submarines (11.4.3-11.4.4). Thus, the only legitimate plots for ML/MTB-fired torpedoes are BL, BLC, B, BRC, BR with the desired initial speed.

12.0 TORPEDO MOVEMENT

12.4 All ML/MTB-fired torpedoes are automatically set to run shallow.

13.0 TORPEDO DETONATION

13.2 Due to its shallow draft, a ML/MTB cannot be hit by a torpedo.
14.0 RELOADING TORPEDO TUBES
14.1 The number of torpedoes available for each ML/MTB always equals the number of torpedo tubes on that boat. Thus, torpedo tubes on a ML/MTB may not be reloaded; due to weight limitations, spare torpedoes and the equipment necessary to load these were not normally carried into action by the small boats.

15.0 ANTI-SUBMARINE WEAPONS (ASW)
15.1 Certain ML/MTBs are fitted with one or more types of anti-submarine weapons which can be utilized against submerged submarines or against surface vessels during the ML/MTB Movement Phase.

15.3 Surface vessels may be affected by ASW attacks against surface ships, with all rules of such enforced (15.11).

15.4 Stern Rack Depth Charges:
15.4.1 Many ML/MTB are equipped with depth charge racks at the stern of the boat.
15.4.2 Depth charges that are placed by a ML/MTB are dropped in the hex directly behind and adjacent to the stern of the ML/MTB.
15.4.3 Depth charges that are placed by a ML/MTB are dropped only in a hex through which the ML/MTB passes while moving forward during that turn.
15.4.9 A ML/MTB may enter and move through a hex which is a part of a path (or “wake”) of hexes of an escort or ML/MTB conducting an ASW attack (with any anti-submarine weapon).
15.4.10/15.4.11 A ML/MTB may enter and move through a hex that contains one or more K-gun depth charges at any point without negating the attack.

15.5 K-Gun Depth Charges:
15.5.1 A few ML/MTBs were equipped with K-guns, which fire depth charges from the side of the boat.
15.5.2 A few ML/MTBs may enter a hex occupied by a K-gun depth charge.
15.5.3 A ML/MTB may execute ASW attacks in as many consecutive turns as its total supply of depth charges permits. As there is no reloading of stern racks or K-guns, ML/MTBs need not wait one turn between attacks.
15.5.4 A ML/MTB may not be reloaded; due to weight limitations, spare torpedoes and the equipment necessary to load these were not normally carried into action by the small boats.

15.11.2 Depth charges used in ASW attacks on surface ships may either be dropped from stern racks or fired from K-guns.
15.11.3 Any and all surface ships may enter or move through a hex containing a depth charge designated for an attack on surface ships without penalty or negating its attack during the current or following turn.
15.11.4 Such depth charges were placed with delay fuses in the hopes of “breaking the back” or damaging the screws and steering of the surface ship as it passed over the charge. Delayed depth charge attacks are not resolved during the Anti-Submarine Attack Resolution Phase (Phase 9) of the game turn in which they are placed. Rather, these are resolved during the Anti-Submarine Attack Resolution Phase of the immediately following game turn. (It is advisable to mark such delay depth charge counters, either DCK or DCK, in red to distinguish these from standard depth charge counters.)

16.0 ANTI-SUBMARINE ATTACK RESOLUTION
16.1 Upon conclusion of the Submarine Movement Phase, any delay depth charges which were placed during the ML/MTB Movement Phase of the previous game turn and currently occupy the same hex as any surface ship or ML/MTB may do damage. Those delay depth charges which are not in the same hex as a vessel have no effect and are removed.

16.5 ASW Surface Ship Resolution:
16.5.1 All delay depth charges explode at less than 25 feet deep and have no effect whatsoever on submerged submarines.
16.5.2 For every effective delay depth charge, the player whose ML/MTB placed the charge rolls one die. This value is cross-indexed with the “S” damage point column of the Damage Table to determine the amount of damage the surface ship or ML/MTB sustains.

16.5.3 If the delay depth charge detonates in a hex containing more than one ML/MTB, the resulting damage must be applied to any one ML/MTB, at the option of the player whose ML/MTB placed the charge.

17.0 SURFACE GUN FIRE
17.4 Every ML/MTB capable of surface gunnery has three surface gunnery strengths; for every surface gunnery strength, there are one or two values. Only one of these surface strength values may be used each turn, and only one target vessel may be fired upon per firing vessel (see Figure 1). If the target hex being fired into contains more than one ML/MTB, only one may be selected as the target vessel.

17.6.1 The surface gunnery strength value within parentheses represents the total surface gunnery, effective against lightly-armored vessels. This value may be utilized whenever the target vessel is either a ML/MTB or a submarine.

17.6.2 The surface gunnery strength value without parentheses represents only the heavier surface gunnery, effective against all vessels. This value may be utilized whenever the target vessel is an escort, a merchant ship or a surface warship.

17.6.3 The two surface gunnery strength values may never be combined.

18.0 BLOCKED LINE OF SIGHT
18.1 A ship or boat may always fire through a hex containing a ML/MTB.

20.0 SCENARIOS
The scenarios presented in this section reflect actual ML/MTB actions fought during the Second World War. Each scenario contains all the information necessary to set up and play a historical battle.
**SCENARIO 1**

**STRAITS OF MALACCA**

I. Introduction

On the night of 9 May 1940, four boats of Kapitanleutnant Rudolph Petersen's 2nd Schnellboote Flotilla were in position in the English Channel—the first German patrol of the war in British home waters— to lend naval support to the invasion of Holland, Belgium, and France. At 2200 hours silhouettes were sighted on the horizon. As German shipping had been cleared from the area, Petersen ordered his force into the attack. The enemy ships proved to be British destroyers. In the ensuing brief mêlée, HMS Aylard sustained severe damage after being struck by two torpedoes. Thus began the long battle for control of the Channel waters.

II. Order of Battle

1. German Player—S30, Class S26
   S31, Class S26
   S32, Class S26
   S33, Class S26

2. British Player—Dundee, Class Town
   Kelly, Class Hunt
   Jamaican, Class Hunt

III. Starting Location

| S00—G30, Bd A, Dir. 1 |
| S37—O48, Bd A, Dir. 1 |
| S32—H48, Bd A, Dir. 1 |
| S30—O50, Bd A, Dir. 1 |
| Dundee—V23, Bd B, Dir. 5 |
| Kelly—D21, Bd C, C.C. Dir. 5 |
| Jamaica—E23, Bd C, Dir. 5 |

IV. Victory Conditions

The German player must inflict at least 6 damage points, in any configuration, upon the British destroyers and exit all 5 boats still afloat off-board. Any other result is a British victory.

V. Game Length

12 Turns, Night Scenario

VI. Special Rules

All surviving German boats must be exited off any board edge of Bd A before the scenario concludes. Should any German boat still in play remain on board at the end of Turn 12, it is considered to be captured—which could alert the British to the offensive planned to commence the next day.

---

**SCENARIO 2**

**BLANZ NEC**

I. Introduction

After months of frustration, Dover Command received reports of a German convoy running the straits on 6 September 1941. Only three boats of the polt10th MTB Flotilla—comprised of New Zealanders, Canadians, Britons, Australians, Scots, South Africans, Irish and Norwegians—were operational. But Lt. Cdr. Pumphrey did not hesitate to order them out to intercept. At 2342 hours the British engaged the enemy screen. Drawn by the gunfire, two boats of the 3rd MGB Flotilla soon entered the battle. This action resulted in an encouraging British victory: the sinking of both German merchantmen and two boats for the loss of one British boat. The German ascendancy in the Channel had finally been curbed.

II. Order of Battle

1. German Player—Two C2 Merchantmen
   S51, Class S26
   S52, Class S26
   S53, Class S26
   S54, Class S26
   S55, Class S26
   S56, Class S26
   S57, Class S26

2. British Player—MTB 35, Class Vosper I
   MTB 84, Class Vosper I
   MTB 216, Class Vosper I
   MGB 43, Class Fairmile B
   MGB 52, Class Fairmile B

III. Starting Location

| C2 Merchant—T32, Bd B, Dir. 4 |
| C2 Merchant—T31, Bd B, Dir. 4 |
| S37—J31, Bd B, Dir. 4 |
| S52—M34, Bd B, Dir. 4 |
| S33—H14, Bd B, Dir. 4 |
| S54—O28, Bd B, Dir. 4 |
| S55—C18, Bd B, Dir. 4 |
| S56—O21, Bd B, Dir. 4 |
| MTB 35—O55, Bd C, Dir. 5 |
| MTB 84—Q51, Bd C, Dir. 5 |
| MTB 521—V52, Bd C, Dir. 5 |
| MGB 43—Enter on Turn 6 on hex O1, Bd A |
| MGB 52—Enter on Turn 6 on hex J1, Bd A |

IV. Victory Conditions

The British player must accrue at least 8 VP, more than the German player. Any other result is a Japanese victory.

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**SCENARIO 3**

**BOKKA FJORD**

I. Introduction

During the autumn of 1941 the Royal Navy made the decision to carry the war into German-controlled waters. On 1 October, the Norwegian destroyer Drap left the Stava anchorage with MTB 56 in tow. Thirty miles from the Norwegian coast the small boat slipped from the destroyer and quietly entered the fjord south of Bergen. Here the MTB came upon a fully laden tanker, escorted and northward bound. The British boat sank the tanker by torpedoes and one S boat by gunfire, and then sped away to rendezvous with the destroyer for the return voyage across the North Sea.

II. Order of Battle

1. German Player—T2 Tanker
   S57, Class S26
   S58, Class S26

2. British Player—MTB 56, Class Vosper I

III. Starting Location

1. T2 Tanker—H18, Bd B, Dir. 3
   S37—D33, Bd B, Dir. 3
   S63—R17, Bd B, Dir. 3

2. MTB 56—Enter on Turn 1 on any hex numbered 58

IV. Victory Conditions

The British player must sink the German tanker. Any other result is a British victory.

V. Game Length

10 Turns, Night Scenario

VI. Special Rules

On the first turn of the scenario, the German S boats may not exceed a speed of four hexes. The German merchant ship must move as a slow convoy (30°). The German player is considered to be the defensive player.

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**SCENARIO 5**

**CRETE**

I. Introduction

Nowhere was the fighting for the shadowy seas fought more bitterly than in the waters around the Mediterranean, where control of the seaways was vital for both sides. Not surprisingly, the early successes of the small boats in this theater were carried out by the Italians, with their considerable force of light but fast craft. The emphasis on individual effort, rather than teamwork, which the handling of these boats required seemed particularly suited to the Italian temperament. Perhaps the most brilliant of all the Italian motor torpedo boat victories occurred on 12 March 1942, when four MAS boats placed four torpedoes in the cruiser HMS York which was on patrol off Crete.

II. Order of Battle

1. Italian Player—MAS 516, Class MAS 502
   MAS 520, Class MAS 522
   MAS 526, Class MAS 528
   MAS 636, Class MAS 526

2. British Player—York (as per British Ajax)

III. Starting Location

1. MAS 516—O38, Bd C, Dir. 5
   MAS 520—J8, Bd C, Dir. 4
   MAS 526—K9, Bd C, Dir. 4
   MAS 636—S38, Bd C, Dir. 5

2. York—W24, Bd A, Dir. 4

IV. Victory Conditions

The Italian player must either sink or make “dead in the water” (155) the HMS York. Any other result is a British victory.

V. Game Length

10 Turns, Night Scenario

VI. Special Rules

The movement of the York must be plotted by the British player at the beginning of each turn during the Movement Plot Phase. The plotted move is not, however, conducted until after MUVMT movement (Phase 6) but prior to torpedo launch and movement (Phase 8).

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**SCENARIO 6**

**BAIE DE SEINE**

I. Introduction

In the summer of 1942, a new generation of coastal craft and small boat tactics were introduced by the British in an attempt to wrest control of the European coastal waters away from the OKM. On the evening of 18 June, three British boats under the command of Lt. J.M. Ritchie set out with the destroyer Albrighton to intercept two German merchant vessels which were known to have departed Le Havre with an escort of 5 boats. Shortly after 0230 the following morning, Albrighton made RDF contact with the enemy force and led the two MTBs into the attack. The first coordinated destroyer-motor boat operation of the war was a moderate success, the sinking of a German 3000 ton merchant for the loss of MGB 7.

II. Order of Battle

1. German Player—Two C2 Merchantmen
   S710, Class S26
   S713, Class S26
   S715, Class S26
   S716, Class S26
   S718, Class S26

2. British Player—Albrighton, Class Town
   MGB 7, Class MGB
   MGB 8, Class MGB

III. Starting Location

1. C2 Merchant—D34, Bd C, Dir. 3
   C2 Merchant—D27, Bd C, Dir. 3
   S710—J34, Bd C, Dir. 3
   S713—Z24, Bd C, Dir. 3
   S714—H25, Bd C, Dir. 3
   S715—J27, Bd C, Dir. 3

2. Albrighton—W43, Bd A, Dir. 6
   MGB 7—U46, Bd A, Dir. 6
   MGB 8—W49, Bd A, Dir. 6

IV. Victory Conditions

The British player must accrue at least 12 VP, more than the German player. Any other result is a German victory.

V. Game Length

15 Turns, Night Scenario

VI. Special Rules

On the first turn of the scenario, the German S boats may not exceed a speed of four hexes. The German merchant ships move as...
In the fall of 1942, the British Admiralty finally had the ships and boats available to raise the strong force of MTBs, MGBs, and Hunt-class destroyers at Dartmouth, Plymouth, and Portsmouth in an attempt to close the Channel entirely to German shipping. Over the next two years, these carried out many sorties amongst the Channel Islands and between Cherbourg and Le Havre. One such operation took place on the night of 13 October 1942, when the Germans tried to bring the armed merchant raiders Komet through the Channel to Cherbourg, from which she could strike at the Atlantic convoys. While most of the attacking forces failed to intercept the Komet and her escort, two destroyers made contact in the early hours of the day and succeeded in damaging—but not stopping—her. Engaged heavily by S-boats, the destroyers were unable to halt her escape. But, at the moment, MTB 236 slipped into the fray and, at a range of 500 yards, delivered the coup-de-grace with two torpedoes.

### II. Order of Battle
1. **British Player—Komet, Merchant Raider**
   - S84, Class S26
   - S97, Class S26
   - S99, Class S26
   - S101, Class S26
   - S107, Class S26
   - S117, Class S26
2. **British Player—Cottesmore, Class Hunt**
   - Cotswold, Class Hunt
   - MTB 236—Enter on Turn 8 on any hex X58, B D

### IV. Victory Conditions
The British player must sink the Komet. Any other result is a German victory.

### V. Game Length
12 Turns, Night Scenario

### VI. Special Rules
The Komet is an armed merchantman utilized as a commerce raider. She is considered to be the defensive player. Any other result is a Japanese victory.

### VII. Optional Rules
The Japanese player may, at his option, utilize Hidden Submarine Movement. In this case, the American player may utilize Night Visual Search and Game Length is extended to 20 turns.

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**SCENARIO 10**

### Tripoli Harbor

#### I. Introduction
Early in 1943 the MTB's based at Malta achieved their first major success when two of the Allied boats sank a Japanese submarine off Tripoli. The attack, which was actually the first attack by any Allied MTB on a Japanese submarine, was carried out on the night of 26 November. In spite of a brilliant full moon, two of the boats managed to penetrate the Kojak area without being detected. The Allied boats then moved in close and opened fire, hitting the submarine with a salvo of torpedoes, which damaged her. The resulting fire was sufficient to sink the submarine. The British player must sink the Komet. Any other result is a German victory.

#### II. Order of Battle
1. **German/Italian Player—Komet, Merchant Raider**
   - S84, Class S26
   - S97, Class S26
   - S99, Class S26
   - S101, Class S26
   - S107, Class S26
   - S117, Class S26
2. **British Player—MTB 196, Class Fairmile D**
   - MTB 196—Enter on Turn 1 on any hex numbered 68
   - MTB 198—Enter on Turn 1 on any hex numbered 68

#### III. Starting Location
1. C3 Merchant—at anchor (see Special Rules)
2. MTB 196—Enter on Turn 1 on any hex numbered 68
3. MTB 198—Enter on Turn 1 on any hex numbered 68
VI. Special Rules

above Thus, damage acquired

Ill. 2. British Player-MTB 655, Class Fairmile D

Visual Search (47.0) and Game Length is extended to 20 turns.

Movement (21.0). In this case, the British player may utilize Night

case, the battle was inconclusive: two S boats were lost, the

German submarine is fired upon with surface gunnery or incurs damage

from the MLIMTBs, these three boats engaged the German

to one, these boats were lost, the rest retir-

sight\" (the machine guns, AA guns, and 20mm can-

the torpedo and depth charge values are easy to verify; likewise the speed values.

data on the National Data Charts should be fairly obvious—of the surface gunnery

the ones without parentheses represent the 30mm and 40mm cannon, 2\" guns, 2-lb.

the like, while those values in parentheses are the small armament added to those

(these three boats engaged the German
craft at 2430 hours on an hour after the sinking of US 601.

Seven MTBs were comprised of the German
class (the machine guns, AA guns, and 20mm cannon).

torpedo and depth charge values are easy to verify; likewise the speed values. The
damage values are a function of construction (wooden construction, steel reinforcement,

The problem was that we wanted to develop into the largest "dog-

coastal waters, as further reinforcements pined

77 to intercept the S boats, these three boats engaged the German

torpedo and depth charge values are easy to verify; likewise the speed values. The
damage values are a function of construction (wooden construction, steel reinforcement,

which led to the next point: Never bunch up your small boats. They were designed to

operate independently—each skipper responsible only to his crew and himself once battle was

be more so than any other type of warship. So be

right of the boat type in battle and the rarity of the boat type in the

crew, or even with heavy damage and casualties on several boats, the Allied craft all returned to port.

I. Order of Battle

A few words might be in order on the logic behind certain rules and figures in this article:

Most of the data on the National Data Charts should be fairly obvious—of the surface gunnery

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right of the boat type in battle and the rarity of the boat type in the

crew, or even with heavy damage and casualties on several boats, the Allied craft all returned to port.

I. Order of Battle

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damage values are a function of construction (wooden construction, steel reinforcement,

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coastal waters, as further reinforcements pined

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damage values are a function of construction (wooden construction, steel reinforcement,

which led to the next point: Never bunch up your small boats. They were designed to

operate independently—each skipper responsible only to his crew and himself once battle was

be more so than any other type of warship. So be

right of the boat type in battle and the rarity of the boat type in the

crew, or even with heavy damage and casualties on several boats, the Allied craft all returned to port.

I. Order of Battle

A few words might be in order on the logic behind certain rules and figures in this article:

Most of the data on the National Data Charts should be fairly obvious—of the surface gunnery

values, the ones without parentheses represent the 30mm and 40mm cannon, 2\" guns, 2-lb.

the like, while those values in parentheses are the small armament added to those

(these three boats engaged the German

case, the battle was inconclusive: two S boats were lost, the rest retir-

sight\" (the machine guns, AA guns, and 20mm can-

the torpedo and depth charge values are easy to verify; likewise the speed values. The
damage values are a function of construction (wooden construction, steel reinforcement,

The problem was that we wanted to develop into the largest "dog-

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77 to intercept the S boats, these three boats engaged the German

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damage values are a function of construction (wooden construction, steel reinforcement,

which led to the next point: Never bunch up your small boats. They were designed to

operate independently—each skipper responsible only to his crew and himself once battle was

be more so than any other type of warship. So be

right of the boat type in battle and the rarity of the boat type in the

crew, or even with heavy damage and casualties on several boats, the Allied craft all returned to port.

I. Order of Battle

A few words might be in order on the logic behind certain rules and figures in this article:

Most of the data on the National Data Charts should be fairly obvious—of the surface gunnery

values, the ones without parentheses represent the 30mm and 40mm cannon, 2\" guns, 2-lb.

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damage values are a function of construction (wooden construction, steel reinforcement,

The problem was that we wanted to develop into the largest "dog-

coastal waters, as further reinforcements pined

77 to intercept the S boats, these three boats engaged the German

torpedo and depth charge values are easy to verify; likewise the speed values. The
damage values are a function of construction (wooden construction, steel reinforcement,
during the course of that scenario must be applied to the relevant boat. Further, entry of any MTB which suffered an unpiloted engine malfunction in Scenario 12 must be denied for additional six turns less, thus may not enter play until Turn 14.

Scenario 13 represents only the initial actions during the great “dogfight” of 1944. The Allied MTBs and destroyers were much more evenly matched than in the earlier days. The following changes may be incorporated to reflect the first hour of the lengthy battle.

Game Length

10 Turns, Night Scenario

VI. Special Rules

The Allied MTB will be considered to be the defensive player.

SCENARIO 14

STRAIT OF SANTA MARIA

I. Introduction

On 23 July, a British MTB squadron, which had seen little action since the Battle of Crete, was established there and on the following day began patrolling the northern approaches to the straits. On the night of 27 July the PT boats finally hit back at a target that was too elusive for them—the Italian-built MAS boats now crewed either by Germans or local Italian fascists. In a hectic action that night, PT 204 and PT 217 managed to sink one and severely damage another.

II. Order of Battle

1. Italian Player—Two C2 Merchantmen
   - MAS 512, Class MAS 526
   - MAS 529, Class MAS 526
   - MAS 533, Class MAS 526
   - MAS 534, Class MAS 526
2. American Player—PT 204, Class Higgins
   - PT 217, Class Higgins

III. Starting Location

1. C2 Merchant—J50, Bd B, Dir. 5
2. PT 204—R40, Bd C, Dir. 5
3. PT 217—Q42, Bd C, Dir. 5

IV. Victory Conditions

The American player must accrue more VP than the Italian player.

V. Game Length

12 Turns, Night Scenario

VI. Special Rules

All Italian merchantmen have the following surface gunnery strengths: Fwd (1), Bde (2), Art (2). On the first turn of the scenario Italian MAS boats may not exceed a speed of four hexes. The Italian merchant ships must move as a slow convoy (300). The Italian player is considered to be the defensive player.

SCENARIO 15

SILBA ISLAND

I. Introduction

Allied coastal operations were extended into the Adriatic following the landings in Italy. The original intention had been to attack enemy shipping along the east coast of Italy, but this was soon found not to be feasible and the Dalmatian coast proved a more lucrative hunting ground. On 21 December 1943, MTBs achieved their greatest single victory in the area. It had been reported that the Italian liner Gairatina, renamed the German Niobe, was aground off Silba Island. Two MTBs of the 20th Flotilla were dispatched from Livorno. Sighting the cruiser at 0100 hours, the British boats approached silently and fired four torpedoes. A series of violent explosions wracked the liner. Crept up on the convoy unobserved. In a battle lasting 7 June, German craft slipped from the British boats, the German Niobe was aground off Silba Island. The original intention had been to attack enemy shipping. In the cross-channel routes and the S boats sought to strike at Allied supply and transport shipping. As the fight intensified, the British boats shook off their pursuers and proceeded to maul them. Only the arrival of the corvettes saved the British boats from complete disaster; as it was, all four MTBs were heavily damaged. The German craft slipped away in the darkness.

II. Order of Battle

1. German Player—S719, Class S119
2. British Player—Malard, Class Flower

III. Starting Location

1. af S boats—Enter on Turn 1 on any hex numbered 1
2. Malard—Enter on Turn 8 on any hex lettered A on Bd A

IV. Victory Conditions

The German player must accrue more VP than the British player.

V. Game Length

12 Turns, Night Scenario

VI. Special Rules

The British player is considered to be the defensive player. Due to damage received during the course of the action the MTBs may not exceed a speed of seven hexes at any point during the scenario.

SCENARIO 16

HARWICH

I. Introduction

With the new generation in S boats, the German commanders showed less reluctance to engage in direct confrontation; the time inevitably came on the night of 14 February 1944, when they sought a group of British boats. A rock of S boats had been spotted and the corvettes Malard and Shearwater dispatched to drive them off. Meanwhile, these boats of the 16th Schnellboote Flotilla were informed of the course of a group of MTBs returning from a raid off Lübeck. Bley lost the corvettes, the S boats intercepted the British and proceeded to maul them. Only the arrival of the corvettes saved the British boats from complete disaster; as it was, all four MTBs were heavily damaged. The German craft slipped away in the darkness.

II. Order of Battle

1. German Player—S121, Class S119
2. British Player—Malard, Class Flower

III. Starting Location

1. af S boats—Enter on Turn 1 on any hex numbered 1
2. Malard—Enter on Turn 8 on any hex lettered A on Bd A

IV. Victory Conditions

The German player must accrue more VP than the British player.

V. Game Length

12 Turns, Night Scenario

VI. Special Rules

The British player is considered to be the defensive player.

SCENARIO 18

BAIE DE SEINE

I. Introduction

The Allied naval command had reason to feel satisfied with their efforts to neutralize the S boat threat. By all appearances, Allied destroyers and torpedo boats had successfully sealed the harbors of Cherbourg and Le Havre. On 11 June, German craft slipped through the blockade with ease. In the Baie de Seine, boats from Le Havre encountered a British MTB squadron escorting three merchant ships. Attack- ing, the S boats isolated the frigate from the convoy, before Allied reinforcements could arrive, the Halsted and one merchant ship were torpedoed and left anchoring.

II. Order of Battle

1. German Player—S137, Class S119
2. British Player—Three C3 Merchantmen

III. Starting Location

1. S127—J52, Bd A, Dir. 1
2. S151—Q51, Bd A, Dir. 1
3. S156—C55, Bd B, Dir. 1
4. S157—H57, Bd B, Dir. 1
5. C3 Merchant—E24, Bd B, Dir. 4
6. C3 Merchant—L25, Bd B, Dir. 4
7. C3 Merchant—S19, Bd B, Dir. 4
8. Halsted—P27, Bd B, Dir. 4

IV. Victory Conditions

The German player must accrue at least 10 VP more than the British player. Any other result is a British victory.

V. Game Length

13 Turns, Night Scenario

VI. Special Rules

All British merchantmen have the following surface gunnery strengths: Fwd (2), Bde (3), Art (2). The British merchant ships must move as a slow convoy (300).
IV. Victory Conditions

The British player must wonder at least 24 V.P. more than the German player. Any other result is a German victory.

**SCENARIO 20**

**STRAIT OF SURIGAO**

I. **Introduction**

With their inner defenses breached by the Leyte landings, the Japanese High Command was forced to prepare for a naval engagement to regain the initiative. One of three Japanese task forces, a collection of battleships and cruisers and destroyers, entered the Surigao Strait, divided into two fleets under the command of Vice-Admiral Shōtoku Nakashima and Vice-Admiral Kyūshō Amakasu. Brushing a screen of American PT boats and destroyers, Nakashima’s force was engaged by three American PT boats. During this action PT 137 fired a torpedo at the destroyer. The torpedo missed. But, at that moment, Vice-Admiral Shimazu’s force was entering the area and the torpedo plunged on to strike the cruiser Abukuma, damaging it. At this time, the formation. Shimazu destroyed scattered the PT boats, sinking two. The rearmost of the Abukuma threw Shimazu’s timetable and plans into total confusion. Shimazu chose to withdraw.

II. Order of Battle

1. **Japanese Player**—Vichy French Cruiser

2. **American Player**—PT 152, Class Echo

3. **Starting Location**

   *Nakajima*—K30, B4 A, D, 1
   *Ashigara*—D34, B4 A, D, 1
   *Abukuma*—N34, B4 A, D, 1
   *Shiroyama*—T26, B4 A, D, 1
   *Shigura*—T39, B4 A, D, 4
   *Hibarigaoka*—T39, B4 A, D, 1
   *Kokkai*—V30, B4 A, D, 4
   *PT 152—535, B4 C, D, 4
   *PT 492—535, B4 D, D, 5
   *IV. Victory Conditions**

   The American player must accumulate 12 V.P. Any other result is a Japanese victory.

**V. Game Length**

14 Turns, Night Scenario

**VI. Special Rules**

The Naka, Ashigara and Abukuma move as a convoy (i.e., all three ships move from one written plot. Their movements are written three turns in advance. The Japanese capital ships move as a fast convoy (300). The Echo PT 493 is a modified 1942 version, and has the following surface gunnery strengths: Fwd 2(4), Bbs 2(6), Art 2.

**SCENARIO 21**

**SCHELDT ESTUARY**

I. **Introduction**

Within a period of one week in April, in a series of fierce encounters between S boats and MTBs that were made possible by the close cooperation that now existed between Allied aerial assets and surface vessels, the German craft were finally defeated. The patrolling frigate Ensign and two MTBs intercepted a group of S boats on their way to lay mines, and severely damaged one. The German boats returned to base without accomplishing their mission. And there remained for the rest of the war this action on 12 April 1945 marked the final clash between British and German small boats.

II. Order of Battle

1. **German Player**—S155, Class 193
   *S205, Class 200
   *S250, Class 210
   *S220, Class 218
   *S222, Class 218
   *S223, Class 223
   *S224, Class 224
   *S225, Class 225
   *S226, Class 226
   *S227, Class 227
   *S228, Class 228
   *S229, Class 229

2. **British Player**—Ensign, Class 223
   *ETB 623, Class Viper III
   *ETB 654, Class Viper III

III. Starting Location

   *S155—B33, B4 C, D, 6
   *S205—K35, B4 C, D, 6
   *S250—Y15, B4 C, D, 6
   *S220—Y15, B4 C, D, 6
   *S222—B4 C, D, 6
   *S223—E51, B4 C, D, 6
   *S224—K36, B4 C, D, 6
   *S225—K36, B4 C, D, 6
   *S226—K36, B4 C, D, 6
   *S227—K36, B4 C, D, 6
   *S228—K36, B4 C, D, 6
   *S229—K36, B4 C, D, 6

IV. Victory Conditions

   The German player must sink 3 boats off any hex numbered 1 or 2 on any result is a British victory.

**V. Game Length**

12 Turns, Day Scenario

**VI. Special Rules**

The British player is considered to be the defensive player.

**SCENARIO 22**

**CAORLE LIGHT**

I. **Introduction**

From the successful attack by Allied naval forces in the Mediterranean came an attack on 13 April when two boats of the Sth MTBs Flotilla attacked TB45, a German heavy torpedo boat (derived from the Italians in 1894) attacked at Caorle Venice. Despite heavy fire from the enemy boat, the MTBs sank it with gunfire. Unfortunately, on the run home, MTB 697, in an area which was supposed to have been cleared of mines by the British cruisers, struck a mine and broke in two, both halves burning furiously. Their crews were never found.

II. Order of Battle

1. **German Player**—TB45, Class Spica

2. **British Player**—MTB 670, Class Fairmile D Var. II

3. **Starting Location**

   *TB45—F37, B4 C, D, 5
   *MTB 670—K43, B4 A, D, 1
   *MTB 697—K43, B4 A, D, 1

IV. Victory Conditions

   The British player must sink TB45. Any other result is a German victory.

**V. Game Length**

8 Turns, Day Scenario

**VI. Special Rules**

The Spica class boat was modified by the Germans and has the following surface gunnery strengths: Fwd 2(4), Bbs 2(6), Art 2(4).

**SCENARIO 23**

**LINGAYAN GULF**

I. **Introduction**

It was soon after the landings in the Lingayen Gulf that a new threat to Allied shipping became apparent—the Japanese suicide boats which, in the manner of the Kamikaze aircraft, were to rear the Allied offensive momentum. With virtually no left to fight with, was to this kind of warfare that Japan was reduced in the final years of their depleting struggle. One of the main tasks of the PT boats in 1945 was to counter these suicide craft. Thus, on 7 March, after reports of Shinyo boats had brought PT 398 and PT 423 into the attack area, the MTB boats intercepted the attack and, in the melee, managed to sink all six.

II. Order of Battle

1. **Japanese Player**—Shinya Class Haruna

2. **American Player**—PT 398, Class Echo

3. **Starting Location**

   *PT 398—D23, B4 C, D, 5
   *PT 423—D23, B4 C, D, 5

IV. Victory Conditions

The Japanese player must accumulate 9 V.P. Any other result is an American victory.

**V. Game Length**

9 Turns, Day Scenario

**VI. Special Rules**

The American merchant ships have the following surface gunnery strengths: Fwd 2(4), Bbs 2(6), Art 0. The American merchant ships must move as a slow convoy (300). The American player is considered to be the defender.

**SCENARIO 24**

**KOKKAWA ON BAWLE RIVER**

I. **Introduction**

During the Korean campaign, the American utilized the myriad inland waterways of the coastal region to supply and evacuate the troops in the region. To this end, the Royal Navy assigned the arduous task of patrolling these routes to the 36th, 37th, 38th and 65th MLFs. Equipped with Fairmile B craft suited for the operation. Patrols began in October 1944, as soon as the monsoons ceased. By May 1945, the British were still struggling for control of the waterways. A typical operation: On 15 May, three British boats and conducted on the banks of the Bawle River, were alerted by the natives to the approach of three Japanese launches. Waiting until the last moment, they burst from cover and engaged the enemy craft. Despite casualties, the British pressed their attack. Within fifteen minutes, all three Japanese launches were in flames. The natives hunted down the Japanese wounded and survivors the next day.

II. Order of Battle

1. **Japanese Player**—MG78, Class MG7

2. **British Player**—MG78, Class MG7

3. **Starting Location**

   *MG78—D26, B4 C, D, 3
   *MG77—L32, B4 C, D, 3
   *MG78—K27, B4 C, D, 3

IV. Victory Conditions

   The British player must accumulate 9 V.P. Any other result is a Japanese victory.

**V. Game Length**

9 Turns, Night Scenario

**VI. Special Rules**

Only Board B is in play, remove Boards A and C. All action must be confined to this playing area.

The Japanese player is considered to be the defensive player.

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**OPTIONAL RULES**

**21.0 ML/MTB HIDDEN MOVEMENT**

21.1 When utilizing this rule, a ML/MTB which enters play out of visual range is not placed on the mapboard until such time as it is spotted by a visible (i.e., non-hidden) enemy vessel.

21.2 The ML/MTB player(s) should note the hex occupied by each hidden ML/MTB above the current speed in the corresponding turn box in the CURRENT SPEED section of the modified Escort Log. This procedure will be continued each turn for...
each ML/MTB that exercises the hidden movement option.

21.4 A ML/MTB is visible and must be placed on the mapboard if it conforms to one or more of the following situations:

21.4.1 A ML/MTB is always visible during a day scenario.

21.4.2 A ML/MTB is visible during a night scenario while it is within four hexes of an enemy vessel or within seven hexes of any vessel that was torpedoed in the previous Torpedo Determination Phase, sustained damage and is still afloat.

21.4.3 A ML/MTB is visible during a night scenario while it is in or adjacent to a hex containing a starshell counter.

21.5 A visually located ML/MTB must remain in view only for that period during which it is visible.

21.6 The ML/MTB player(s) need not place a torpedo fired by a hidden ML/MTB on the mapboard until it reaches the last hex of its move in the turn it was fired. All depth charges, including delay depth charges, must be immediately placed on the mapboard as they are dropped or fired by a hidden ML/MTB.

23.0 RADAR SEARCH

Due to their wood construction and high speed, radar was rarely accurate in locating ML/MTBs during combat situations. Therefore, hidden ML/MTBs may not be located by radar.

24.0 RADAR AND SONAR FIT

Due to weight restrictions, rarely were ML/MTBs fitted with either radar or sonar. Unless specifically stated in the special rules of the scenario in play, ML/MTBs may not utilize either radar or sonar.

25.0 STAR SHELLS

25.1 Each ML/MTB, whether visible or hidden, may fire one or two star shells per turn.

25.3 A star shell can be placed in any hex within five hexes, inclusive, of the hex currently occupied by the ML/MTB (see Figure III).

25.5 A ML/MTB that is to fire star shells may not participate in surface gunnery in the same turn. It may, however, engage in surface gunnery the following turn.

26.0 RADAR SEARCH

As the war progressed, advances in technology gave Allied escorts the limited capability to locate enemy small boats by radar.

46.2 A ML/MTB can be located by 3cm. radar.

46.3 As each escort fitted with 3cm. radar conducts its radar search, the Escort player rolls two dice. The ML/MTB player cross-indexes this roll with the column headed "3CM RADAR—Snort Up" to determine the basic radar range effective against ML/MTBs.

46.5 The final range is the number of hexes within which the escort could spot a ML/MTB.

47.0 NIGHT VISUAL SEARCH

47.1 ML/MTBs do not have a night visual search capability and may not extend their night visual range. All vessels not equipped with 3cm. radar may utilize night visual search to locate hidden ML/MTBs.

47.3 Night Visual Search Procedure. ML/MTBs at speed were often revealed at night due to the highly visible and distinctive wake created by their passage. The greater the speed, the more visible their wake. The Night Visual Search Table is to be modified to reflect this. In sighted attempts by vessels, in the place of "Submarine Depth" read Current ML/MTB Speed; instead of "0 ft.", substitute 7+ Speed, and instead of "25 ft.", substitute 0-6 Speed.

47.3.1 As each vessel conducts its night visual search, the player rolls two dice. The ML/MTB player cross-indexes this roll with each ML/MTB's speed at the end of the previous game turn to determine the vessel's basic visual range to that ML/MTB.

47.3.3 The range, with any modification, is the number of hexes within which a vessel could spot that ML/MTB.

50.0 WEATHER

50.1 The operations of the "little ships" were dictated by the weather. Forced to reduce speed or seek shelter by foul weather, many promising missions were forced to abort.

50.2 Weather affects the operations of all ML/MTBs in a combat situation.

50.2.1 During a Gale, ML/MTBs are unable to function. Remove all ML/MTB counters from play if the dice roll results in "Gale".

50.2.2 During a Storm, ML/MTB maximum speed is affected. Reduce the maximum speed of each ML/MTB in play by one-half (rounded down) of the appropriate maximum speed listed in the National Data Chart if the dice roll results in "Storm".

50.2.3 If the dice roll results in "Rough" or "Clear", ML/MTBs are not affected in any manner.

51.0 SPECIAL WEAPONS

51.2 ML/MTBs may not be equipped with a "foxer".

51.4 ML/MTBs may not utilize T3 torpedoes.

51.5 ML/MTBs may not utilize one-ton depth charges.

52. REPAIR

52.1 Due to weight limitations and the short duration of most actions, a ML/MTB may not effect repairs.

65.0 ENGINE MALFUNCTION AND REPAIR

The greatest unpredictable factor faced by the officers commanding the small boats was engine failure. Due to the extreme stresses placed upon the
65.1 In each game turn that the current speed of a ML/MTB equals or exceeds seven hexes, the possibility exists that it may suffer engine malfunction.

65.2 At the end of the ML/MTB Movement Phase, the ML/MTB player(s) must roll two dice for each ML/MTB that faces the possibility of engine malfunction. If the dice roll equals or exceeds ten (10+), the ML/MTB experiences an engine malfunction.

65.3 For each ML/MTB with an engine malfunction, the ML/MTB player(s) again must roll two dice. The numerical value of this dice roll is immediately subtracted from the ML/MTB's maximum speed. The ML/MTB's modified maximum speed is noted in the Log. Until repairs are effected, the ML/MTB may not exceed this modified maximum speed.

65.4 Should the numerical value of the second dice roll equal or exceed the ML/MTB's maximum speed, the ML/MTB is considered ‘dead in the water’ and may neither move nor change facing.

65.5 The results of engine malfunction take effect immediately (negating 8.2.2 if necessary).

65.6 It is possible for a ML/MTB to suffer successive engine malfunctions. The results of engine malfunctions are cumulative (until the ML/MTB is ‘dead in the water’ or unable to exceed a speed of six hexes).

65.7 Engine malfunction and the resulting reduction in maximum speed need not be revealed to the opponent until the conclusion of the scenario in play.

65.8 Upon the game turn following an engine malfunction, and for each game turn thereafter, an afflicted ML/MTB may attempt to correct the malfunction. This attempt may be made regardless of fire and current speed.

65.8.1 At the end of the ML/MTB Movement Phase, the ML/MTB player(s) may roll two dice for each ML/MTB currently experiencing engine malfunction. If the die roll equals or is less than four, the ML/MTB crew has repaired all engine malfunctions and the reduction in its maximum speed is negated. The ML/MTB’s maximum speed reverts to its original value. (Note however, that rule 8.2.1 remains in force.)

65.9 Due to the superb Isotta Fraschini petrol engines employed by the Italians and the superior Daimler-Benz diesel engines utilized by the Germans, their small boats suffered less from engine malfunctions than their opponents. Therefore, modify all initial malfunction dice rolls for German and Italian ML/MTBs by subtracting one (−1). Dice rolls for the results of engine malfunction and repair are not modified.

66.0 SHINYO SUICIDE BOAT

During the closing months of the war, the Japanese introduced the one-man Shinyo type suicide motor launch. These craft were 16 feet in length, powered by one or two automobile engines producing speeds up to 30 knots, and containing two tons of high explosives in their bows which was contact-armed by the pilot when on a collision course with an enemy vessel. Over 6000 were built for use during the Okinawa and expected Home Islands invasions.

66.1 When a collision (10.1) occurs between a surface vessel and a Shinyo type suicide boat, detonation of the suicide boat warhead occurs immediately.

66.2 The Shinyo ML/MTB is sunk and immediately removed from the mapboard.

66.3 The opposing player immediately rolls twice on the “9” damage point column of the Damage Table to determine the amount of damage the surface vessel receives. Each dice roll is resolved separately and the damage is cumulative. (Add the two amounts of damage together to produce the total damage suffered by the surface vessel.)

The counters reproduced here are those necessary to play the scenarios included with this article.

CONTEST #133

As commander of an American destroyer of the Buckly class, your mission in this contest is to cause the greatest possible damage to the sighted Japanese submarine (of the RO35 class) that was threatening your convoy. The diagram shows your position and that of the enemy submarine, at a depth of 25 feet according to your radar. There are two important pieces of information to consider in making your decision:

1. You’ve just made an ASW attack on this submarine the previous turn.
2. You will not be able to keep contact with the submarine in your next turn.

We have already plotted the next two moves, and the depth of the submarine in each turn. To enter the contest, all you need do is plot the course of your next two moves (enter the hexes on the entry form). Indicate your position at the end of the first move with an asterisk. Use the identification letters to indicate the locations of your launched or dropped anti-submarine weapons. Indicate the depth settings of your depth charges in the space provided. All entries will be matched with the pre-plotted course of the Japanese boat and winners will be those whose attacks offer the chance of greatest damage.

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Ten winning entries will receive merchandise credits 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 judgement of the contestant. The solution to Contest 133 will appear in Vol. 23, No. 5 of The GENERAL.
THE LONE WOLVES
The British in SUBMARINE

By Charles Markuss

SUBMARINE, for the true buff, suffered from one shortcoming—a shortage of scenarios—as other articles in The GENERAL have already emphasized. To date, scenarios for the German, American, Russian and odd Japanese submariners have appeared, even though the counter-mix provides a fertile field of information. Other nations may have, but British submariners deserve much credit for depriving the Axis of transports and warships, and Rommel’s Chief of Staff would complain after his capture, “we should have taken Alexandria and reached the Suez Canal if it had not been for the work of your submarines”. (About 70% of all British successes were in the Mediterranean, and in some months 60% or more of Rommel’s supplies were lost, largely to submarine attack.) British submariners did not just attack transport ships; British submarines helped make the German invasion of Norway very costly for the Kriegsmarine by sinking 21 ships.

Britain began the war with roughly the same submarine strength as the OKM, about 58 boats; the Royal Navy put another 157 into service through the war, losing some 74 through various causes. This represents less than 10% of the German submarine losses, by the end of 1940. During World War I, three French, four Greek, two Polish and one Norwegian submarines lost while under British command. In exchange for these losses, British submariners accounted for six enemy cruisers, 16 destroyers, 36 submarines, 112 minor warships and 493 merchantmen. Another 38 merchantmen, a U-boat, a destroyer, a corvette, and three torpedo boats are known to have been sunk by mines placed by British submarines.

By American or German standards, these figures appear unimpressive. But it should be remembered that British submarines were deployed as “mobile minefields” or “lone wolves”. Too, the quality of the opposition must be kept in mind. The German and Italian escorts were efficient and deadly; there were few Allied submarines in the Mediterranean at all. British submarines were deployed as “mobile convoy protection” and female protection to form British wolf-packs.

Instead, when Italy declared war, these boats were sent into the Mediterranean—tantamount to keeping a killer-whale in a garden pond. Their size, relative sluggishness, noisy auxiliary machinery and little experience of inshore work made many an submariner aware of exactly the opposite features were essential to survival. With their commanders used to the murky Pacific waters, and crews exhausted from a lack of shore-leave, they were hunted down and sunk one after another. By the end of 1940, nine of the fifteen initially committed to the theater had been lost.

Losses, and successes, were fewer in other areas; about 20% of the sinkings and 36% of the losses were in northern waters, and the remaining 10% of sinkings and 4% of losses occurred in the Far East. The German invasion of Norway provided plentiful targets. In the North Sea, British submariners only encountered the fast, elusive blockade runners or the thick-skinned German warships or Axis submarines. If American submariners specialized in destroyer-destruction, British ones can be regarded as specialists in sinking their own kind, accounting for one French, 15 German, 17 Italian, two Japanese and—in an error—one British submarine.

Patrols into the North Sea or in the Mediterranean were shorter than those in the Atlantic or Pacific deeps, but not without numerous hazards. Apart from the enemy, the waters in these two regions are shallow, down to 100 feet along the Norwegian coast, 90-120 feet off the Low Countries, 105 in the Helgoland Bight and no deeper than 150 feet in the Kattegat. In deeper areas the varying salinity densities off Norway and in the Mediterranean played havoc with the trim of the submarines and would send them very deep, out of control, or liable to broach and then remain stubbornly afloat. In calm weather the Norway Deep is clear enough to betray submarines down to 90 feet, and the Mediterranean’s crystalline waters can display a sub as deep as 100 feet. Most British submarines based in Malta were painted blue in an attempt to counteract just this fact.

Certain, useful British features compounded the dangers and handicaps. Most British submarines had periscopes only about 30 feet long, and this forced them much closer to the surface, increasing the chance of detection. This came about because British designers demanded solid bronze conning towers and periscopes to minimize interference with the magnetic compass and so, being weaker than steel, the periscopes had to be both shorter and better-supported with heavy, distinctive framing. In addition, the commander of a British submarine directed attacks from the control room, not from the more central position in the conning tower (as in American practice). This was considered a uniquely British feature of a built-in gunnery-type leader. In other respects, he had to target on the basis of apparent size (which submariners of all nations tended to overestimate).

No British officer was given command of a submarine unless he had passed an intensive, exhausting training course known with good reason as the “Perisher”. No matter how good a candidate was in other respects, he had to excel on this course; the mediocre and those unable to keep a rapid mental track of the targets and the escorts were quickly weeded out. All simulated attacks, first with models and then with training vessels, were critically assessed by instructors who themselves were experienced submariners. The British system contrasted sharply with those adopted by other submarine services (except, notably, the German). The British never made the mistake of trying to mass-produce submarine commanders.

Like their fire-control systems, British torpedoes were designed by the Admiralty and proved effective, due largely to the high number of test firings at targets before the war. The standard Mk. VIII “steam” torpedo was capable of only 45 knots but had a range of about 10,000 yards (twice that of its American and German counterparts). As in the U.S. Navy, torpedoes were destroyed by a predetermined number of hits. After three hits, the warhead was larger. Much World War II torpedo data is contradictory, but it appears that the Mk. VIII
warheads were 530 (later 660) pounds. By comparison, the German torpedo warheads were all either 604 lbs. (the T-5) or 617 lbs., while the first American torpedoes of the war carried 500-507 pounds.

Most of the time, British destroyers worked, but being non-magnetic types were of much lower destruction than the reliable American Mk. 14. Britain had already learned about torpedoes running below their set depth during the First World War, but the hard way, and this aspect of performance was expected. The Admiralty had developed a magnetic-triggered warhead as early as 1924 (which was successfully used at Taranto), but these were used for use in submarines only in limited numbers comparatively late in the war. Like its foreign sisters, the British magnetic torpedo was extremely unreliable and, being rarer, never caused the large-scale mischief inflicted on other submarine services. Official orders to ban the use of magnetic warheads were issued to British submariners in November 1944. The main fault was the premature explosion of the device. A British commander, Ben Bryant, claimed a sinking by a magnetic warhead (August 1942).

Using contact exploders, it is not surprising that no major capital ships were sunk by British torpedoes (although several were damaged). Too, poor maintenance caused a number of torps to run wild or simply sink, even though the former proved to be effective against enemy shipping on occasions. During 1942, a torpedo ‘shortage’ forced the use of stocks of old Mk. IIVs, then twenty years old. These were capable of only 35 knots, and once loaded into the tube could not have the depth settings altered without removal. Long storage made them very unreliable and at least one submarine, the legendary Upholder, was issued with warheads so badly swollen that they would not fit into the torpedo tube.

But the real weakness in British torpedo technology lay in the fact that gyroscope settings were limited to either 0 degrees or 90 degrees only. The latter angle was found to be unreliable and its use was quickly abandoned. British submariners tended thereafter to use their torpedoes to fire ‘hose-pipe’ salvos as opposed to fans. The ‘hose-pipe’ could be likened to a stream of bullets, in line ahead. These salvos were achieved by firing the torpedoes at regular intervals in sequence, and a ‘fan’ could be achieved by departure at different times of the gyro by firing the torpedoes while the sub was turning. However, this technique was not ideal at close range since the target would be changing rapidly, in large increments, while the submerged sub moved slowly. The advantage of the ‘hose-pipe’ lay solely in the fact that it minimized errors in estimating target course and speed and eliminated the errors common in gyro torpedoes.

Another distinctly British aspect was the enthusiasm for surface gunnery by submarine crews. By comparison, American and German commanders made little use of their guns. In pre-war exercises, the rapid “battle surface” gunnery technique was well-rehearsed, especially in the Far East squadrons. Ben Bryant, serving in the North Sea and Mediterranean, estimated that he sank an average of ten tons of shipping for every 161-pound shell fired from the 3” guns of Salmon. Many later-built S-class and all T-class submarines mounted the much more effective 4” gun. As targets decreased in size in the latter stages of the Mediterranean and Pacific campaigns, these guns played an increasingly important role and targets were attacked in waters as shallow as 20 feet. Indeed, prior to the lifting of restrictions, British submarines were forced to use the gun to stop targets before sinking those that could be justified. (Torpedo attacks without warning were not allowed until 9 April 1940 in the north, and not before July in the Mediterranean.)

What of the men themselves? Many of the common seamen and junior officers were pressed into submarine service against their will to replace the heavy losses, and most took to their new job and performed admirably. British captains tended to be very young (the youngest was 22 years old). They were regarded as being at their peak between 25 and 30 years of age, after which it was thought they became too cautious. Only one commander served in submarines from the start of the war to the finish (and he was ashore for an extended eight-month leave for illness). Two of Britain’s aces were comparatively old however: Leidig was 37 when he was killed, and Bryant commanded Safari until he was 38 years old. By November 1940, most of the submarine commanders when war began were—either to their graves, to command of surface ships, or to staff appointments.

Now was the time for submarine service and submariners. Clearly their story is rather different than the usual tales of disaster, hurried improvisation and “muddling-through” that other British arms suffered. There was much more to the Royal Navy than just the white ensign above the waves. SUBMARINE lets us at long last honor these fine sailors and heirs of Nelson.
at one time or another, operated in the Atlantic from Bordeaux under German direction. Exactly half of these were lost, but they sank some 101 merchant ships and several escorts. The Tenarii's first patrol was also her last. Arriving off Bordeaux on 15 December 1940 after a futile patrol, she was met by Lt. Cdr. Crouch in the Thunderbolt, also on her first patrol. Crouch fired from 5000 yards. One of the torpedoes surfaced in the swell but was not seen. Tenarii hit in the stem and sank immediately.

II. Order of Battle
1. British Player—Thunderbolt, Class T, Type 1
2. Italian Player—Capitano Tarantini, Class Calvi

III. Starting Locations
1. Thunderbolt—as per rule 20.4
2. Cpt. Capitano—T67, Bd A, Dir. 6

IV. Victory Conditions
The British Player must sink the Capitano Tarantini. Any other result is an Italian victory.

V. Game Length
10 Turns, Day Scenario

VI. Special Rules
Thunderbolt begins play at 25 ft. depth; Tenarii begins at 0 ft. depth. The Italian submarine may not dive. Thunderbolt has six bow tubes loaded; no reloads are available.

SCENARIO BM AN AUSPICIOUS START
I. Introduction
Lt. Cdr. Tompkinson was to become one of the greatest British aces of the submarine service while in the Mediterranean, but he began his career while on passage to Malta in his brand new command, the Ure. Making a meandering passage through the Bay of Biscay to Gibraltar, he was informed on 18 April 1941 when he intercepted the Axis blockade runner Franco Marsello, a tanker homeward-bound from Brazil on the last leg of her long journey. Tompkinson made sure she never arrived.

II. Order of Battle
1. British Player—Ure, U Class
2. German Player—Franco Marsello, T2 Tanker

III. Starting Locations
1. Ure—as per rule 20.4
2. Franco Marsello—M44, Bd B, Dir. 6

IV. Victory Conditions
The British Player must sink the German tanker. Any other result is a German victory.

V. Game Length
15 Turns, Day Scenario

VI. Special Rules
All of Ure's four torpedo tubes are loaded; no reloads are available. Ure begins the scenario at 50 ft. depth and may not surface.

SCENARIO B6 A HELPING HAND
I. Introduction
As Russia's request, British submarines moved operations to the bases between Tromso and Kirkenes to attack German troopships. Having already sunk one ship, Lt. Cdr. Sladen in the Tident used his last two torpedoes against another convoy on 30 August 1941. In what the German convoy commander would describe as a "skilled and cold-blooded attack", the Tident put one torpedo into the Donau II and another into the ammunition ship Bardufoss. German destroyers homed in, but Tigris suffered only minor damage from the depth charging.

II. Order of Battle
1. British Player—Tident, Class T, Type 1
2. German Player—Admiral Scheer, Prinz Eugen

III. Starting Locations
1. Tident—as per rule 20.4
2. Z7—F57, Bd B, Dir. 6
3. Z5—V57, Bd B, Dir. 6
4. Prinz Eugen—J57, Bd B, Dir. 6
5. Admiral Scheer—R57, Bd B, Dir. 6

IV. Victory Conditions
1. Thunderbolt has only two torpedoes loaded; there are no reloads. All German merchantmen are carrying troops, munitions and military supplies. Add 10 V.P. to the worth of each merchantman and double the amount of damage inflicted when hit.

SCENARIO B7 THE HALF-SPRING TRAMP
I. Introduction
Forewarned by intelligence that German warships were being sent northwards for use against the Russian-bound convoys, Cdr. Sladen's Tident was one of five Allied submarines deployed across the expected path of the German ships. While surfaced on 23 February 1942, her lookouts spotted the Admiral Scheer, Prinz Eugen and two destroyers off Kristiansand. A salvo of torpedoes was hastily prepared, but the target speed was underestimated. Tident dived as the third torpedo was fired. Two collided and exploded, but the third hit Prinz Eugen and blew off twenty feet of her stern, including her rudder but leaving her screws intact. Thinking it a mine or errant depth charge, the other ships departed to leave the cruiser limping erratically towards Trondheim. Prinz Eugen was not repaired until May.

II. Order of Battle
1. British Player—Tident, Class T, Type 1
2. German Player—Admiral Scheer, Prinz Eugen

III. Starting Locations
1. Tident—as per rule 20.4
2. Z7—F57, Bd B, Dir. 6
3. Z5—V57, Bd B, Dir. 6
4. Prinz Eugen—J57, Bd B, Dir. 6
5. Admiral Scheer—R57, Bd B, Dir. 6

IV. Victory Conditions
1. Venturer-as per rule 20.4
2. Japanese Cruiser—Kuma

V. Game Length
15 Turns, Day Scenario

VI. Special Rules
Tident begins the scenario on the surface at 0 ft. depth, but may change depth as desired. All German ships commence play at a speed of six knots, and may not alter this until and unless a German ship is struck by a torpedo or the enemy submarine is detected by sonar or visual search. German ships, excepting the escorting destroyers, may not move their screws more than 60 degrees off course from Direction 6.

SCENARIO B8 UNCLE SAM LENDS A HAND
I. Introduction
In August 1942, the Admiralty asked the U.S. Navy to send a destroyers sunk. In reality, a torpedo in the Japanese cruiser sank in a cloud of smoke.

II. Order of Battle
1. British Player—Tally Ho!, Class T, Type 2
2. Japanese Player—Kuma

III. Starting Locations
1. Tally Ho—B51, Bd A, Dir. 3
2. Kuma—B1, Bd C, Dir. 4

IV. Victory Conditions
The British player must sink or make "dead in the water" the Japanese Player must sink the Pietm Oneolo, or any two destroyers. Any other result is an Axis victory.
The explosion of the Harpoon SSM momentarily turns the black Arctic night into brilliant day. The Soviet carrier, Kiev, flagship of the Red Banner Northern Fleet, has been seriously damaged in its island structure, but it is still operational. Screened by menacing Soviet attack submarines, Kiev continues south with its task force to sever the vital NATO shipping lanes to Europe. The US A-6 Intruder that launched the SSM at 60-mile distance returns to its parent carrier, U.S.S. Theodore Roosevelt, with word that the Soviet fleet has passed the Greenland-Iceland-United Kingdom gap and is entering the North Atlantic. The new battle for the North Atlantic is about to begin.

A refinement of Victory Games' popular Sixth Fleet, 2nd Fleet lets you compare the strengths and weaknesses of the Soviet Red Banner Northern Fleet and the US Second Fleet and its NATO allies as they come in conflict over control of the North Atlantic and Arctic Oceans. Will NATO be able to withstand a determined Soviet advance into the North Atlantic, or will the combined might of the Soviet Navy and Air Force crush the alliance? Only you can determine which side will emerge triumphant.

The five Introductory Scenarios teach you the capabilities of your submarine, surface, and air units. Your mighty aircraft carriers must be protected in Task Forces from torpedo attacks by lurking submarines, from surface-to-surface missile attacks by enemy battle groups and air wings, and from bombing attacks by high-flying bandits. Once you detect the enemy, you close in with your Task Forces to give battle. Moving on to the four Intermediate Scenarios, you will learn to coordinate your three unit types in major conflicts between enemy fleets.

The Advanced Scenario shows you the whole scope of modern naval warfare. Your vital airfields and ports become subject to attack and may be invaded by enemy marine, parachute, and commando units. Political and random events can shatter your carefully planned campaign. Expected reinforcements may be delayed. The initial Soviet strategy for the war may suddenly escalate, leading you to World War 3. A logistics option limits the amount of ammunition and fuel your ships have available, and you must keep your fleet replenished or suffer disaster. Other optional rules cover tactical nuclear warfare, cruise missile attacks, minelaying and sweeping, close combat between surface combatants, and many other details that make 2nd Fleet the most realistic depiction of modern war at sea.

2nd Fleet comes complete with:
- Two 22" x 32" mapsheets covering the North Atlantic and Arctic Oceans, from the Kola Peninsula in the Soviet Union to the southern tip of Greenland and across to the United Kingdom.
- 384 ¼-inch playing pieces, representing individual surface ships and submarines and squadrons of air units.
- 260 ½-inch markers.
- Rules booklet with a situation analysis of the Soviet and NATO strategies and abilities.
- One Logistics Roster pad.
- Two Deployment/Reinforcement Cards.
- Two Charts and Tables booklets.
- One 10-sided die.
- One counter storage tray.
Reserves are units withheld from battle. As such they can be as small as a platoon in tactical reserve or as big as several divisions held in strategic reserve. Reserves serve the dual function of allowing troops to rest while providing the commander with the strength to decisively influence a battle at a critical moment. The use of reserves is probably the single most important skill a grand tactical commander must master and probably the least important for skillful play of SL or ASL scenarios. Perhaps nothing more pointedly demonstrates the fact that the crop of existing scenarios are “just a game” than their inability to simulate the proper use of reserves. Let us examine why reserves are important in combat.

The following elements should be considered in understanding a commander’s reliance on reserves: command control, avoiding disaster, reinforcing success, efficient weapons match-up, fresh troop strength, uncertainty. Each is discussed below.

**Command control** is the ability to make troops do what you want them to. The harder they are to contact, the more dispersed they are, or the busier they are (being close to the enemy makes one very busy even if not a shot is fired) all reduce your ability to control your troops. The great commanders who led from the front did so because that is one of the few ways you’re sure you’ve got their attention.

Should all hell break loose, and you suddenly find bad guys pouring in where they “ain’t supposed to be”, then avoiding disaster can be simplified by moving up reserves to block the attackers’ progress. It is far easier for troops to move up than it is to break contact with the enemy and move back to block a thrust. Thus reserves can save your own personal hide.

Of course, the converse is that once in a while you can achieve an unexpected success. Reserves are your best bet for quickly being able to magnify your victory, for the same reasons as above.

“Efficient weapons match-up” refers to the fact that no one ever has all the proper weapons in the right spot. At gun concentrations are of limited value against mass infantry assaults. By holding key weapons like HMGs and ATGs in reserve, a commander can swing over to the right tools for any particular threat. ASL does a nice job of showing just how hard it really is to mount up a big gun when the pressure is on.

Troops get tired. The strain of being on the front line is more than physical. Constant demands on attention make an individual progressively less effective. Combat amplifies these demands and goes beyond this as weapons run out of ammo or break-down. Reserves are (or should be) rested and well provisioned. Their ability to deal a decisive blow is enhanced because they are usually pitted against men at the end of their tether.

**Uncertainty** is the key reason, however, that commanders depend on reserves. All of the above factors are really reflections of how a CO copes with the unknown. As much as is possible, reserves give the leader a known quantity to work with. Reserves are also a psychological buffer. I can recommend John’s “The Clay pigeons of St. Lo” for an insightful peek at the thoughts of a battalion commander. Given all the positive aspects to reserves, why not then hold the majority of troops in reserve? I feel two factors diminish the value of reserves. The first is the psychological reluctance of any commander to commit his reserves. While their potential strength, so long as they are held in reserve, may be great, once committed, their value markedly diminishes. Thus you have to be fairly sure that this is the optimum moment for going for broke. Given the uncertainty element noted above, little wonder that commanders hold onto reserves as long as possible.

The second negative feature of reserves are obvious to all SL/ASL buffs. Strength in reserve is worth little at the front. Units defending a piece of terrain may be dug in and bore-sighted, adding to their resistance. Attackers need enough power and adequate numbers to break through defending lines. If you must hold onto or break into an objective, you have to maximize your strength at that point (remember “Concentration of Force” from a previous clinic installment). Therefore the actual strength and numbers of reserve units will depend on the given tactical situation. The best analogy I can think of is a football game where goal line plunges require everything up front and mid-field defenses are usually held in considerable depth. So it is on the battlefield.

Why are SL/ASL scenarios usually so poor at reflecting the need for reserves? On the whole, SL/ASL is probably the wrong scale to deal with the problems noted above. We’ve not found a good, simple solution to the issue of command control. Players never have to worry about breakthrough,
other than in the context of winning or losing the scenario. Unit stamina could be reflected by having the ELR of a unit slowly drop while it is on the board, but the value of such a rule is questionable. We pay lip service to uncertainty but only one scenario has ever had the attacker uncertain of the outcome of the defender (“In Rommel’s Wake”). A case can be made that this is not the failure of the scenarios but rather a side-effect of their intent to focus the squad level of combat. Yet, given the comprehensive nature of the ASL rules, it should be possible to recreate the conditions which call for the use of reserves.

It is the intent of the accompanying scenario (see insert) to force the German player to make some key choices. Hoping to use delaying forces? Putting the AT gun on the board will give you HIP and bore-sighting; but what if the tanks arrive on another board? We freely admit that this may be the simplest demonstration possible of the use of reserves. The Russian player is fairly well committed from the first turn and the German player has a perfect knowledge of what is coming down the pike. Nevertheless, we have chosen to start with this as an introduction. If readers like the idea, we would hope to expand on this concept in later scenarios.

After Action Report—The Hedgehog of Piepsk

These notes continue the series of commentaries in the Clinics pertaining to the scenarios published with the previous installment of the column (Vol. 23, No. 2 in this case). The intent is to provide the ASL player with one of numerous possibilities for defensive setup, attacker initial placement, and basic tactical approaches for both. Having spent several months to examine your own approaches to our Clinics scenarios, the reader can now compare his findings with our summation.

GERMAN: A 9-1 leader, two 4-6-7 squads, one HMG and one MMG in the second floor of 3N2. Another 9-1, three 4-6-7s and two LMGs in the second floor of 3N1. The 8-1 leader and two squads with LMG in 3R6. Use the 8-0 with the radio as a spottet in 3N1. Boresight the HMG on hex 3U7 and the MMG on 3U8.

RUSSIAN: Six 4-2-6 squads enter spread out on the edge of Board 4 and filter up along the north edge. One 8-0 leader plus five 4-4-7s enter between 3G06 and 3G10 and advance along the axis of 3W8 to 3T6 tp 3Q6. The remaining 21 squads enter behind Hill 498 and filter up along the edge of Boards 3/4.

ATTACKER’S TACTICS: You should plan to jump off the first assault against building 3N1 no later than Turn 6. Your best shot is to try to draw fire with your flanking “cheapies” while the main assault groups try to move completely in cover. Take a Commissar along the main axis of advance to rally any unit that breaks in the advance. Expose the MMG at eight hexes range in the woods with the 9-1 leader just as you would for your assault. You never know when that lousy pop can pin the defenders and suddenly end multiple shots from the MGs. Pray for the intervention of Fate.

DEFENDER’S TACTICS: Shoot when you must, but don’t be drawn into long-range shots against lousy targets. Don’t forget that sniper fire as well as a broken MG can cripple you. Try to use the artillery against the units advancing into 3U7. The chance of calling in a totally blind FFE is about 40%, so if the Russian player is being very cautious—go for it. The Russians do not have time to recover from eight or so broken squads and fight their way up the stairwell of 3M2; so try for broken squads rather than losses. Naturally, using a defensive FFE on 3R1 at about Turn 5 can really crimp the Russian style.
What the White House Needs Now . . .

. . . is a copy of Diplomacy, the internationally famous board game!

Today our foreign policy is in shambles. The worst it's ever been! Is there any parallel to the fact that our diplomatic expertise started going downhill when those cabinet members familiar with the Diplomacy game left their government posts???

Whatever your opinions of the Nixon administration have been, you must admit they had one sharp foreign policy . . . due, perhaps, to the fact that members of the Nixon cabinet were Diplomacy players.

In All the President's Men, the award-winning novel exposing the Watergate mess, it was stated that cabinet members, including David Eisenhower, played Diplomacy to get their minds off of Watergate.

It was told to Gyles Brandeth, Games & Puzzles Magazine editor, that Diplomacy was Dr. Henry Kissinger's favorite board game. Dr. Kissinger was Secretary of State at the time.

Charles Grenville, London Daily Mail, wrote back in November 1962, "they play it in the White House. In fact, it's the rage in America. And at Cambridge, the Dean of Trinity College, John Gallagher, is an expert. In ecclesiastical circles, the Bishop of Woolwich knows all about it . . . IT? The game called Diplomacy!"

Angus McGill, London Evening Standard, claims that the Kennedy's were said to play Diplomacy at the White House.

Well . . . there ain't nobody playing it today at the White House . . . obviously.

YOU CAN HELP

It's not too late to salvage the situation. If every subscriber reading this would send one copy of Diplomacy to the White House, someone surely would get the message.

Better still—why not send one copy to your best friend! Who knows, the person you introduce to Diplomacy might end up as Secretary of State himself.
During the years immediately following the end of the Second World War, the Soviet Union — under the leadership of the infamous Josef Stalin — began aggressively expanding its power and influence in both Europe and the Middle East. As the Soviets expanded, a number of disturbing events took place. Both Czechoslovakia and Hungary fell to the Communists and Russian troops repeatedly massed on the Greek and Turkish borders. Communist Party activity increased in both France and Italy. A number of other crises (including the Berlin Crisis of 1948) generated a tremendous amount of friction between what were to be the NATO Powers and the Warsaw Pact.

After the end of the Second World War, the United States emerged as the leader of the free world. In response to the malevolence displayed by Stalin and the Soviet Russia, the U.S. began the development of war plans as a contingency for war with the Soviet Union. These plans were known under a variety of codenames, including “Dropshot”, “Broiler”, “Trojan” and “Pincher”. All these plans had many of the same features and objectives in common.

During the time period in which these war plans were developed, military experts for the U.S. Joint Chiefs of Staff assumed that the U.S. and Britain — among others — could do little to halt the advance of invading Soviet hordes in Europe. This was because that, while the Western Allies (later to become NATO) demobilized their military machines after the war to a great degree, the Soviet Union and its allies upgraded and expanded their armed forces.

As a result, the Joint Chiefs decided to fight delaying actions initially. Then, NATO forces could withdraw to selected fortified areas and defend them until reinforcements arrived. These fortified areas would be used not only as bases of operations against the Russians, but also as bridgeheads for the counter-invasion of Western Europe.

After the surviving NATO countries had mobilized, the Allies planned to counterattack. NATO planners looked to counterattack not only from the fortified areas still under their control, but also planned to launch an invasion of the Soviet Union itself. This invasion would come through the Caucasus and was intended to seize the oil-rich region and drive into the industrial heartland of the Soviet Union around the Black Sea. Such a maneuver would have trapped the main Russian armies in Europe, far from their bases in Russia. At the same time, this invasion would both deprive the Russian army of much of its fuel and spare equipment and strike a blow at Russian industry and agriculture.

The path for the NATO invasion of Russia would have been paved by the heavy and medium bombers of the USAF, RAF and, to a lesser extent, the French Air Force. The NATO airforces would strike at targets in Russia using the limited number of atomic bombs then available. These strikes would have been launched from fortified airfields in England, Europe, the Middle East, the Pacific and Alaska. All of these bases would be defended and held at all costs against ground attack. The targets of the atomic strikes would be Soviet and Soviet-allied military troop concentrations and production centers. American planners intended to conduct these atomic strikes simultaneously in order to maximize the shock effect on the Soviet governments and population. Losses among the attacking aircraft were expected to be high because of the large number of defending Russian jet and conventional fighters.

At sea, the allied navies would first suppress Soviet naval activity and try to keep vital sea lanes open. After this was accomplished, Soviet surface naval units and submarines were to be hunted down and sunk. Finally, with the sea lanes secure, units of the U.S. Navy and other friendly ships would carry units of the U.S. Army to areas in Europe and the Middle East for the invasion.

TACG’s HITLER’S WAR provides players with an experimental vehicle that can be used to determine how such a hypothetical war between NATO and the Soviet Bloc might have been fought in the late 1940s, when both sides were still equipped with WW2 vintage armament, only the U.S. had the atomic bomb, and jet aircraft were just beginning to enter service in large numbers. Such a scenario also allows the players to examine how well U.S. war plans for such a conflict would have worked out.

This scenario, “Stalin’s War”, simulates a war fought as a consequence of the Berlin Crisis of 1948. The variant rules included here are intended to supercede selected portions of the regular game rules in order to simulate this hypothetical conflict. In any situation where this variant material conflicts with the original rules, the regular game rules will take priority in resolving all rules disputes.

SPECIAL RULES

1. This scenario uses all normal rules of the campaign game scenarios. Rules designated as applying to the Allied player will apply to the NATO player, and all rules specified as applying to the Russian player will apply to the Soviet player.

2. Both sides may build units as in the regular game. All types and kinds of weapons and units may be built. All undeclared production hexes in player-friendly countries may be used to build units. NATO tech level is “6”; Soviet tech level is “4”.

3. Bombers: NATO bombers may attack all hexes within a ten-hex radius of their assigned base. Air units of all kinds may be used to attack each other. NATO bomber bases have an inherent strength of “11”, and may be attacked as though they were production hexes. The US begins the game with 10 atomic bombs available at the start of play.

4. The Soviet player may use both his naval and submarine units to attack NATO trans-Atlantic shipping. In this scenario, both sides should use the following naval strength:

<table>
<thead>
<tr>
<th>Ship</th>
<th>Carrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>8</td>
</tr>
<tr>
<td>Britain</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>2</td>
</tr>
</tbody>
</table>

   Allied fleets base in their home country; American fleets must base in any friendly port. As an alternative to this original deployment, the US may place one point each of submarine and carrier units in hexes L8 or L9 or E14 or E15 at the start of the scenario.

5. The Soviet player uses the German submarine units and is bound by all rules governing use of submarines.

6. Neither player may build fortifications other than those which begin the scenario in place.

7. The Suez Canal route is applied to the Soviet player should it capture.

8. If the players wish to use the optional Leaders Rule, the Soviet player receives one and the NATO player two.

9. Sweden, Saudi Arabia and Switzerland are neutral throughout the scenario and may never be attacked by either player.

10. Soviet sea transport may take place between French and British ports in addition to other areas where Russia may normally conduct sea transport as listed on the Sea Transport Table.

11. NATO strategic bombers appear at bases on Turn 2 and may commence bombing that turn. Bomber strength points may be allocated between these bases as the NATO player desires.

12. The NATO player may begin using atomic bombs at the start of Turn 2. All atomic bomb attacks against enemy army or fleet units are resolved in a different manner than those made against production hexes. All atomic bombs against an army or fleet are conducted on the Firepower Table, with all die rolls modified by -1 and all losses mandatory. Players are reminded that the NATO player may make only 10 atomic bomb attacks through the course of the scenario’s 12 turns.

13. Partisan warfare may be used against the Soviets, but only outside Soviet Russia.

14. The NATO player has reserves in both the United States and Canada. The US Army reserve has 12 TacAir, 2 Par, 5 Mech, 10 Inf and 3 Amphib available for transport; Canada has 1 Inf. All reserve strength points must be sent to Europe by sea.

OPTIONAL RULES

If players feel that the scenario is unbalanced after playing it through, they may mutually agree to reduce the length of the game to eight or ten turns. Yet another method of balancing the scenario is to let the Soviets begin the game at tech level “6” and with one atomic bomb. In this case, allow the Russian player to place one bomber and one bomber base at the start of the game; the Soviets may deliver one atomic bomb attack through the course of the game. Yet another option would give the Soviets the advantage of strategic surprise (although that is historically debatable); in this case, double all NATO losses on the first turn only. Any of these will have a radical effect on play of the scenario. This situation lends itself to experimentation, and players should make the most of it for further enjoyment.

Players are cautioned not to go overboard in trying to balance the scenario, since at the beginning of any such conflict each side would have unknown strengths and weaknesses. Initially, the Soviet forces would be very difficult to halt. Only after the US and NATO forces mobilized their mobilized armies and navies could they seriously contend with Russia for domination of Europe and the Middle East. And, of course, the atomic bomb would have affected all decisions made by both sides.

Sources consulted in devising this variant include:


SOVIET-FRIENDLY AREAS AT START

Soviet Union
East Germany (all hexes of Germany east of and including Q11-P10-N11)
Poland (including hex Q13)
Baltic States
Hungary
Rumania
Bulgaria
Yugoslavia
Albania

NEUTRAL COUNTRIES

All other countries are assumed to begin play neutral. Both Turkey and Greece are pro-NATO and will join NATO if attacked by Soviet forces. All countries, including Turkey and Greece, are governed by the Unaligned Forces rules and use the army strengths found in those rules. India is also considered neutral, and may not be attacked.

VICTORY CONDITIONS

1. NATO player wins by capturing or eliminating (by atomic bombing) all three Soviet capital hexes by the end of the game and eliminating all Soviet armies.
2. Soviet player wins by capturing all production hexes in Norway, Finland, Germany, France, Italy, Spain, Greece and Turkey and eliminating at least seven NATO bomber bases.
3. If neither player is able to achieve both his victory conditions above, the scenario ends in a draw.

Stalin’s War
Set-Up and Special Rules

Warsaw Pact Forces in Play

<table>
<thead>
<tr>
<th>Unit</th>
<th>Location</th>
<th>Inf</th>
<th>Mech</th>
<th>Para</th>
<th>Tac Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leningrad</td>
<td>T15</td>
<td>40</td>
<td>20</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Moscow</td>
<td>Q17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiev</td>
<td>N14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasus</td>
<td>K19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>K13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwest</td>
<td>P10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>Q11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Russia</td>
<td>N11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Ukrainian</td>
<td>M12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Ukrainian</td>
<td>L11**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siberia</td>
<td>Siberia*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lone Wolves

Fleets in Port — 2 strength points (one each in T15 and K17)

U-boat in Port — 8 strength points (use German submarine counters)

* - See special rules for use of the Siberian Army.
** - The 2nd Ukrainian Army represents the Yugoslavian Army; it may also enter Yugoslavia, Italy, Greece, Hungary, Bulgaria, Rumania and European Turkey.

NATO-FRIENDLY AREAS AT START

USA
Britain and all possessions
France and all possessions
Canada
Low Countries
Italy
Denmark
Nordway
Norway
Egypt
Sardinia
Corsica
Cyprus
West Germany (all hexes of Germany west of Q11-P10-N11)

NATO Production at Start

54 points

Victory Conditions

1. NATO wins by capturing or eliminating (by atomic bombing) all three Soviet capital hexes by the end of the game and eliminating all Soviet armies.
2. Soviet player wins by capturing all production hexes in Norway, Finland, Germany, France, Italy, Spain, Greece and Turkey and eliminating at least seven NATO bomber bases.
3. If neither player is able to achieve both his victory conditions above, the scenario ends in a draw.

Scenario B11

Still on Patrol

I. Introduction

Only three British submarines were lost in the Far East. One of these, Lt. Cdr. Pelly’s Stratagem was caught in shallow water in the Malacca Strait by Japanese destroyers on 22 November 1944. Damaged in the initial attack, her position was given away by leaking oil from her external fuel tanks (fitted as an economy measure). Finally forced to the surface, only eight men escaped from the wreck. Service in the beautiful Pacific had its dangers as well.

II. Order of Battle

1. British Player—Shakespeare, Class S, Type 2
2. Japanese Player—Ukunawa, Class Matsu

III. Starting Locations

1. Stratagem—within ten hexes inclusive of M29, Bd B, any direction
2. Hana—M29, Bd A, any direction
3. Ukunawa—M29, Bd C, any direction

IV. Victory Conditions

The Japanese player must sink the Stratagem, regardless of his own losses. Any other result is a British victory.

V. Game Length

12 Turns, Day Scenario

Special Rules

The Stratagem has all bow torpedo tubes loaded; no reloads are available. The British submarine must commence play at 25 feet. The water depth on Bd A is 125 feet, on Bd B 100 feet, and on Bd C 75 feet. It may rest on the bottom, but must be at least 25 feet above the bottom if any movement is plotted.

V. Game Length

12 Turns, Day Scenario

Special Rules

The Stratagem has all bow torpedo tubes loaded; no reloads are available. The British submarine must commence play at 25 feet. The water depth on Bd A is 125 feet, on Bd B 100 feet, and on Bd C 75 feet.

Scenario B12

A Bloody Nose

I. Introduction

Before leaving the Mediterranean, Shakespeare, under Lt. Ainslie, had had a good run and sunk the Italian sub Velella only minutes before the Italian surrender in 1943. In action against the Japanese, however, she got rather more than she bargained for.

II. Order of Battle

1. British Player—Shakespeare, Class S, Type 2
2. Japanese Player—C2 Merchantman, Sub Chaser, Class 28

III. Starting Locations

1. Shakespeare—N50, Bd B, Dir. 6
2. C2 Merchant—N30, Bd B, Dir. 6
3. Sub Chaser—Enter on Turn 6 from any mapboard edge

IV. Victory Conditions

The British player must sink the Japanese merchant ship, or make both Japanese vessels “dead in the water”, without losing the British submarine. Any other result is a Japanese victory.

V. Game Length

20 Turns, Day Scenario
Dear Editor,

This is my first letter to the Avalon Hill Game Company, and the praise for your wargames contained herein is long overdue. Since my first purchase of the BATTLE OF THE BULGE about eighteen years ago, to my most recent purchase of ADVANCED DIO LEADER, I’ve spent countless hours enjoying your games as well as informally learning much military history, by sheer dint of a few components, game pieces, and rulebooks. I am a wargame hobbyist, and now an associate of the ASL, primarily interested in historical wargaming.

Specifically, my most recent purchase of the ASL is a special edition of the game, which includes a supplement containing additional rules and scenarios. I have found this edition to be particularly enjoyable, as it includes new and challenging scenarios that push the limits of what is possible in a typical wargame.

I am particularly interested in the scenario called “The Assault,” which features a battle between Allied and Axis forces in the Ardennes Forest. The scenario is well-researched and provides a realistic portrayal of the events that took place during the Battle of the Bulge.

In conclusion, I would like to express my gratitude for the ASL, and my appreciation for the hard work and dedication that goes into creating such a high-quality game. I look forward to playing more scenarios in the future and exploring new strategies and tactics.

Yours sincerely,

[Signature]

Dear Sirs,

Thank you very much for your kind note [Vol. 21, No. 1]. Keep up the good work.

Now to a small complaint. I was very impressed by the scenario of the war game for B-17. However, why didn’t you make it an insert or print it on the opposite side of an existing insert? It is hard to read and even harder to see. It is often very difficult to read and see the whole of the cost. It does take an awful long time to reinforce all those holes.

Also, I wonder why you only accept the coupon included in the GENERAL for purchases of the complete game and some small range of worth of coupons but can’t use them towards purchases of parts and accessories that are hard to obtain. A complete game can be bought as a single piece from my “local” store in Sweden as I ordered directly from you.

Lars Holst    
Stockholm

Dear Sirs,

At one time, did we allow application of the postage coupons toward shipping for parts and accessories. But, many times orders for such coupons were considerably less than $10.00, or folks kept deducting the full amount from their order—in demand that we “keep track” of the surplus. This attitude created many problems for our shipping staff. Some time ago, the policy was changed to avoid these hassles. It is unfortunate that the “lax policy” only applied to complete games, but this seemed the only reasonable solution to our quandary.

Res.:

I am writing to express my concern over the direction that some of the GENERAL’s articles have taken, and their impact on the hobby. My spot in the monthly magazine is not a minor one, and I have a vested interest in promoting the hobby. However, the articles in the recent issues have been a concern to me.

In conclusion, I believe that the articles in the GENERAL have been out of touch with the current state of the hobby. I urge the magazine to focus on promoting the hobby and providing useful information for the wargaming community.

Yours sincerely,

[Signature]

Dear Mr. Martin,

I would like to share some thoughts on ASL.

Firstly, as to whether or not the game should have been made, I’d say yes. I own several copies of the rulebook and I can attest to its quality. However, I believe that the game could have been improved with some modifications. For example, the rulebook is quite dense and could benefit from better organization.

Secondly, on the physical aspects of the ASL manual, it’s beautiful, but I have a couple of suggestions. I have a lot of experience in using manuals because I work in the data processing business. The ASL manual needs something that I call “paper pushers” (because I don’t know the technical term). These are plastic or stiff cardboard pieces that are placed on the left and right of the binder, on the rings, just like a page. They are as long as a page, but only four inches wide, and slightly curved. When the binder is closed, the paper pushers lift the pages with harm, thus increasing their life. The game is packaged between the rings and the binder cover. This pinching is the main cause of hole destruction.

Speaking of hole destruction, I’m not sure that all the pages should be reinforced. I recommend spending time using the extra thin reinforcements that are included with the game pieces. A better manufacturer could print one of these reinforcement papers on an ordinary printer and place it over the center pages. It would only take a few minutes to complete.

Secondly, I propose a wish list of improvements for the leads in the “Leaders and Followers” section of the article. The statement regarding leads of 9.1 quality is lower and as having little effect on the survivability of other units is ridiculous; a unit unable to double-time must have the lead of 1 leader. Leading a similar unit without a leader, during the Movement Phase the former continues his advance into the sector of the latter’s attack. A similar statement is made about the lead of the unit’s objective at the time of this scenario (keeping in mind a squad stacked with a leader who can move back further than a lead without being a leader, even when double-timing). Having all your squad’s survive a scenario is a little consolation when the enemy still controls your objective at the end of the game.

Thirdly, although readers of the article may have written papers, I would suggest that the ASL be made available in several formats. For example, I suspect that some readers may find it difficult to read the game rules, which are quite dense and require a certain level of understanding. However, by providing these readers with a printed copy of the rules, we can make the game more accessible to a wider audience.

In conclusion, I believe that the ASL is a fantastic game, and I look forward to playing many more scenarios in the future. Thank you for your dedication to the hobby.

Yours sincerely,

[Signature]
As complete as it is, some aspects of modern warfare have been omitted from *BLITZKRIEG* 75 (and its revision as "BLITZKRIEG '85" in Vol. 21, No. 6 of THE GENTLEMEN). The current game offers an accurate overview of European-type, conventional warfare in the late third of the 20th Century. Yet, however, another European war may very well feature an added dimension — NBC (Nuclear-Biological-Chemical warfare). The rules that follow, like their real-life phenomena, are optional. A game scenario of the 80's technology is assumed.

### 54. NUCLEAR WEAPONS:

Both NATO and the Warsaw Pact have made no secret of their stockpiling, not only of strategic nuclear weapons, but of a newer generation of tactical warheads. These tend to have yields of a half-kiloton (KT) or less and appear in sizes down to 155mm. The temptation to resort to low-KT weapons may prove irresistible, especially with the advent of neutron (low-fallout) weapons. Nuclear weapons have three major effects: thermal (that is, the visible light and heat emitted from the fireball), blast and radiation. Since tactical weapons will probably be set for air rather than ground-level burst, residual radiation will be minimal. Air bursts would still produce, and even maximize, the effects of blast, heat and initial radiation.

Electromagnetic Pulse (EMP) is the fourth effect of a nuclear explosion. An atomic bomb emits a wide spectrum of "radiation" — visible light, heat, nuclear radiation, and, in this case radio and electromagnetic impulses at random. An EMP is usually sufficient to scramble or damage most radio, TV, microwave, computer and transistorized equipment over a vast area. Armored units, for instance, though best able to withstand blast, heat and radiation, would still be debilitated by EMP.

Nuclear effects on the *BLITZKRIEG* mapboard are planned for a standard area — the "hex". Since a Soviet motorized rifle division currently attacks on a 10-16 kilometer frontage, and can defend up to 45 kilometers, the mapboard (and units) are presumably geared to 30-kilometer hexes. Thus, nuclear effects on the *BLITZKRIEG* map are less than you'd think, given such large areas.

As to general nuclear effects, given a weapon equal to 1000 tons of TNT (or 1KT), some radiation fatalities would occur out to 800 meters. Thermal and blast effects would be more significant, and personnel in the open, even at a kilometer from "ground zero", would still experience burns and a blast wave equaling to 100 mph winds. Personnel in buildings and armored vehicles would be protected from much of this, given reasonable distances from ground zero. Communications would be disrupted, and ground zero itself would remain "hot" even if no fallout was released.

Incidentally, those wondering about "vaporization" would be comforted. The fireball would be only .04 mile in radius (or 420 feet in diameter) and would be well off the ground anyway. So, in a 30-kilometer hex, the fireball would not be as important as the four effects just described.

American and Soviet policy alike is in that initial use must be authorized at the highest political level (i.e., the White House or the Politburo). The United States would grant this permission as authority to use a "package" — numerous weapons — in a set time-frame and area, usually a corps sector. Soviet doctrine may well parallel this, but is unclear at the moment.

Nuclear weapons in "Total Krieg" are tactical. Strategic (thermo-nuclear) weapons are separate, with unique delivery systems. The two major nations in this game can be assumed to possess a number of thermo-nuclear warheads on ICBMs; these would be strictly controlled by the political leadership. The players, as field commanders, will not control these as they are outside the purview of the game.

#### 54.1 Delivery systems and effects as described in the accompanying NBC Effects Table.

#### 54.2 When any nuclear attack occurs, the NBC Repercussions Table must also be rolled, once for each target, using two dice. The effects and repercussions are implemented immediately.

#### 54.3 All nuclear attacks must be written one turn in advance, during the friendly Movement Phase for the player. Attacks occur on the following turn, during the opponent's Combat Phase. Written attacks must specify, for each attack:

- The weapon desired as shown on the NBC Effects Table.
- The number of packages requested that turn, for each attack. No more than six packages per turn, total per player, are allowed. Thus, in effect, 12 packages can be dropped in one full game turn, with no limit on the number of turns that can continue.
- Target areas, written as a single-hex co-ordinate. That hex, and a radius of two hexes around it, constitute the "target area". The number of packages in the area, up to two maximum, must be specified. No more than four target areas may be designated for a given turn, and these areas may not overlap.
- The turn of attack, for attacks may be plotted more than one turn in advance (although the limit of six packages in any single turn is still enforced).
- When attacks are made, they must be delivered exactly as written. Partial attacks may be partially or wholly aborted at the time of the attack, and is the only deviation allowed from the written instructions. Attacks may occur anywhere within the target area, as declared by the player at the time of attack.

#### 54.5 If a delivery system — SAC, for instance — assigns more factors than needed to deliver the package, then the last factor destroyed can be assumed to have the nuclear weapons (e.g., a SAC half-unit out of an original two units on the mission). The escort rule (32.4) continues to apply, except that unescorted bombers never employ nuclear weapons at half-effectiveness (contrary to the ACT notes). If they get through, too bad.

#### 54.6 If a bomber force is whittled down to less than the minimum number of units (as cited on the NBC Effects Table), the mission is aborted. This is on a weapon-by-weapon basis, and applies mainly to chemical missions. One bomber factor is sufficient to drop a nuclear warhead.

#### 54.7 All nuclear weapons assigned to a target area can be dropped in any of that area's hexes. Each nuclear weapon must be used on no more than one hex; however, all weapons in the package can be concentrated on a single hex.

54.8 The player receiving a nuclear attack may himself request one package or more for the next turn. Failure to complete a "retaliatory" nuclear strike of not less than one package will require the player to roll on the NBC Repercussions Table on the Failure Line at the end of the second friendly Combat Phase after the nuclear attack.

54.9 The Night Bombing mission may not be used for nuclear attacks. (All-weather radar and fighters would certainly react, as effectively as in daylight given the '80s technology.)

54.10 No NBC attacks are allowed in sea or lake hexes! Also, only delivery systems named by the NBC Effects Table may ever be used.

### 55. CHEMICAL WEAPONS:

Chemical weapons are a reality on today’s battlefield. First used in World War I, chemical weapons reappeared, as recently as 1980 in Afghanistan. Over 100,000 full-time chemical personnel serve in the Soviet forces; the Warsaw Pact regards chemical weapons as an integral part of conventional warfare.

Chemical weapons — specifically toxic chemicals used in battle — can be delivered by aerial spray, air-dropped aerosol containers, or, more likely, in shells and barrage rockets. These are local in effect (within a single *BLITZKRIEG* hex) but can be used wholesale to support (or stop) a general offensive.

Chemical warfare is more cumbersome than nuclear warfare, even given the potency of certain nerve gases. Given one of the most deadly — "Sarin" (nerve agent GB) — and ideal weather conditions, the results of a sample attack would be surprising. Under such conditions (little or no wind, an inversion layer, 50 degrees F, no rain, open country), 1150 rounds of 155mm shells would be needed for 50% casualties. And that’s in a 100-hectare area (a *BLITZKRIEG* hex encompasses about 600 hectares). An entire artillery division would have to be dedicated, and that’s under ideal conditions. Other agents or other chemical weapons would require even greater concentrations.

Chemical weapons appear in the following varieties:

a) Nerve Agents, which attack the nervous system, usually kill by paralysis of the lungs. Nerve agents require only one drop to kill, whether breathed in or absorbed through the skin. Symptoms, often slow to appear, may not begin until after the damage is done.

b) Blister Agents are mustard-type gases which inflame and burn the skin, eyes, lungs (and can be fatal in the latter case). Blister agents cause fewer fatalities, but cause many casualties nonetheless, burdening the medical services heavily. Recovery will be slow, and the mustard-gas victims may be out of the war for good. These gases, and the choking agents, accounted for one-quarter of all World War I casualties.

c) Choking Agents, such as phosgene and chlorine, damage and flood the lungs when breathed and are potentially lethal.

d) Blood Agents, cyanide-type gases, interfere with oxygen absorption in the blood stream. These enter the body through the lungs and kill rapidly. Blood agents also attack gas mask filters, rendering them ineffective.

Non-fatal agents occasionally appear on the battlefield, as tearing, incapacitating, or vomiting gases.
Persistent agents. All varieties of chemical weapons are included combinations of persistent and non-persistent potency quickly (but need very little time to kill); these number some nerve agents, and all blood and choking agents.

These are rarely found in military hands and are generally left to the civil police, outside the BLITZKRIEG player's consideration. 'Chemical weapons, as termed, don't usually include flame weapons. Such weapons as napalm, white phosphorus, flamethrowers and starshells are integral to equipment, personnel, and buildings would require much of the survivors' time and much specialized equipment as well.

The varied toxic agents fall into two tactical classes. Persistent agents are those which contaminate an area for days or weeks; these include all blistering, and some nerve, agents. Non-persistent agents are those which disperse or lose potency quickly (but need very little time to kill); these number some nerve agents, and all blood and choking agents.

Military planning hinges on these two classes in an NBC environment. Areas that friendly forces might enter would get non-persistent agents, so that an offensive would not be impeded. Enemy rear area targets, such as road junctions, munitions dumps, airbases or missile sites would face contamination from persistent agents. These two categories are shown on the NBC Effects Table. Persistent attacks, on the chart, in-clude combinations of persistent and non-persistent agents. All varieties of chemical weapons are narrowed down to these two classes, for simplicity's sake. On the BLITZKRIEG game scale, effects on units would not only include casualties, but the attendant disruption and manpower diversion as well. Clean-up after persistent agents would be as damaging as losses, for the decontamination of equipment, personnel, and buildings would require much of the survivors' time and much specialized equipment as well.

Some units would be more resilient. Tanks, armored personnel carriers, and self-propelled artillery would be able to button up and avoid some of the hazard (especially with internal mask systems for the occupants). Vehicles in artillery, infantry and airborne divisions would be mostly wheeled and lack NBC protection.

Forces in a chemical environment, including many untouched by direct attack, would have to don protective masks and clothing and have to work and fight in them. Fatigue and heat exhaustion would be a factor, and soldiers would find unusual activity (eating and other acts of nature) to be personal crises. Civilian populations would not be so protected, and occupying armies will thus have a further drain on medical resources, not to mention the loss of war production or the roads clogged with desperate, panic stricken refugees.

55.1 For delivery systems and effects, see the NBC Effects Table.

55.2 Players may use chemical weapons during any attack, including AVs during the Movement Phase (non-persistent agents only). Any use of chemical weapons will require a roll on the NBC Repercussions Table for each attack. Effects and repercussions are immediate.

55.3 Rule 25.3 still applies — only one BBT attack of any sort may be made against a single hex on

---

**NBC EFFECTS TABLE**

<table>
<thead>
<tr>
<th>WEAPON/PACKAGING</th>
<th>TABLE</th>
<th>DELIVERY SYSTEM(s)</th>
<th>MIN # OF UNITS</th>
<th>CITY EFFECT</th>
<th>GENERAL EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Persistent</td>
<td>BBT</td>
<td>MDM/BA</td>
<td>1</td>
<td>SRIX, RCX, PX</td>
<td>No friendly unit may enter on turn of attack. Surviving enemy (other than 2 DF decon) MUST leave. Target hex is contaminated. All effects lift upon decontamination.</td>
</tr>
<tr>
<td>Chemical Nonpersistent</td>
<td>BBT AF×2 or TGAT+1</td>
<td>MDM/BA or TAC/BA</td>
<td>1</td>
<td>SRIX</td>
<td>Friendly/enemy units may enter hex freely. No contamination.</td>
</tr>
<tr>
<td>Neutron (1 package)</td>
<td>BBT AF×2</td>
<td>MDM/BA</td>
<td>1</td>
<td>SRIX perm.</td>
<td>Friendly units may advance through hex. No contamination.</td>
</tr>
<tr>
<td>Tactical Nuclear (½ package)</td>
<td>SAC/MDM/BA</td>
<td>½</td>
<td>SRIX, RCX or PX perm.</td>
<td>Eliminate one ground unit OR all air units in hex (attacker's choice). Attacking ground units may not enter that turn; surviving defender units must retreat 2 hexes. Contamination is present; no units may enter till attacker's next movement phase; contamination lifts automatically.</td>
<td></td>
</tr>
<tr>
<td>Theater Nuclear (2 packages)</td>
<td>SAC</td>
<td>½</td>
<td>SRIX, RCX &amp; PX</td>
<td>Friends may not be adjacent during attack. Surviving enemy retreat 4 hexes. Same contamination effect as Tactical Nuclear above.</td>
<td></td>
</tr>
<tr>
<td>Thermo-nuclear</td>
<td>NOT USED BY PLAYERS.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>SRIX perm.</td>
<td>Affects target hex and all hexes two or less away. All units in affected hexes eliminated. Contamination last four full turns or till rain; contaminated cities are RCX during contamination.</td>
</tr>
<tr>
<td>Chemical Decontamination</td>
<td>Persist indefinitely. Removable by placing 2 DF in hex for one full turn (invert unit). Decon unit removes contamination unless attacked or eliminated; decontamination is complete at end of friendly movement phase when decon unit spent ENTIRE phase without moving. Any other ground units entering or failing to evacuate hex rolls 16 column on BBT upon deconning. Air units in a contaminated hex must leave and may not fly any combat missions that turn. Air units may fly over, but not land, in contaminated hexes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Decontamination</td>
<td>None, contamination lifts at start of attacker's next movement phase. Any unit entering before then rolls the 20 column on the NBC Effects Table.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES TO NBC EFFECTS TABLE**

**ABBREVIATIONS:**

BA — Breakthrough Artillery
AF — Attack Factors
TGAT+1 — Shift TGAT one column in attacker's favor
Package — This is PER ATTACK.
DF/MT — Provided for scale. No effect in game.
Neutron — Each package represents several warheads. Necessary on a map of this scale. Each attack = 1 package.

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**BIOLOGICAL ATTACK TABLE**

<table>
<thead>
<tr>
<th>DIE ROLL</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>EPIDEMIC. Attack succeeds; results are as determined by NBC Effects Table. Defender must remove four infantry or airborne units from board immediately (equivalent substitute units are acceptable), to be returned as reinforcements on the defender's turn AFTER contamination ends. Defender also forfeits air transport on the first turn of contamination.</td>
</tr>
<tr>
<td>5</td>
<td>BOOMERANG. Infection spreads to attacker's forces; nearest attacker-occupied city is contaminated. Same results to attacker as above and as found on NBC Effects Table. Defender suffers same effect as EPIDEMIC result above.</td>
</tr>
<tr>
<td>6</td>
<td>PANDEMIC. Epidemic breaks out of control and spreads throughout Continent. Five percent of human population survives, none of it as an organized society. The game is over.</td>
</tr>
</tbody>
</table>
a given turn. If the BBT attack was with non-
persistent agents, units may advance more than one
hex, up to the maximum allowed by the TGAT.

55.4 Players are each permitted four chemical
attacks per turn. No advance notation is required.
Only one attack is permitted per hex, or per city,
per turn. Chemical attacks only affect one hex (or
one city) each.

55.5 Failure to retaliate to chemical attack is punish-
able on a roll of the “Failure” line of the NBC
Repercussions Table. The attacked player must roll
at the end of the next friendly Combat Phase if he
has failed to make at least one chemical attack.
Retaliation need not occur in the same locality.

55.6 Persistent agents (only) may be employed
against a vacant hex, with contamination being
automatic. This still constitutes one attack, but there
are no defending casualties unless units enter the
hex later.

55.7 In a target hex, armored units take chemical
losses 50%, after other units are eliminated (air
assault units are considered armored). When
armored units are eliminated, they suffer losses
equal to half the remaining BBT/TGAT losses (frac-
tions rounded up).

55.8 Rule 54.6 applies to bomber chemical
missions.

55.9 Weather rules, if used, do affect chemical
attacks as described below:

55.91 Fog: Non-persistent agents now roll at +3
columns on the TGAT. BBT losses are doubled.

55.92 Rain: Negates all contamination.

55.93 Gale, Ice, Snow: No chemical attacks are
allowed.

56. BIOLOGICAL WEAPONS:

Biological agents (i.e., ‘’germ warfare’’) would
hit war-weary populations very hard. Diseases
employed against troops and civilians would be
highly contagious and include ordinary and mutated
strains of anthrax, Q-fever, encephalomyelitis, or
worse. Detection would be difficult initially, and
authorities would be slow to move to stop an
epidemic which, once rampant, could attain the scale
of the “Black Death”. Even if a ready cure were
available (usually not), distributing it in time under
war conditions may not be possible.

Biological agents can be employed by one of three
methods: aerosol or spray involving aerial disper-
sion; vector dissemination, which utilizes insect
carriers (mosquitoes, lice, ticks, etc.); or covert
dissemination, using espionage forces to introduce
biological agents into water or food supplies.

Beyond the obvious losses, the attacked nation
would be forced to divert manpower to containment
and decontamination attempts. However, the
diseases could spread or allow the attacker’s own forces,
boomeranging through POWs and refugees.

Even the technical units would not be immune.
To be sure, aircraft, artillery, and armor would be
intact. But the crews would not be, nor the service
and support personnel; and the equipment itself
would require decontamination. There would be no
rapid replacement of these units— even with
reclaimed equipment. Biological warfare is the
nightmare of every service, the single greatest threat
that hangs over the modern battlefield.

56.1 One biological attack may be made per game,
per player. Retaliation is mandatory within two
turns, but may be made with nuclear weapons (two
packages minimum) rather than ‘’in kind’’. Failure
repercussions are rolled at the end of the second
friendly Combat Phase after attack, if not.

56.2 A biological attack may be made against any
hex on the map, and affects the target hex and all
others within two hexes (except lake/sea hexes). If
any part of a city lies within the affected region,
all adjacent city hexes are affected.

56.3 Biological agents are rolled on the NBC
Repercussions Table, and then on the Biological Attack
Table, with results applied immediately. Biological
agents are made during a player’s Combat Phase,
and do not require pre-notation.

56.4 Entry of a contaminated site of city results in
immediate elimination.

56.5 Biological attacks may not be made during
Rain. Rain also is considered to remove any
biological contamination immediately.

56.6 Any hexes affected by a biological attack
remain contaminated for four full turns after
the attack, or until a Rain turn.

“Total Krieg” was written to show the effects and
constraints of NBC, using the BLITZKRIEG
game as a format. With nuclear and chemical
weapons rife among the superpowers, and with
nuclear proliferation even among the minor nations,
the subject is timely. It remains a simulation, in the
sense that player’s options have been deliberately
limited. NBC represents a global “Pandora’s Box”;
even if belligerents strive to limit NBC to tactical
levels; and so, political authorities have kept these
weapons under tight control. Indeed, the time
delays and limits on employment of these weapons
represents the only saving grace. But the artillery
and bomber units of the superpowers will certainly
have nuclear warheads and chemical weapons nearby
in the next war.

The Repercussions Table is a part of the simula-
tion mode. Though field commanders may profess
to be apolitical, their decisions will not. The
chemical and biological agents are so potent, in fact,
that simplification becomes necessary. It really
doesn’t matter which gas or microbe gets you, for
they will all kill you just as dead. Thus, I discarded
the fine distinctions between specific weapons in
this variant.

These rules are intended to be used as a complete
variant (i.e., if one rule or one NBC weapon is
employed, then all are in effect or use). When any
part of the unthinkable is possible, then nothing is
too horrible.

So, if the Biological Attack Table, or the NBC
Repercussions Table, represents a hideous risk,
you’ll have some concept of NBC. Pray that our
heads of state think likewise.
**SERIES REPLAY**
**BEYOND VALOR, Scenario 8**

*German Player—Don Chappell*

*Russian Player—Jim Blick*

*Neutral Commentator—Charles Kibler*

Don Chappell and James Blick, both ex-Marine officers and both long-time ASL playtesters, chose Scenario 8 to highlight the best tactical game system on the market. Charlie Kibler, our artist and expert ASL player, was drafted to look over their shoulders and provide neutral commentary. In the last issue, the first four turns saw the German plan to mount an assault toward one bridge and rush toward another still unheld. In an exciting fourth turn, the Russian ATG crew—heroes of the Union all—dispatched the German T14 and PSW. But the Germans seem poised on the brink of victory nevertheless. We resume the commentary with the Turn 5 actions.

**TURN 5**

*German Player Turn*

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DRM</th>
<th>DR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rally Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>235 Wind Change Attempt</td>
<td>4</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>236 R.G. (DM) rally with Eastonov</td>
<td>-1</td>
<td>8</td>
<td>Remove DM</td>
</tr>
</tbody>
</table>

*Prep Fire Phase*

| Movement Phase | 239 SPW #DD, G.P. w/LMG from 23U4 to 23P7 | 240 R.K. fires on SPW #DD crew, w/LMG-PTC | +2 | 12 | NE |
|                | 239A SPW #DD, G.P. w/LMG conducts overrun on ATG crew | -1 | 1 | KIA |
|                | 241 SW random destruction (C11.6) | -1 | 4 | ATO remains |

*Russian Player Turn*

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DRM</th>
<th>DR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rally Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>281 Wind Change Attempt</td>
<td>6</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>282 R.G. (DM) rally with Eastonov</td>
<td>-1</td>
<td>12</td>
<td>Casualty Reduction</td>
</tr>
</tbody>
</table>

*Replace R.G. w/tz*

| Prep Fire Phase | 283 R.K. fires on SPW #DD crew, w/LMG-PTC | +2 | 8 | NE |
|                | 284 R.K. fires on Oettl, G.N., G.R. | -4 | 8 | Cowes, NE |

*Movement Phase*

| Movement Phase | 285 T34 (B10) from 22B9 to 23P9 | 286 StuG fires main gun on T34 | +4 | 7 | Miss, G.O. |
|                | 287 G.N. fires main gun on T34 | 288 G.R. fires main gun on T34 | 6 | Printed |
|                | 288 G.R. fires main gun on T34 | 289 StuG fires main gun on T34 | +2 | 9 | Printed |
|                | 290 T34 bounding fire main gun | +7 | 7 | Miss |
|                | 291 T34 fires BMG/CMG on SPW #DD | +2 | 6 | PTC |
|                | 292 SPW #DD crew—PTC | 4 | Pass |
|                | 293 G.P. w/LMG—PTC | 7 | Pass |
|                | 294 R.B. from 200B6 (BPM R4 and R3) to 25P7 | 2006 | 2006 |
|                | 295 R.A. w/LMG and CX movement from 2074D to 2074A | 2006 |

*Remove Concealment counters E and F as useless.*

| Movement Phase | 296 R.E. from 210B6 to 23B11 | 297 R.I. from 210B6 to 23B11 | 298 R.I. w/LMG and CX movement from 23A13 to 23D10 | 299 R.O. assault move from 23A13 to 23D10 | 300 R.N. from 23T9 to 23A13 |
|                | 301 Cherkesova assault move from 23A13 to 23D10 | 302 R.M. w/LMG and CX movement from 23B11 to 23D10 | 303 G.P. reduced to 4-4-7 (A19.231) | 304 R.M. w/LMG and CX movement from 23B11 to 23D10 | 305 R.N. w/LMG and CX movement from 23B11 to 23D10 |

*German: I also should explain the little firefight on Board 20 to all of you experts. This little tactic is called "mistake." Unfortunately it is not a good example of Dickson's "Tactics of Mistake" (see Three for Dorast). The truth is that after the first Prep Fire attack on the ATG, I got so excited about the possibility of overrunning the beast that after looking up all the appropriate rules and counting up factors, I simply Malfunctioned the rest of my Prep Fire Phase. So, when I remembered in the MPH, Jim quite properly laughed his head off. I advanced squad M to 20P4 to take away his opportunity to gain encircled fire. Turned out to make no difference. Going into melee may be a little desperate, but Halle's boys are beginning to feel left behind. I finally decided on the overrun because even if unsuccessful, the ATG crew will have to rout away and anyone wanting to shoot the gun would first have to be successful in Close Combat. I reduce the...*
Russian probability of success in CCPhs by leaving the SPW 251 in Motion.

All the squads are deployed in extended order along the canal bank to make a large, dispersed fire group with good Panzerfaust opportunities. Bring on the T-34! We ain’t afraid of no tanks!

It’s really rather unusual for it to have so much effect, but this ammo shortage rules is killing me. I’ve lost five machine guns totaling 10FP (24 factors per turn if you consider ROF). Now a marginally effective StuG III has become useless.

Jim was startled when I started to shoot Panzerfausts at him. I volley fired the PFs and the StuG III to try and get a quick kill. (I am using the term ‘volley fire’ because that is a technique used where everyone shoots at the same time, in this case at the same movement point; you lose a little in fire control but you gain in surprise.) It would be nice to get a kill to go with this tactic. I guess I’m lucky I don’t have an immolated halftrack and squad to shoot around.

My plan has been to shoot up the T-34 before it really starts to hurt him, prevent Russian reinforcement of the crossing site, and start suppressing the Guard’s fire so I can cross the bridge. No sweat!

Russian: Well, unfortunately the ATG crew couldn’t hang in there. It is quite clear that Don has shifted his attack to bridge P7. Hopefully my Guards can stop this crossing. It is going to be close.

All right! ALL RIGHT!! Which one of you ASL second-guessers hasn’t ever forgotten that just because there are no Panzerfaust counters doesn’t mean there are no Panzerfausts? You may have noted that Don and I are playing with a +1 DRM to the PF availability check. Although not required by the rules, we felt a DRM was appropriate to reflect the ammo shortage.

A couple of other thoughts. I believe 23Q5 has a blocked LOS from my HMG. It takes a little getting used to, the varying size of hexes behind obstacles. With the woods in 23O4 and 05 more than five hexes away, they cast a two-hex ‘shadow’; we’ll see when I can spare a shot.

He has lost one squad and I have lost two squads (equivalents). We both still have a heavy AFV. I have no doubt that he has the strength to force his way over the bridge; the question is how much of a toll can I make him pay. It would be nice to have a duel between the StuG III and my T34/85—but somehow I don’t believe his Panzerfaust-toting teenagers are going to let that happen.

Neutral Commentator: The Russian has finally realized the scherzpunkt of the attack—namely, the bridge at 23P7. It will certainly be interesting to see whether or not the reinforcements will be able to reduce the German bridgehead. Note that Event 256 (the one that killed 2 G.M.) should have been a Cowen, reducing the column from 8FP to 6FP, but the result would have been the same. Another minor point overlooked by our players: the contestants in the new Melee once again forgot to roll for Ambush (AI.14).

I was really impressed at the bravery of that T34/85 crew. You’d think that this late in the war, they’d want to live and would have learned some respect for the Panzerfaust. A better spot to park this ’85 would’ve been 23P10, not out of PF range but a bit safer. Or perhaps at even 23K9—safe from all German fire but still able to easily interdict all Germans with Panzers engaging.

Nothing has ever forgotten that you can’t take that T34/85, either. I think I would have sent some of those Russian Guards to 23O10 (1st level) so to disperse them (the fire group would still be maintained).

In Event 286, the German rider squad O is disrupted when the StuG fired. This is not required (or even allowed, for that matter; a Rider must Bail Out, however, if a AFV it’s riding changes its TCA).

ORGANIZATIONAL COMMENTS

In the past, we have found some Series Replays to be difficult to follow. We decided to chronicle each player action as it took place in the exact order it takes place; you will find the Event List before player comments for each turn in the text. As you can see, movement was often interrupted by Defensive First Fire and then continued. Each and every die/dice roll is also recorded.

The tables below show all the non-bookkeeping counters that a reader will need to follow along with this Series Replay. He will need the full compliment of Prep Fire, First Fire, blaze, DM and Malfunction counters at hand. If the reader does try to follow along exactly, looking for mistakes (I am sure we have some left) or analyzing strategy, it may even be useful to set the dice up as they were. I believe you will find that your enjoyment of this replay is greatly enhanced if you take the time to sort through your countermix to duplicate the counters listed in Table 1.

The Event Listings that accompany each turn record each event sequentially, with continuing actions by units listed with the exact event number. For example: Event 1 is the initial movement of a squad, Event 2 is the First Fire attack of a HMG, Event 3 might be a morale check. If the squad continues its move, it would be listed not as Event 4, but as Event 1A; the HMG continuing to fire as 2A; any new morale check as 3A.

The first table below shows the set-up forces and their Event Listing designation. Units such as the T34 or PzKw IV which are the sole unit of their type do not have any special designation. Some of the leader counters are hold-overs from FL and COI (for many reasons; the only improvement on the latest is the art work). [Commentator’s Note: not true; ASL leaders have a boxed morale number on the broken side to indicate self-rally capacity.]

Table 2 shows the conventional abbreviations we adopted in recording the actions and events during play. There is no indicator for the condition of units while in play (broken, ELR reduced, malfunctioning, etc.) so readers will have to keep track with such status changes on your board as you follow the Event Listings.

Jim and I had a lot of fun playing this scenario for you, but it is not without errors—both tactical and rules violations. We left all these in. Obviously, tactical errors are what make any wargame what it is. And, ASL is a difficult game to master, and experienced players have an edge because of their mastery of the rules. We played this game some three weeks after the release of ASL. Whenever we made a mistake and caught it, we comment on it ourselves. In other words, we did not retroactively correct errors even though we would look stupid in print. No one (not even Jim and I) should have been without a rule boo-boo or two. It’s no big thing, and arguably is part of the game. Remember A.2.

RUSSIAN UNITS

<table>
<thead>
<tr>
<th>Board 20</th>
<th>Designation</th>
<th>Type Unit</th>
<th>Board 23</th>
<th>Designation</th>
<th>Type Unit</th>
<th>After Set-Up</th>
<th>Type Unit</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-4-7</td>
<td>R.A.</td>
<td></td>
<td>4-4-7</td>
<td>R.F.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-4-7</td>
<td>R.B.</td>
<td></td>
<td>4-4-7</td>
<td>R.G.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-4-7</td>
<td>R.C.</td>
<td></td>
<td>4-4-7</td>
<td>R.H.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-4-7</td>
<td>R.D.</td>
<td></td>
<td>4-4-7</td>
<td>R.I.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-1</td>
<td>Leader</td>
<td></td>
<td>2-2-8</td>
<td>crew</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8-0</td>
<td>Leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7-0</td>
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Turn 5 Reinforcements

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<td>6-2-8</td>
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</tr>
<tr>
<td>6-2-8</td>
<td>R.N.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-2-8</td>
<td>R.P.</td>
<td></td>
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</tr>
<tr>
<td>9-1</td>
<td>Leader</td>
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<td>Chernova</td>
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GERMAN UNITS

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<td>Eastonov</td>
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<tr>
<td>6-2-8</td>
<td>Leader</td>
<td>Halle</td>
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<tr>
<td>6-2-8</td>
<td>Truck</td>
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ADDITIONAL UNITS

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<td></td>
<td>4-4-7</td>
<td>G.P.</td>
</tr>
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<td>2-3</td>
<td>T.Z.</td>
<td></td>
<td>4-4-7</td>
<td>G.R.</td>
</tr>
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<td>4-5-8</td>
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<td></td>
<td>2-3-7</td>
<td>g.n.</td>
</tr>
<tr>
<td>(1)-0-6</td>
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<td></td>
<td>2-3-7</td>
<td>g.P.</td>
</tr>
<tr>
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<td>2-3-7</td>
<td>g.R.</td>
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<tr>
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<td>2-3-7</td>
<td>g.D.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2-3-7</td>
<td>g.C.</td>
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</table>
**Figure 4:** Positions at the end of Turn 5.

**TURN 6**

**German Player Turn**

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DRM</th>
<th>DR</th>
<th>Result</th>
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<tr>
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<td>329</td>
<td><strong>Rally Phase</strong></td>
<td>6</td>
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<tr>
<td>330</td>
<td>German StuG main gun repair</td>
<td>4</td>
<td>NE</td>
</tr>
<tr>
<td>331</td>
<td>T.Z. rally with S.D.M.</td>
<td>-1</td>
<td>6 Rally</td>
</tr>
<tr>
<td>332</td>
<td>R.K. (DM) rally with Chernova</td>
<td>-2</td>
<td>5 Rally</td>
</tr>
<tr>
<td>Prep Fire Phase</td>
<td>333</td>
<td>G.R. makes PF check</td>
<td>3</td>
</tr>
<tr>
<td>334</td>
<td>G.R. fires PF at T34</td>
<td>+4</td>
<td>5 Turret Hit</td>
</tr>
<tr>
<td>335</td>
<td>T34 crew survival</td>
<td>11</td>
<td>T34 KIA</td>
</tr>
<tr>
<td>336</td>
<td>Oettl, G.R., G.N. fire on R.N., R.M. w/LMG-8 IFT</td>
<td>+3</td>
<td>7 NE</td>
</tr>
<tr>
<td>Movements Phase</td>
<td>337</td>
<td>SPW #12, G.P. in 23P8 change VCA to Q9/P9</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DRM</th>
<th>DR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>338</td>
<td>R.N., R.O., R.K., R.M. w/LMG fire on SPW #5 crew, G.P.</td>
<td>-2</td>
<td>4 IFT</td>
</tr>
<tr>
<td>339</td>
<td>SPW #5 crew-2MC</td>
<td>-2</td>
<td>4 IFT</td>
</tr>
<tr>
<td>340</td>
<td>G.P.-2MC</td>
<td>-2</td>
<td>4 IFT</td>
</tr>
<tr>
<td>341</td>
<td>SPW #5 (BU) stops in 23P8</td>
<td>+2</td>
<td>7 2MC</td>
</tr>
<tr>
<td>342</td>
<td>SPW #5 crew-2MC</td>
<td>+2</td>
<td>7 Stunned</td>
</tr>
<tr>
<td>343</td>
<td>G.P.-2MC</td>
<td>+2</td>
<td>7 Breaks (DM)</td>
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</tbody>
</table>

**Russian Player Turn**

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DRM</th>
<th>DR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Fire Phase</td>
<td>401</td>
<td>G.E. (DM) rally with Kindel</td>
<td>-1</td>
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<tr>
<td>402</td>
<td>G.N. (DM) rally with Kindel</td>
<td>-2</td>
<td>10 Remove</td>
</tr>
<tr>
<td>403</td>
<td>German StuG main gun repair</td>
<td>-5</td>
<td>NE</td>
</tr>
<tr>
<td>Prep Fire Phase</td>
<td>404</td>
<td>R.L. w/LMG fires on People, G.R.</td>
<td>+1</td>
</tr>
<tr>
<td>405</td>
<td>People-2MC</td>
<td>+1</td>
<td>7 2MC</td>
</tr>
<tr>
<td>406</td>
<td>R.N., R.M. w/LMG fire on People, G.R.-DM</td>
<td>+1</td>
<td>7 2MC</td>
</tr>
<tr>
<td>407</td>
<td>People-2MC</td>
<td>+1</td>
<td>7 2MC</td>
</tr>
</tbody>
</table>

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**Notes:**
- Rally Phase: Positions at the end of Turn 5.
- German Player Turn:
  - Turn 6 Positions
  - German StuG main gun repair
  - T.Z. rally with S.D.M.
  - R.K. (DM) rally with Chernova
  - SPW #12, G.P. in 23P8 change VCA to Q9/P9
- Russian Player Turn:
  - G.E. (DM) rally with Kindel
  - G.N. (DM) rally with Kindel
  - German StuG main gun repair
  - R.L. w/LMG fires on People, G.R.
  - People-2MC
  - R.N., R.M. w/LMG fire on People, G.R.-DM
  - People-2MC
German: Well, in every critical battle there comes the moment when both sides think they’ve had it. Victory usually goes at that point to the side which perseveres. Let’s comment on Chancellorloville is appropriate, “I was too weak to defend, so I attacked.”

My movement might not seem to make any sense at first, but here is the logic behind it. After polishing off the T-34, I figured that overrunning Russian squad I (23X9) with the SPW 251/1 would be a cute maneuver and have three collateral benefits: 1) it would surprise Jim and make him think I was crazy; 2) it would attract bullets from the Guards’ large fire group with a +2 DRM versus the -2 DRM everyone else would suffer; and 3) it would take over the duty of isolating Russian squads F and H from the battle area.

After that didn’t work, I planned to overrun Russian squad E in B44 and then jump the canal there to divide his attention. Once the SPW 251 and squad Q were pinned, it seemed better to leave well enough alone and not move any further.

My last great idea was to build up a large fire group in 23M6 and 23N6 with - leadership and drive away the Guards by fire. Lt. Urban told everybody that the SPW in the church steeple (23F5) was out of effective range. Now poor Urban doesn’t get to see the end of the war. C’est la guerre!

My only hope now is to get enough people through his Prep Fire Phase to lay down a serious Panzerfaust barrage during the Defensive Fire Phase. It would also be really nice to win these melees.

I had a really effective Rally Phase during the Russian turn. My small crossing force got beat by his Guards, and I was lucky to just pin down his close assault squad (Russian K). I have to make money this next turn or his defense will gel and I’ll never get across.

Russian: I was surprised to get such a clear shot with my HMG. It really paid off by killing a -9 leader and a squad and a half. Combined with the very effective fire against both halftracks, Don wasn’t able to accomplish very much. I’ll use this respite in his attack to get as ready for his final assault as I can.

Don still has 51 victory points on the mapboard, so the next turn should tell the tale. Squad K maneuvered to try and take out five points worth of halftracks and passengers, but didn’t make it.

The Guards were able to lay down some serious sub-machinegun fire on the bridge’s exit hex, during both the Defensive and Prep Fire Phases. So, I started to think that the far south bridge might need a little additional protection. If I can continue to bottle up the center bridge, the two squads coming from Board 20 will be able to put him under encircling fire. At that point, his already poor ELR will become much more of a factor.

Psychologically I feel much better now, but I should continue to remember that Don is a crafty veteran, and he might trade those 51 points into some kind of an advantage. Now is the time to watch for a trick.

Neutral Commentator: I couldn’t believe that both halftracks were Strategy points. As we can see, the price was paid. Note that the halftrack crew in 23M7 that became pinned did not prevent the vehicle itself from continuing movement. Maybe Don didn’t notice this (A7, 5).

One error committed in the German turn: the Russian ATG would have to be ‘possessed’ (A4, 44) before being spiked; this could have been done in the MPH (by expending a MF) or in the Rally Phase; both would require a dr less than '6'. Then, the gun could be spiked in any Fire Phase in which the possessing unit could otherwise fire it (A9, 3).

Those Guards in 23M0A may be a very tough nut for the German to crack. But, in the Russian turn, they still refuse to climb the stairs. Chernova should have prompted them a bit more before taking the back door out.

The German bridgehead is becoming more hemmed-in by the minute. It’s amazing that these melees have been going on as long as they have. I guess the Russians are struggling to survive as much as the Germans are trying to escape.

I was also surprised to see that the battlefield integrity rules were being employed (A16), being Optional as they are (I myself am definitely one of those that ‘record keeping is offensive’).

**TURN 7**

**German Player Turn**

<table>
<thead>
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<th>Serial Event</th>
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<th>Result</th>
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<tr>
<td>Rally Phase</td>
<td></td>
<td></td>
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<tr>
<td>449 Wnd Change Attempt</td>
<td>7</td>
<td>NE</td>
<td></td>
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<tr>
<td>446 G.P. (DM) self rally</td>
<td>8</td>
<td>NE</td>
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<tr>
<td>447 People (DM) rally</td>
<td>-1</td>
<td>5</td>
<td>Rally</td>
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<tr>
<td>448 G.R. (DM) rally with Peol</td>
<td>-3</td>
<td>7</td>
<td>NE</td>
</tr>
<tr>
<td>449 G.O. (DM) rally with Peol</td>
<td>-3</td>
<td>7</td>
<td>NE</td>
</tr>
<tr>
<td>450 g.n. (DM) rally with Kindel</td>
<td>8</td>
<td>Remove</td>
<td>DM</td>
</tr>
<tr>
<td>451 G.E. (DM) rally with Kindel</td>
<td>4</td>
<td>Remove</td>
<td></td>
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<tr>
<td>Prep Fire</td>
<td></td>
<td></td>
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<tr>
<td>452 G.I. rally with Blick</td>
<td>-2</td>
<td>4</td>
<td>Rally</td>
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<tr>
<td>453 German StuG main gun repair</td>
<td>6</td>
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<td>455 G.S. G., G.D., G.K. fire on R.N., R.M.</td>
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<td>NE</td>
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**Russian Player Turn**

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<tr>
<td>Rally Phase</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>449 Wnd Change Attempt</td>
<td>7</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>446 G.P. (DM) self rally</td>
<td>8</td>
<td>NE</td>
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<tr>
<td>447 People (DM) rally</td>
<td>-1</td>
<td>5</td>
<td>Rally</td>
</tr>
<tr>
<td>448 G.R. (DM) rally with Peol</td>
<td>-3</td>
<td>7</td>
<td>NE</td>
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<tr>
<td>449 G.O. (DM) rally with Peol</td>
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<td>7</td>
<td>NE</td>
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<td>450 g.n. (DM) rally with Kindel</td>
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<tr>
<td>451 G.E. (DM) rally with Kindel</td>
<td>4</td>
<td>Remove</td>
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<tr>
<td>Prep Fire</td>
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<tr>
<td>452 G.I. rally with Blick</td>
<td>-2</td>
<td>4</td>
<td>Rally</td>
</tr>
<tr>
<td>453 German StuG main gun repair</td>
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<tr>
<td>Defensive Fire</td>
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<tr>
<td>454 G.S. G., G.D., G.K. fire on R.N., R.M.</td>
<td>11</td>
<td>NE</td>
<td></td>
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<tr>
<td>455 G.S. G., G.D., G.K. fire on R.N., R.M.</td>
<td>11</td>
<td>NE</td>
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<tr>
<td>Movement Phase</td>
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<tr>
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Figure 5: Positions at the end of Turn 7. Above are shown the contexts of the two German SPW 231/1 (as marked on the illustrations).

Russian Player Turn

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<tbody>
<tr>
<td>513 Wind Change Attempt</td>
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<tr>
<td>514 German SPW AAMG repair</td>
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<td>NE</td>
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<tr>
<td>515 Kindel (DM) self-rally</td>
<td>-1</td>
<td>7</td>
<td>Remove DM</td>
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<tr>
<td>516 G.D. (DM) rally with Oettl</td>
<td>-1</td>
<td>5</td>
<td>Remove DM</td>
</tr>
<tr>
<td>517 G.C. (DM) rally with Oettl</td>
<td>-1</td>
<td>9</td>
<td>Remove DM</td>
</tr>
<tr>
<td>520 G.K. (DM) rally with Oettl</td>
<td>-1</td>
<td>9</td>
<td>Remove DM</td>
</tr>
<tr>
<td>521 G.G. (DM) rally with Blick</td>
<td>-2</td>
<td>7</td>
<td>Remove DM</td>
</tr>
</tbody>
</table>

Prop Fire Phase

| 525 G.F.-PTC | 5 Pass |
| 526 G.A.-PTC | 9 Pinned |
| 527 G.B.-PTC | |
| 528 R.L. fires on G.H.-4 IFT | +1 9 NE |
| 529 HMG fires on G.H.-6 IFT | +1 4 IMC |
| 530 G.I.-1MC | 7 Breaks |

Defensive Fire Phase

| 532 R.H. w/HMG | +3 10 NE |

Advancing Fire Phase

| 534 Hero fires on Kindel, G.E. | -1 IFT | 6 NE |
| 535 R.A. fires on SPW 368 crew, Metzler, G.Q.-1 IFT | +2 9 NE |
| 536 R.B. fires on SPW 368 crew, Metzler, G.Q.-2 IFT | +2 9 NE |
| 537 R.J. fires on Kindel, G.E.-2 IFT | +1 9 NE |
| 538 R.F., R.O., R.K., Metzler, G.Q.-1 IFT | |

Replace squad G.O. with G.O. half-squad.

Rally Phase

| 548 R.O. from 23x10 (BPM 11) to 23x10 | |
| 549 R.M. w/368 from 23x10 to 23x10 | |
| 550 Chernova assault move from 23x10 to 23x10 | |

Close Combat Phase

| 559 R.M. w/LMG into 23x10 (2nd) to 23x10 (2nd) | 10 Breaks (DM) |
| 560 g.R.-2MC | 9 g.R. KIA | 8 Casualty Reduction |
German: Who says TAHG doesn’t engineer their games well? If I’d had any more squads, I would have run out of DM counters. It has become abundantly clear that we aren’t going to cross the canal at P7. My German forces are getting panicky, so we are trying to flood across all the bridges at the same time and dilute the defense a little.

I brought the impotent StuG III back to hex Q5 for a few seconds worth of cover, from which I ended up routing anyway. I figured that it was worth risking in a potential Close Combat. Unfortunately, its chances were reduced considerably by my shooting at his squad A and giving them a Hero to 30 along with a battalion-hardened squad. Hey guys, for Russians it is just as easy to surrender on the Heat of Battle Table!

I also want to point out one of my favorite tricks. In Event 459, I declared CX movement. When I got to hex 2314 with the unit, I asked Jim if he was going to shoot it. He undoubtedly figured I was going to cross 23H4 (why use CX movement elsewise) so he replied “No” hoping to get a residual fire attack and then another fire attack. Instead I declared the end of its movement. I view this as a legal way not to be shot up with FNFM/FFMO attacks, but there does seem to be a question as to its legitimacy. I recommend trying this on your friends; it can really frustrate your opponents.

In my mind’s eye, I see my squad L on Board 20 groveling in the cellar while Russian squad C is drinking up all the schnapps and vodka upstairs. Halle figures his only chance is to overcome them, one or two at a time, as they come downstairs for drinking and hand grenades don’t mix. At least I was able to capture some Germans and so relieve my earlier embarrassment.

Neutral Commentator: It appears as if the Germans have just about fizzle out. What was once a fairly concentrated and organized attack is now spread out ineffectively over the length of Board 23. Noted errors:
Event 486—Already broken units do not suffer ELR reduction (A9.13).
Event 491—German Sniper activation attempt missed.
Event 494—Panzerfaust can’t be used here (C8.31).
Event 495—These units are routing toward a known enemy unit (in 23F3) within that unit’s range; they would have to stay in place instead.
Event 498—These units are also routing closer to a known enemy unit (23F3); should low crawl to 23P6. Then, in the next Rout Phase, with the HMG out of LOS, they could get to 23N5.

Event 542—A unit may not Subsequent First Fire (A8.3) at a “target at a range > that to the closest known enemy unit”. Observe R.B. in 23U3.
Event 542—A unit may not Subsequent First Fire (A8.3) cannot be used by a unit marked with Final Fire, as G.Q. would be after his illegal Subsequent First Fire attack.
Event 553—Again our players have forgotten to add +1 for a CX unit firing (A4.51).
Event 556—Already broken units are not subject to ELR reduction.
Event 565—The Germans here are routing closer to R.B. in 23U3, a known enemy unit in their LOS.
Event 567—This advance would require the placement of a CX counter on R.L., according to A4.72—“**Difficult Terrain**”.

At the end of all this, things do look dim indeed for the German. The German had little to cheer for during this turn, save only the end of the standoff in 2005. As Jim pointed out, a better place for the 70-DAR is stacked with the HMG. All such heavy SWs should now have leader direction (especially with the upcoming revision of the Dover rule.)

**TURN 8**

**German Player Turn**

<table>
<thead>
<tr>
<th>Serial Event</th>
<th>Final DM</th>
<th>DR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rally Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>583 Wind Change Attempt</td>
<td>11</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>584 G.P. self-rally</td>
<td>12</td>
<td>Casualty Reduction</td>
<td></td>
</tr>
<tr>
<td>585 Kindel self-rally</td>
<td>11</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>586 G.D. (DM) rally with Onti</td>
<td>7</td>
<td>Remove DM</td>
<td></td>
</tr>
<tr>
<td>587 G.C. (DM) rally with Onti</td>
<td>9</td>
<td>Remove DM</td>
<td></td>
</tr>
<tr>
<td>588 G.K. (DM) rally with Onti</td>
<td>4</td>
<td>Remove DM</td>
<td></td>
</tr>
<tr>
<td>589 G.C. rally with Blick</td>
<td>-2</td>
<td>7</td>
<td>Rally</td>
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<tr>
<td>590 Repair SWF #EE AAMG</td>
<td>3</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>591 Repair German LGM in 23T4</td>
<td>6</td>
<td>Eliminated</td>
<td></td>
</tr>
<tr>
<td>Prep Fire Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>592 Chapman abandon his command to change into civilian clothes and escape to the West</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**German:** I have conceded to Jim. This is a great personal embarrassment and my chagrin knows no bounds. Whipped in a fair fight on “National TV” by my own product.

At this point, if you write off the units in P4 and M6 (which is a very safe assumption), then the total possible German points which exist are 33. If you consider the string of luck which would be required to get everybody off, it is clear why I concede. By that way, it is still possible to get Halle and squad L off by using a “magic truck.” A magic truck is one that all of a sudden knows you need it even though this one is over 400 meters away at the time. Halle and squad L move to 23Y1 using double time; track E slips back one hex. On Turn 9 they load (costing 7MP from the turn allowance) and then move offboard. Trucks may move through enemy units like an overrun, but TPBF by even one squad gets the truck with a TK of **“8”** on the IFT. Not a good chance, but still mathematically possible. In any case, the odds of being this lucky across the board do not seem worth the effort involved in continuing to chronicle my downfall for this distinguished audience.

**CLOSING COMMENTS**

**German:** We will continue these final comments the way Jim and I always do after a game. A friendly ‘**why did you . . .** question-and-answer session. Jim, what was your overall impression of the game?

**Russian:** In defeat as in victory, Don, you are so humble. I don’t think either of us played our best game on the whole. I had a multitude of little errors in the mechanics—like forgetting Panzerfausts or keeping leaders with SW. You played a more technically proficient game, but lacked the aggressiveness I think the German player needs in order to win. The key to this scenario is getting an early bridgehead and then pushing past the defenders in the first five turns. What I did was understand is that I couldn’t cross at bridge X3 during Turn 4 when you had the chance? That’s when you turned north and charged the anti-tank gun.

**German:** Well, I am happy to hear that you were convinced that X3 was the crossing site. Actually, if you read my initial comments, you’ll see that it was basically an anti-tank attack. As to charging the anti-tank gun, that is hard to defend right now. The only thing I can say is that the single AT Gun was a lot weaker defense than the four squads covering the northern bridges. Don’t you think so?

**Russian:** No, I don’t. Manhandling an ATG out into the street was a desperation move on my part. You had two squads in halftracks which could cross with immunity and then become CE during your Advance Phase; the StuG III and the armored car would have provided a lot of additional close support. Lastly, I thought you’d place that gigantic fire group along the hedge under “Opportunity Fire” counters and then cross with one squad at a time until I had to break Concealment before you built up too big a force to take on me to cop. In fact, that seemed to be what was happening when I took that long-range shot at your armored car with the ATG.

**German:** Well, that might have worked, and I certainly still had all my strength. Even though I couldn’t cross at P7 until after your Guards arrived, it seemed to me that the original plan was still viable. Assuming I could inhibit your Board 23 movement with fire lanes from those halftracks, I would only face the ATG and three short-range squads. (The T-34 would be a problem anywhere you put it.) The only thing I think I should have done differently was not make the move on P7 so soon. If I waited until after your Turn 5 movement, would the Guards have come on to reinforce the X3 crossing?

**Russian:** I might have done that; it’s hard to tell now. You should have avoided the question of the Guards effectiveness by attacking immediately in Turn 4, defeating first the Board 23 forces and then the reinforcements in detail. You also moved into range of the HMG, which would have been no factor at such long range—especially with a three-hex blind zone behind every obstacle. What about your luck? It seemed pretty bad to me.

**German:** I’ve already averaged up the dice rolls so that I could cop a plea. No more? Not only were we even overall, but we both were better than average. Still, it is clear that the ammo shortage rule had more effect in this playing than usual. I did not have a functioning ordnance or SW by the end of
Turn 7.

**Russian:** Well, that’s true, and it did help me. You need that extra firepower where it can be concentrated into one hex so a leader can ameliorate the effects of the building DRM. We can also see what an effect your low ELR had on the game. Slowly but surely, under constant pressure, your force disintegrated. You played a good game with what you had.

**German:** On the whole, I am not particularly happy with my play. I don’t believe that I adapted fast enough to the situation. As you know, I expected to keep my forces together enough to fight through any opposition. As I suffered gaps under normal attrition and from the effects of the ammo shortage, I failed to realize that I was no longer capable of fighting a stand-up battle. Certainly, part of this was caused by my rush to engage the ATG instead of waiting until my infantry had the chance to supress the crew. At least I got the T-34 with the Panzerfausts.

**Russian:** OK, I guess you can take one cheap shot. Just don’t make a habit of it or I’ll never let the Chappell counter out of the Gulag.

**Neutral Commentator:** The one thing that stands out to me in this battle is despite all the number of errors committed, none had a serious effect on determining the victory. This just goes to show that even YOU can play ASL, not worry too much about getting everything perfect, and still have a good time and a fair game.

Looking over the players’ final comments, I too think that the German should have abandoned his fancy plans, and taken advantage of his local superiority on his Turn 5 by forking a bridgehead over the 23X3 and 23BB5 bridges. Sure, there’s a lot to be said about formulating a solid plan and sticking to it “through thick and thin”, but there’s even more to be said (in my humble opinion) about being flexible at the situation at hand. I just wonder what might have transpired had this route been taken. Do I detect a strong streak of stubbornness in Don.

All in all though, a fairly well-played game tactically by both players, considering the undertaking involved in producing a Series Replay.

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**AH Philosophy . . . Cont’d from Page 2**

a simple yet challenging game, well liked by everyone who has played it so far. An original from Gibsons Games (the British publisher), The Avalon Hill Game Company is pleased to offer the American version.

**Bruce Shelley**

Back in those golden school days, it was an expected yearly chore to write about what we did last summer under the vigilant eye of a kindly teacher. Here, instead of a boring and brutal—editor (Rex, I know that you’re going to edit this out—feel free to substitute “gruff but loveable editor”) I am neither gruff nor loveable, the yearly chore is to write up what we’re working on.

**My current major project is to develop FEBA (“Forward Edge of the Battle Area”), likely to be retitled Tac Air. This is a battalion level game of future European conflict designed by Major (he’s been promoted) Gary Morgan of FLIGHT LEADER fame. This is a highly innovative game system that does an excellent job of displaying the interaction of various combat arms, command and control and logistics. Air operations are far less abstract than in most games on this scale. The game is very playable, and the smaller scenarios can be completed in a couple of hours. The rules are currently being rewritten as this game, like FLIGHT LEADER, was originally devised for the USAF.

The other major game project is developing West Front. This is the companion game to the popular RUSSIAN FRONT using the same scale and game system to simulate the fighting in Western Europe. This is still under evaluation but, as projected, should provide not only a game in itself but also a “mate” to RUSSIAN FRONT to produce a combined monster game that covers the entire war in Europe.

**S. Craig Taylor**

Finally, KNIGHTS OF THE AIR is about finished, with just the past-up of the rules to go. A great deal of the design effort was devoted to developing a game wherein an airplane would respond to a player’s manipulations of the flight controls as it should if it were actually flying. This required many involved calculations as altitudes, the vagaries of engine performance, and the effect of gravity all had to be considered. The result is a simulation of very realistic recreation of aircraft response.

The mapboard presents a full-color painted reproduction of an aerial photograph taken of the exact section of front lines where Richthofen, the “Red Baron,” was shot down. Our resident graphics artist, Cora Kibler, did an excellent job, capturing the scene so well you can almost feel you are flying over the front. The mapboard is along the lines of a traditional “slide and pursue” game ala Monopoly—but much more intriguing. While it has a high level of excitement, there is definitely a skill factor involved (as is our desire) which is more pronounced than in most family games. The innovation that makes this game so different is the “Ratings War” concept, in which networks must cancel poor programs and develop new ones. The game is intriguing in itself, but it is especially entertaining to television fans who will enjoy the parodies on programming past and present. If you are looking for a simple game you can play with the entire family, look no further. I hope those of you who have come to share my taste in games over the years will give this one some consideration. It has my highest personal endorsement.

On my next project—QUEST FOR THE IDEAL MATE—I can hear the hoots and howls of laughter already from our war-gaming readers. Say what you will, if it were not for the success of non-battle games like Dr. Ruth’s Game of Good Sex and Baseball Strategy, we wouldn’t be in business today. Wargame sales don’t pay the bills any more, so we have to branch out if we are to survive. Games like this subsidize our real interest—games of strategy. Actually, this one isn’t as syrupy as the title suggests. QUEST is a party game for mixed sexes which uses a traditional format and cards containing nine different categories of provocative questions which must be answered truthfully to advance in the game. In the course of all this, the conversation can become very enlightening as people reveal their true personalities, or where they stand on the various issues of the day (be they of national importance or trivial). Unlike many theme games, this one actually does go a long way towards letting people judge their compatibility in a fun setting. Besides, what better way is there to ask a young lady how many times a month she wants to make love?

All three of these projects are scheduled for Spring release.

Don Greenwood
KAMPFGRUPPE PEIPER
Towards a More Realistic BATTLE OF THE BULGE
By Danny S. Parker

BATTLE OF THE BULGE (1981) is a fine game. It has the advantages of easy to understand and complete rules, an excellent order of battle and a high excitement level in play. However, research conducted over the intervening five years since its publication has revealed a number of improvements that can be made to help this game live up to its true potential. This advanced version of the game is designed to impart even greater historical realism to BB '81 while also improving play balance.

First, let's examine the problems that exist with the historical "realism" of the game:

1. It is not possible for units (both US and German) to hold positions as they actually did in the battle.
2. There is no reason in the game for players to keep divisions organized in any fashion. In fact there are incentives to separate divisions and create "killer" stacks of high-point armored regiments.
3. Infantry units switch defensive positions too easily in the game, allowing the Allied player to plug holes with greater ease than was the case.
4. A breakout of a German armored Kampfgruppe — like that of Kampfgruppe Peiper in the actual battle — is nearly impossible since game players are blessed with unlimited knowledge of enemy positions and capabilities.
5. There are disparities between the armored strengths of German units in the game and the actual recorded operational tank strength from available German sources.
6. There are a few omissions in the Order of Battle and corrections to be made in the Order of Appearance. This includes inclusion of the German 89th Infantry and 340th Volksgrenadier divisions and the American 29th and 118th Infantry Regiments (separate). In addition, research has determined that several German divisions arrived earlier than shown in the game's OB.
7. The chronic German problem with maintaining fuel supply to their motorized units is not reflected in the game.
8. There is no historical rationale for the 20+ factor artillery die roll modifier for the German player. The German artillery was plagued by fuel and ammunition shortages that made movement and concentration extremely difficult.
9. Some US units that actually began the battle in improved positions are not shown in them in the game.
10. Units advance across rivers easier when faced with an enemy on the other side than they would unopposed.

An even more significant problem with the 1981 version is the play balance of the game. While it is almost universally recognized that the 1965 version was clearly balanced in favor of the German side, the 1981 version is imbalanced in the opposite direction. In short, it is difficult for the German player to win. We may safely assume that German chances for the capture of Antwerp were historically quite slim. However, if we key a game's victory conditions to performance exceeding that of the Germans in the actual battle, we can reach victory conditions that give both players a chance to "win" while still keeping the outcome uncertain. This is essential to continuing interest in the game and greater excitement in the play level.

ZONES OF CONTROL

The zones of control (ZOC) rules in BULGE '81 are not realistic. As structured now, attacks are mandatory when units are closer to each other than about two miles. Thus, if an aggressor advances as a result of combat to within two miles to a defender, the defender will have to counterattack the aggressor or withdraw. If this was true in the actual campaign, many of the epic actions would have been quite different. For instance, in the action around (not in) St. Vith known as the "fortified goose egg", the defending Americans were in almost constant contact with the enemy. Although there were limited American counterattacks, the U.S. units stood their ground — forcing the Germans to root them out of their positions. In the game as it now stands, the Americans would have had to flee simply due to the fact that stronger German forces advanced adjacent to them or received a "Contact" result in combat. Then too, the epic German defense against the Third Army south of Bastogne could not have held for four days in Avalon Hill's battle.

Often in the game, a surrounded American unit is required to attack a superior force and literally commits suicide. This ridiculous tactic won't be found in any historical account. When surrounded and beset by a superior enemy force, it was common in World War II combat for the defenders to consolidate their positions, take whatever cover they could find and prepare to destroy the aggressor by direct fire when they closed. In more peaceful periods, it was common for two enemy forces to co-exist on a quiet front within a mile of each other with little combat. This is precisely the case on the Elsenborn Ridge during the later part of the battle, as well as along the northern front from the Ourthe to the Salm (December 27 through New Year's Day). Mandatory attack rules might be realistic in a WWII game with a scale of a mile or less per hex since this is the effective range of direct fire weapons, but it has no place at this level. As currently stated, the rule seriously distorts how the battle was fought. Probably one of the most realistic games on World War II operational-level combat is THE LONGEST DAY. Note that with a scale of 1.2 miles per hex, combat between enemy units adjacent to each other is completely voluntary.

At the same time, when in contact with the enemy in World War II, withdrawal became a tricky procedure which is not well reflected in the game. This gives the American player an unrealistic ability to fill from one defensive position to the next. In actuality, moving from enemy contact could take most of the day. This is reflected in LONGEST DAY in the fact that strategic movement is not possible if units begin their turn adjacent to enemy units.

My recommendations:
7.4 Combat is completely voluntary for units in enemy ZOCs; that is, a unit may enter an enemy ZOC and attack any or none of the units which he is adjacent to. Units that begin their turn in an enemy ZOC are not required to attack the adjacent enemy units.
7.5 Infantry or paratroop type units that begin their turn in an enemy ZOC use a road movement rate of one (1) Movement Point per hex.

DIVISIONAL COMBAT COORDINATION

This rule induces players to maintain the organization of their divisions. The effect is made punitive since playtesting discovered that the Germans ran roughshod over the Americans if it is made a negative DRM (a "reward"). The recommended rule has the desired effect — a winning player will keep his divisions organized, particularly when attacking.

In any attack where there is nor at least two units of a single division participating in the attack, the die roll of the combat resolution is increased by one (+1 drm). There is no additional
amplification. Inexperienced troops such as those of the U.S. 106th Div. were particularly prone to surrender. Others, like the paratroopers of both sides or the Waffen SS, would as soon fight to the last man.

1. In any turn that a "Green" unit is isolated, surrounded by enemy ZOCs, and is more than four hexes from the nearest friendly supply point, it must roll to determine if it surrenders. It surrenders on a die roll of "11" or "12". Other non-paratrooper and non-SS units surrender under such circumstances on a die roll of "11". Units that surrender are eliminated from play and are removed from the board. Paratroop and SS units never surrender. If there is a stack of units, roll once for the hex with results applied to all therein; the least likely (including SS and paratroop) unit in the stack is used to determine whether the entire group surrenders.

2. "Green" units are those that were inexperienced at the time of the campaign. They are any units of the following divisions:

<table>
<thead>
<tr>
<th>American</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>75th INF</td>
<td>352nd VG</td>
</tr>
<tr>
<td>87th INF</td>
<td>626th VG</td>
</tr>
<tr>
<td>99th INF</td>
<td>276th VG</td>
</tr>
<tr>
<td>106th INF</td>
<td>560th VG</td>
</tr>
<tr>
<td>11th ARM</td>
<td></td>
</tr>
</tbody>
</table>

VICTORY CONDITIONS

24.2 For the Outbreak Scenario, points are awarded at the end of play to the player controlling:

- Leige and Namur hexes: 15 points each
- Meuse River city hexes: 6 points each
- Any other of the 50 towns: 1 point each
- River city hexes: 6 points each

25.3 For the Campaign Scenario, the time requirement for the various victory conditions is changed from four consecutive turns to three consecutive turns. The German Victory, Meuse River, is now attained if there are supplied German combat units in at least five of the following eight towns for two consecutive turns: Givet, Dinant, Namur, Andenne, Hay, Bastogne, St. Vith, Spa.

GERMAN ARMORED STRENGTH

The formula for determining the German armored strength appears to be as follows: total tank strength divided by ten and then one support strength point was added to Wehrmacht units and two support strength points were added to SS armored units. JdG and StuG strengths are allotted to the panzer-grenadier units. Using this formula basis and the very best available information on German tank strengths (Microfilm T-311, Roll 18 and the Lage Frankreich maps for 16-24 Dec 1944) yields the following:

- German Tank Strengths

<table>
<thead>
<tr>
<th>Division (V,VI)</th>
<th>StuG</th>
<th>Total AFV Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lehr</td>
<td>63</td>
<td>55</td>
</tr>
<tr>
<td>1 SS</td>
<td>117</td>
<td>82</td>
</tr>
<tr>
<td>2 SS</td>
<td>86</td>
<td>48</td>
</tr>
<tr>
<td>9 SS</td>
<td>74</td>
<td>40</td>
</tr>
<tr>
<td>10 SS</td>
<td>89 (59) (32)</td>
<td>101</td>
</tr>
<tr>
<td>12 SS</td>
<td>87</td>
<td>43</td>
</tr>
<tr>
<td>9t</td>
<td>79</td>
<td>38</td>
</tr>
<tr>
<td>9th</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>9th</td>
<td>106</td>
<td>25</td>
</tr>
<tr>
<td>116th</td>
<td>71</td>
<td>61</td>
</tr>
<tr>
<td>FBB</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>3 Panzer</td>
<td>46</td>
<td>46 (41)</td>
</tr>
<tr>
<td>15 Panzer</td>
<td>15</td>
<td>48</td>
</tr>
</tbody>
</table>

(59) 59 of the 69 tanks in 10th SS were in short-term repair as of 10 December.
(41) 41 additional assault guns were in shipment in December. However, most seemed not to have arrived in time for the campaign.

There are a number of implications for the units in the game to be drawn from the chart and sources:

1. Lehr/903 did not exist. The single reference by Bayerlein in A-941 on page 26 is contradicted by all other sources which indicate that the group to which Bayerlein was referring to as near Tellin on December 24th was the s. Panzerjager Abt. 559 and 243rd StuG Battalion (also referred to as the 1/130). It is also noteworthy that the map in the same document covering this period indicates that elements of the 902nd KG von Porsching) were covering the flank, so that this is likely a mere typo. Describing the same operation a translation of Rittgen reads: "... the division continued its march later than planned because it had to wait for a supply convoy of fuel trucks. Both of the Kampfgruppes were assigned to seize Rochefort that day. Kampfgruppe von Fallois (Lehr Aufklärungs Abt.) took the route Mabourg-Fourrieres; Kampfgruppe von Porsching approached Rochefort via Grupont-Wavrelles.

Note that Grupont is within one kilometer of Tellin and that KG von Porsching consisted of Lehr/902, most of II/130, s. Pieger 559 and StuG 243. Thus, it is reasonable to replace "Lehr/903" with a "KG von Fallois" — a reconnaissance Kampfgruppe of regimental strength with the designation Lehr/30 ALA and a combat and movement strength of "4-6" and with two 7-4 panzer grenadier regiments.

2. The strength of the Fuhrer Grenadier Brigade should be increased to "10-4" due to the considerable AFV strength available. It also would more correctly depicted as a panzer brigade rather than a panzer grenadier unit since it had more and better AFVs than did the Fuhrer Begleit Brigade. The organization of the brigade is described in Die Geschichte des Panzerkorps Grossdeutschland. Its panzer strength at the time of commitment can be taken from the Lage Frankreich maps that cover the Ardennes period.

3. The strength of the panzer regiments of the other divisions should be adjusted as shown in the chart. These are taken from Microfilm T-311, Roll 18 which was the source for Jung and is probably the best original source available for the German for this period.

4. 1SS/1 KG should be made a "15-5" since the unit had considerable initiative, a highly-trained and motivated cadre and included the 45 MKVI IIs of 501st SS under von Westerhagen, which were worth more in combat tank-for-tank than any other AFV in World War 2.

CHANGES TO REINFORCEMENT SCHEDULES

Based on German troop movements gleaned from the Lage Frankreich maps, the reinforcement schedules are altered as follows:

- 79th VG Division arrives 21 PM turn.
- 9th VG Division arrives 26 AM turn.
- Fuhrer Grenadier Brigade arrives on 21 PM turn.

Unless 11th Panzer Division arrives by crossing of the Meuse River, it arrives at hex XX26 on the 24 AM turn but may not cross to the Our River until the Allied player captures any of the following: Wilte, Vianden, Houffalize, Echternach or Clerf.

New German Units. Again based on the Lage Frankreich maps of the later stages of the battle:

- 89th Infantry Division (two rgt) arrives 29 AM turn at hex X3: 89/1055 (4-3) and 89/1056 (4-3)
- 340th Volksgrenadier Division arrives 30 AM turn at hex X3: 340/694, 340/695 and 340/696 (4-3 each)
EVALUATION OF COMBAT STRENGTHS IN BULGE '81

The purpose of this study is to determine, as objectively as possible, the relative combat strength of the divisions fighting in the Ardennes in the winter of 1944. This task is accomplished through the use of a uniform numerical accounting methodology. The analysis involves "counting rifles" as well as trying to evaluate less tangible factors such as training, morale and motivation of combat formations.

The basic unit of "firepower scores" is the infantry battalion which is allotted a strength of "1.0". Other weapons were evaluated to determine their effectiveness relative to this standard:

<table>
<thead>
<tr>
<th>German</th>
<th>Score</th>
<th>U.S.</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inf Bn</td>
<td>1.0</td>
<td>Lt Artillery Bn (105mm)</td>
<td>1.0</td>
</tr>
<tr>
<td>Med Art Bn (150mm)</td>
<td>1.5</td>
<td>Med Art Bn (105mm)</td>
<td>1.0</td>
</tr>
<tr>
<td>Hvy Art Bn (170mm+)</td>
<td>2.0</td>
<td>Hvy Art Bn (155+)</td>
<td>2.0</td>
</tr>
<tr>
<td>Werfer Bn</td>
<td>1.0</td>
<td>Recon Bn</td>
<td>1.5</td>
</tr>
<tr>
<td>Flak Bn</td>
<td>1.0</td>
<td>AA Bn</td>
<td>0.5</td>
</tr>
<tr>
<td>Pioneers Bn</td>
<td>1.0</td>
<td>76mm AT-Towed</td>
<td>3</td>
</tr>
<tr>
<td>75cm Pak</td>
<td>0.5</td>
<td>M-5 Tank</td>
<td>1/45</td>
</tr>
<tr>
<td>Mkv IV Pz</td>
<td>1/15</td>
<td>M-4 Tank</td>
<td>1/16</td>
</tr>
<tr>
<td>Mkv V Pz</td>
<td>1/10</td>
<td>M-10 TD</td>
<td>1/20</td>
</tr>
<tr>
<td>Mkv VI Pz</td>
<td>1/7</td>
<td>M-18 TD</td>
<td>1/19</td>
</tr>
<tr>
<td>Jg-IV</td>
<td>1/20</td>
<td>M-36 TD</td>
<td>1/17</td>
</tr>
<tr>
<td>JgV</td>
<td>1/18</td>
<td>JgVI</td>
<td>1/10</td>
</tr>
<tr>
<td>StuGII</td>
<td>1/18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These categories are described in a spreadsheet to facilitate the calculations. Another characteristic is given called "Adjustment" that allows alteration to the firepower score based on quantitative or qualitative information. AFV totals are based on "on hand" amounts rather than the TO&E establishment, which was seldom realized for either combatant. German mortar battalions are considered as medium artillery for the scores. The American score for the 155mm piece is greater than the German 150mm due to the superior U.S. fire control and observation.

Note that German reconnaissance battalions are considered to be more effective than the U.S. counterparts. This is due to the fact that tactically, the German reconnaissance battalion had a better defined role and was typically equipped as a fast attack force rather than as a light reconnaissance team.

The German 7.5cm Pak was a dual purpose weapon with an anti-tank capability as well as an infantry support artillery piece. On the other hand, the U.S. 76mm piece was solely designed as a towed anti-tank weapon. Finally, the tactical employment of German towed anti-tank weapons was generally superior (they had a lot more experience with it), further increasing their effectiveness. The same is true of the German flak versus the U.S. AA battalions. The Germans used these guns to great service in ground support and as an extremely effective anti-tank piece, whereas the U.S. weapon often spent time guarding bridges and watching for the scarce German aircraft.

The tank strengths were evaluated with consideration of gun effectiveness, armor, range and mobility (in that order of importance). Other considerations included gun traverse (or the lack of it in German panzerjagers) and the lack of overhead protection in the case of the U.S. tank destroyers.

Other quantitative and qualitative factors in the "adjustment" must include:
1. Casualties or understrength units
2. Missing equipment
3. Training
4. Motivation
5. Morale

These are best described on a division by division basis. This is given below for both the German and U.S. forces.

10SS: Superior equipment, training and morale. 501SS Pz Abt attacked and organic werfer abt. Over strength in personnel.
2SS: Well equipped. Up to strength with better than average replacements.
9SS: Poor replacements and lack of transport. AFV totals does not include 519 s.Pzgr abt. as was attached to 3FJ on arrival in the Ardennes (Dec. 21).

1SS: Superior equipment and morale. Assumes all AFV were in operation by time of commitment. Includes 655 s. Pzgr.
2SS: Up to strength but poor transport and weak recon abt. Organic werfer battalion, 560 s. Pzgr attached.
Lehr Pz: Includes s. 559 Pzgr and 243 StuG. Short rifle strength in PzGr bns but superior experience and morale.
2 Pz: Rested, well equipped and trained. One of the best German divisions. Up to strength.
116 Pz: Experienced with good morale but short transport and armor.
9 Pz: Very good German division with the attached 301 s. Pz Abt. (Tigers) but missing its artillery reg until after Christmas.

Fuh Begleit Brigade: Manteuffel considered these troops superior to any in the Ardennes (MS B-151). Received additional StuGs while in battle. (Lage Frankreich for Christmas Eve shows 60 StuG on hand with the brigade). The pz abt. (MkIV longs) was from Gross Deutschland and was very well trained.

Fuh Gr Brigade: Not fully refitted from recent combat. Good replacements but little training as a coordinated force. 6,000 men with one each on halftracks, trucks and bicycles; attached 911 StuG Brig.

3 Pz Gr Div: Missing 20% of rifle strength and 40% of equipment—transport and the recon abt was weak. Many AFV in shipment; no evidence that any appeared. Not completely rested.

15 Pz Gr. Div: As above, but with better recon abt and more StuG.
150 Pz Brig: Miscellaneous of units and equipment. One adjustment point allotted due to the capabilities of the commando units, the elite status of K9 200 and the deception potential.

Fuh F 21: Poor training, questionable tactical capability. Little motivation for aggressive offense after initial reverses (commander lacked any experience with infantry operations). No AFV although 519 s. Pzgr attached on 21st. Reconnaissance company and mortar battalion. The 8th regiment did not arrive until the evening of the 16th.

F 21: Short on training but more veteran cadre and good morale. 15 FJ Reg was partially motorized. Missing mortar battalion. 11th StuG Brigade attached with 30 AFV (18 operational on 16 Dec). Two replacement battalions. Missing divisional pzgr battalion.

9 VG: 7th Army considered a good division. Experienced officers and NCOs. Suffered scattered commitment. Fusilier company is shown as a recon entry.

12 VG: Extra fusilier battalion, excellent morale and experience. Best infantry division in 6 Pz Army.

18 VG: Up to strength and familiar with terrain. Attached 244 StuG Brigade. 506 s. Pz Abt. (8 Tigers) fought in its sector from 17 Dec to 21 Dec. Little experience but good training.

126 VG: This was only a 6 battalion division, but each battalion had the equivalent of 6 companies (many extra heavy weapons companies. Also, strong reconnaissance abt. and superior experience. Best infantry division in Army Group B.
62 VG: Regulation equipment but completely inexperienced.


1 Inf: Two regiments with three battalions each and fusilier battalion—all seriously understrength.

16 LG: Better experienced division with fusilier battalion. Pzgr abt arrived late.
212 VG: Good NCOs and better training. Fusilier battalion. Best division in 7th Army.
246 VG: Understrength from recent fighting.
272 VG: Seriously depleted rifle strength from current fighting.

26 VG: According to the 7th Army Chief of Staff—"The division was a deception. "Defective training, 'unqualified commanders' and no assault guns. An armed mob.

277 VG: Originally in the sector. Poor morale in some of the replacements.

146 VG: Depleted strength from recent combat and loans to 272 VG. Poor training and little tactical finesse. No StuG and little transport.
340 VG: Better training than average and experienced NCOs. Fusilier battalion.

560 VG: Distribution equipment but little training. Good marching performance and morale.

U.S.

2 Arm: Superior training, experience and morale. M-36 90mm TDs in the TD BN. Rusted and fully equipped.

3 Arm: Up to strength with '42 armored Div. organization. SP TD battalion loaned to 1st Division. Good division.
### Statistical Analysis

The study results were compared to the numerical values in the **Battle of the Bulge** game. This is shown in the attached spreadsheet. It was obvious that *BULGE* values were smaller than those in the study, so a linear regression was performed to determine a proper scaling value. The origin was forced through the zero intercept with little reduction in the correlation coefficient, R-squared was .81, inferring that the values in the study explained about 81% of the variation in combat values in the *BULGE* game.

The average study firepower value translates into .85 factors in Avalon Hill's game. Based on this relationship, it was possible to adjust the study values (REGRESS EST) to reflect this ratio. Finally, the absolute fractional difference in the scores and those in the game was estimated to locate the formations on which there existed a significant disagreement (CO VAR).

Generally, due to the somewhat subjective nature of the process of evaluating combat formations and the limitations of their incorporation in a countermix, it was decided that disagreements of 0%-15% were relatively insignificant. Those greater than 15% were starred—one star for each 5% disparity on the overall strength predicted.

The final spreadsheet reflects the recommended strength changes to the *BULGE* game (described in the body of the text). In this assessment (REVISION), overall agreement is significantly greater with R-squared increased to .94. Generally, the study finds the German strength to be underevaluated relative to that of the Allied forces, particularly for infantry formations.

It is possible to differ with some of the quantitative evaluations made for the competing forces. Unless the conversion values are radically changed, it is unlikely that results will change significantly since only serious disagreements are addressed. Errors in battalion counts are likely to have a more substantial effect. These were double-checked to reduce the likelihood of error.

---

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Adjust +/- | 2.0 | 0.0 | 0.0 | 0.0   | 0.0   | 0.0  | 1.0  | 0.0   | 0.0  | 0.0  | 1.0 | 1.0  | 0.0  | 1.0   | 1.0   |
New U.S. Units. The source for these is the After Action Report for the Third Army and 29th Infantry Regiment (Separate) for December 1944:

29th Infantry Regiment (3-4) arrives 22 AM at hex 11.
118th Infantry Regiment (3-4) arrives 24 AM at hex A22.

99th DIVISION AND 110th REGIMENT/28th DIVISION

Describing the positions that his men held at the beginning of the battle, General Lauer wrote, "I was extremely proud of my men. I had complete confidence in them. I knew they were entrenched in covered foxholes which I had inspected at various times..." (from Battle Babies: Story of the 99th Infantry Division).

In the sector of the 110th Infantry Regiment of the 28th Division, the regiment was so spread out that it occupied "village strongpoints each manned in rifle company strength". However, the stubborn American defense at Weiler, Holzthum, Conshum, Hosingen and Marnach was sufficient to deny the Germans access to the Clerf River for 24 hours. Hosingen and Conshum would not fall until the 18th of December! Of their stand, MacDonald writes (A Time for Trumpets), "Nowhere on the first day of the German offensive was there a more remarkable achievement by the American soldier."

The 99th Division, and the 110th Regiment of the 28th Division, should begin the game in improved positions on the morning of December 16th. Thus, the Allied player should place improved positions in hexes SS8, SS10 and LL23 at the beginning of the game.

EFFECTS OF FORTS

The effect of forts in the present game design is to not require defending units to attack when adjacent to enemy units. Since this rule has been rescinded in this version of the game, the advantage of forts should simply be that they give the defender a +1 die roll modifier. The towns of Monshau and Echternach should begin the game with forts constructed therein.

ADVANCE ACROSS RIVERS

Penalties for advance across rivers in the game are too lenient. It is possible for units to move onto a river hex and attack adjacent enemy units and then advance across the river (which they would be unable to do otherwise) up to four additional hexes. Combat operations across rivers in December 1944 in the Ardennes were exceedingly difficult. In terms of the attacks across the Our River on the first day, it is useful to examine the depth of the maximum
Below are shown the final spreadsheet figures drawn from previous data (see pages 39-41). Explanation of this presentation can be found under Recommended changes are summarized on the opposite page.

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Regression Output:

| Constant | 0.000 | Std Err of Y Est | 2.075 | Std Err of Y Est | 0.820 | R. Squared | 0.819 | R. Squared | 0.820 |
| No. of Observations | 61.000 | Degrees of Freedom | 60.000 | Degrees of Freedom | 59.000 | X Coefficient(s) | 0.848 | X Coefficient(s) | 0.870 |
| Std Err of Coef. | 0.015 | Std Err of Coef. | 0.053 |

Regression Output:

| Constant | 0.000 | Std Err of Y Est | 1.092 | Std Err of Y Est | 1.173 | R. Squared | 0.837 | R. Squared | 0.940 |
| No. of Observations | 61.000 | Degrees of Freedom | 60.000 | Degrees of Freedom | 59.000 | X Coefficient(s) | 0.862 | X Coefficient(s) | 0.911 |
| Std Err of Coef. | 0.008 | Std Err of Coef. | 0.030 |
penetration in the first 24 hours. The “maximum penetration” is taken from the narrative in a Luxembourg history (Melchers) based on original sources.

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<th>Division</th>
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<td>2nd Pz</td>
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<td>26th VG</td>
<td>Holzthum (3 miles)</td>
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<td>5th FI</td>
<td>Merscheid (4 miles)</td>
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<td>352nd VG</td>
<td>Tandel (2 miles)</td>
</tr>
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<td>76th VG</td>
<td>Beaufort (1 mile)</td>
</tr>
<tr>
<td>212th HG</td>
<td>Owesler (2 miles)</td>
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Since hexes in BULGE ‘81 are roughly two miles across, this amounts to a one or two-hex advance in the first two turns! Too, this didn’t apply solely to the opening German assault. Refer to the description of the German attempts to cross the Salm River against opposition in MacDonald’s book (A Time for Trumpets) and to the various sources noted in this tactical reality in World War 2 combat. Units may not advance across river hexes at all after successful combat in THE LONGEST DAY? Without limiting the German player too severely, I offer the following to curb the excess allowed by the current rules:

1. Advances across rivers after successful combat is limited to one hex, except across bridges or town hexes astride the river.

DELETE THE DIE ROLL MODIFIER FOR 20 + ARTILLERY FACTORS

There is no historical basis for the die roll modifiers for large concentrations of artillery for the Germans in the Ardennes Offensive. Although groups of artillery formed centers of gravity for attacks in World War 2, this rule is currently abused in the game. I recommend deleting the rule as it stands now. The sheer mass of attack factors inherent in multiple artillery has its own virtue.

The Germans lacked the basic ammunition and transport necessary to use the “Fire Direction Battery” concept often in the Ardennes (Lütich, 1957). One was formed temporarily in the Bastogne area for the fighting there, but was countered by a similar organization of III Corps artillery. Never in the Ardennes, even in the fighting around Bastogne, did the German command have sufficient ammunition on hand to engage in continuous massed fire as they had so successfully done on the Eastern Front. According to the Heeresgruppe B Artillery Commander:

“A necessity of prime importance was to bring strong artillery units up fast enough with the essential ammunition and motor fuel after a penetration had been achieved, because the enemy would carry out countermeasures on the German forces’ flanks. The necessary artillery forces to ensure this, however, were not at hand; there was a shortage of towing mediums, transport space was lacking for ammunition and motor fuel. We did not see far enough ahead to contemplate the difficulties which would later ensue owing to the roads and terrain.”

(Thoholte, MS B-311)

And, the commander of the 5th Panzer Army artillery...:

“On the 24th of December, the situation caused the senior artillery commander to dissuade the commander of the Fifth Panzer Army from bringing up the artillery and Nebelwerfers which were still left at the line of departure to commit them before Bastogne. Considering the fuel scarcity which had already seriously handicapped the supply of ammunition, we were forced to propose that this idea be dropped for the present in order to supply the artillery and Nebelwerfers already committed.” (Metz, MS B-393)

If any DRM should be allowed in the game for massed artillery, it should be limited to one DRM subtraction that is allotted to massed Allied fire during clear weather (reflecting the effect of air observation). A number of sources comment on its increased effectiveness when observation planes were aloft.

STATISTICAL STUDY OF UNIT STRENGTHS

Attached to this article is the compilation that estimates divisional firepower scores for all the American and German divisions in the Battle of the Bulge. This was systematically done using a Lotus spreadsheet to — as objectively as possible — evaluate the various formations in the campaign. The description of the evolution methodology is contained in the sidebar. Briefly, the following results were obtained and recommended as changes in BULGE unit strengths.

<table>
<thead>
<tr>
<th>German Division</th>
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<tbody>
<tr>
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<tr>
<td>9 SS</td>
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<tr>
<td>9th Pz</td>
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<td>116th Pz</td>
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<td>89th VG</td>
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<table>
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<td>3-4</td>
</tr>
<tr>
<td>118th Inf Regiment</td>
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</table>

Hardly any American divisions had the same difficulty. For the time being, part of the panzer regiment, the artillery regiment and the flak battalion have to stay behind in Area E (Reuland-Weiswampach) due to the lack of fuel.”

9SS: “The 9th SS Panzer Division was marching on foot from the area of Stadtkyll through Born toward Recht. Its fuel supply was sufficient only to keep the 9th SS Reconnaissance battalion mobile. The artillery and panzer regiments were still waiting for fuel.”

(Lehmann, MS B-779)

SET-UP CORRECTIONS

If any DRM should be allowed in the game for divisional artillery, the 21st enough fuel was acquired to mobilize the II battalion of the Panzer Regiment (MkIV), the Panther battalion would not arrive in the Recht-Poteau area until the 24th."

(Tieke, Im Feuersturm Letzer Kriegsjahr)

12SS: This division had barely moved from the line of scrimmage due to its involvement in a costly fight for Dom Bulgenbach. Because of its lack of movement, its fuel situation was not so acute. However, its commander described its fuel situation at the beginning of the campaign: “The division in the assembly area had no more than half an issue (50 km range). One more issue was brought up with considerable delay and difficulty on the day of the attack itself.”

(Krass, MS B-522)

2nd Panzer: “During the night of the 21st, the first elements of the panzer grenadier regiments arrived at the (Tenneville) bridgehead. The tanks were yet unable to follow as they were still without gasoline.”

(Weitz, MS B-456)

116th Panzer: “The division’s gas supply on the 20th was very critical. The reconnaissance battalion, artillery and panzer grenadier regiment 1SS had run out of fuel. Then a present from heaven: into the hands of the Division in Samree fell a large fuel supply. The total contents sufficed to fill the tanks of all the combat units of the division during the night.”

(Memminger, Der Windhund)

Panzer Lehr: On the 22nd, “... refueling the forces caused a lot of trouble. West of Moericy for the first time tanks had to be refueled from cans where the panzer grenadiers had available on their Steyr transport vehicles. The formations had expected to capture fuel stores in St. Hubert, but unfortunately only empty cans were found.”

(Ritgen, Die Geschichte der Panzer Lehr Division)

Fuhrer Begleit Brigade: “My intention was to move to Vielsalm and then to Salmchateau so that I could take up the main attack there; however, I was told to move further south. The brigade had been torn apart in this detour around St. Vith and we were short many of our tanks due to the gasoline shortage.”

(Remer, ETHINT-80)

To reflect this obvious limitation, beginning with the December 21 AM turn, the following goes into effect:

1. The movement allowance of all panzer-grenadier units is reduced by one.

2. The movement allowance of all panzer units is reduced by two.

3. Unless the German player captures fuel, the units of the 9SS and 2SS Panzer Divisions remain in this state from the time they enter the game.

4. If the German player captures a fuel dump, the 1SS and 12SS Panzer Divisions are immune to this rule for the balance of the game, and the 9SS and 2SS Panzer Divisions do not enter play "out of gas". If two fuel dumps are captured, all SS divi-
ADVANCE AFTER COMBAT

Infantry units were not capable of advancing in a general assault as rapidly as mechanized forces. In general, infantry units tended to become much more disorganized in combat than did mechanized forces. As the rules now stand, infantry can often move to the limit of its capacity and then move again (only if opposed) further than it could have otherwise. The rule below brings these excesses more in line with expected results described in Maneuver Control (FM-105-5).

1. Infantry and paratroop infantry units may not advance further than two hexes after combat.

REFERENCES

Houston, Donald E. — 1977: *Hell on Wheels: The Second Armored Division* (Presidio Press: San Rafael)
Kraus, Hugo — 1947: "11SS Panzer Division", MS B-322 (National Archives: Washington)
Kurzweil, Franz — 1964: *Die Panzer Lehr Division: Die Geschichte der Deutschen Panzerdivision im Zweiten Weltkrieg* (Verlag: Thoholte, Carl)
Lehmann, Rudolf — 1946: "ISS Panzer Corps", MS B-779 (National Archives: Washington)
Metz, Richard — 1946: "Army Group B Artillery During the Ardennes Offensive", MS B-393 (National Archives: Washington)
Memmingner, Fritz — 1952: "Die Kriegsgeschichte der Windhund Division" (Poppingshaus: Bochum-Langendreer)
OB West, Tagesmeldungen: "KTB Die Wacht Am Rhein, October 24-December 31, 1944" — Microfilm T-311, Roll 18 (National Archives: Washington)
OKW Wehrmachtstruppenstab: "Lage Frankreich 1:300.000, December 10, 1944 — January 31, 1945" (National Archives: Washington)
Preiss, Hermann — 1946: "Commitment of the IISS Panzer Corps during the Ardennes Offensive", MS A-877 (National Archives: Washington)
Riggin, Holmst — 1979: *Die Geschichhe der Panzer Lehr Division im Westen* (Motorbuch Verlag: Stuttgart)
"LXVII Armee Korps", Microfilm T-314, Roll 1334 (National Archives: Washington)
Thobert, Carl — 1946: "Army Group B Artillery During the Ardennes Offensive", MS B-311 (National Archives: Washington)
U.S. Third Army — 1945: *After Action Report, August 1944—May 1945* (Regensberg)
Weidinger, Otto — 1982: *Division des Reich, Band V* (Munin-Verlag: Osnabreck)
Weitz, Ruediger — *2nd Panzer Division*, MS B-456 (National Archives: Washington)

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<td>38.</td>
<td>P. Fleps</td>
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<td>39.</td>
<td>F. Hullman</td>
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<td>M. Miller</td>
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<td>41.</td>
<td>M. Frisk</td>
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<td>42.</td>
<td>B. Salvadori</td>
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<td>43.</td>
<td>R. Shurdut</td>
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<td>L. Barlow</td>
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<td>45.</td>
<td>E. Miller</td>
<td>8</td>
<td>44</td>
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</tbody>
</table>

Mr. Robert A. Shurdut is 49, married and father of two, holds a BA in Accounting, and is a Fiscal Support Specialist for the Massachusetts Dept. of Education in West Newton, Massachusetts.

**FAVORITE GAME:** THIRD REICH

**AREA RATED GAMES:** TRC, 3R

**% TIME PBM:** 100%

**GAMING TIME/WEEK:** 15 hrs.

**PLAY PREFERENCE:** PBM

**HOBBIES:** Chess, WWII History, Pilates

Mr. Pet Peeve: Late moves compounded by no correspondence that the move will be late or not forthcoming.

Mr. Shurdut's thoughts on recruiting new hobbyists:

I believe that wargaming could attract many new players if more people knew the hobby existed. I am in a position to talk to many people in Massachusetts about wargaming. Only a small percentage have heard of this hobby, or of gaming in general. Chess everyone has heard of, but games that re-create history... "Wow! Where do you get them? Tell me more," is the frequent cry from would-be gamers. The industry should advertise their products and the hobby, at least in the same manner that other hobbies do. Occasionally a major newspaper or magazine will run an article or do an editorial on people playing war games and how much fun they are. I believe the wargame industry would be pleasantly surprised if a greater effort was made to attract more new people to the hobby."
OPPONENTS WANTED

The **Opponents Wanted** adverstment runs on this page, and is offered as a service to the readership of this journal. If you have an exciting adverstment on this page are intended for one or more copies equal to the number of requests cannot be honored.

**AREA rated Prov. 1275 AAA seeks oppo. for WSSM, GIS, SL, DIP, COI, D&G, TAC, ST, 7302 Blue Springs Way, Citrus Heights, CA 95611, (916) 724-5917.**


Central Missouri Wargamers meet the third Sunday of the month in the Columbia area. John Loy, 861 Homestead Dr., Moberly, MO 65270, (573) 263-1857. Anyone with a GM degree or 10+ years experience at gaming, dedication and a sense of humor can GM for us. You will get the chance to try out your rules. Contact: Steve Wooster, 5476 E. Old Farm Cir., Teaneck, NJ 07666, (201) 836-4645. Any Rio Grande Valley gamers.
21.3 With regard to the above, may armor, assault and artillery still advance when the first hex after combat is into a zone of control, mountain or woods hex? May another two units go to sea during the same Movement Phase? A. Yes.

21.3 May an armor unit in an enemy ZOC continue if the first hex after combat is into a zone of control, mountain or woods hex? May another two units go to sea during the same Movement Phase? A. Yes.

19.4 If Blue has a unit at D3, may Red move units from Sea Zone A to Sea Zone B? A. Yes.

29.8 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

29.7 May aggressor units voluntarily be left out of supply to prevent the 2-factor supply loss? A. Yes.

32.4 May multiple air missions be conducted against the same hex during a single turn? If multiple attacks are permitted and conducted against a single hex, do escorts protect all missions in the theater? A. Yes, although the specific missions must be identified to the opponent prior to combat. Yes.

30.2 Is the aircraft "movement factor" (2.5) the same as aircraft "range"? A. Yes.

30.1 Multiple attacks are allowed. On the next turn, may a single TAC or MDM aircraft engage in multiple attacks? A. Yes.

30.5 Must aircraft return to the original base if not captured generate a replacement? A. Yes.

28.3 If an aircraft city has been captured, is the ground unit replacement capacity also reduced? A. Yes.

28.2 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

28.1 Is the aircraft "movement factor" (2.5) the same as aircraft "range"? A. Yes.

27.4 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

27.3 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

26.7 Does Red access to Sea Zone A from Sea Zone B? A. No.

26.3 If Blue has a unit at D2, may Red move units from Sea Zone A to Sea Zone B? A. Yes.

25.5 Is there a limit to the number of units that can be supplied through a friendly port hex? A. No.

25.4 Can air missions other than bomber and air transport be escorted? A. Yes.

25.1 Is the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

24.6 Does air cargo be escorted? A. Yes.

24.4 Conducting a mission other than "transfer"? A. No.

24.1 Can aircraft cities take-off after a mission? A. Yes.

23.9 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

23.6 Can air missions other than bomber and air transport be escorted? A. Yes.

23.4 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

23.3 Conducting a mission other than "transfer"? A. No.

22.8 Can aircraft cities take-off after a mission? A. Yes.

22.4 Conducting a mission other than "transfer"? A. No.

22.1 Can aircraft cities take-off after a mission? A. Yes.

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3.1 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

2.1 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

1.1 Does the aggressor 2-factor loss per turn reduce when the occupation takes one city of a formerly subdued minor country? A. Yes.

The following games are ranked by their reader-generated overall Value rating. Further aspects of reader response to our titles are indicated by the ratings in other categories. By breaking down a game's ratings into these individual categories, the gamer is able to discern for himself where the title's strengths and weaknesses lie in the qualities he values highly. Readers are reminded that the Game Length categories are measured in multiples of ten minutes (thus, a rating of "18" equates to three hours).
Infiltrator's Report

Another new hobby periodical made its recent appearance in hobby and game stores in the eastern U.S. this past month. And it has a unique advantage—it's free. The gameworks is a 12-page quarterly publication devoted to all types of games, with classified ads by game stores, articles on the play and design and collecting of games, insights into hobby events, and more. A rather conversational style makes it a treat to read. Unfortunately, no subscriptions are available, the editors being determined that it be a free service to those who, like them, have a great love of this particular pastime - and a look for a copy at your local store. For hobby shop owners and others who may desire more information, sample copies may be obtained from the editor, Ms. Debbie Driscoll (PO. Box 2157, Flemington, NJ 08822).

From a few friends getting together to enjoy the hobby in 1984, Adventure Games Worldwide (AGW) has grown to encompass some 250 members in four states. The organization was formed with the hopes of offering a forum for gaming competition and to bring together wargame clubs from all over the continent. AGW officers offer their support and advice to individuals wishing to start a game club chapter, or to existing chapters looking to expand membership or their program of events. A bi-monthly newsletter is in the planning stages, and there are plans for providing discounts on game purchases by members being exposed. These, and other matters, will be discussed at the first AGW national meeting at ORIGINS '87 in Baltimore. If readers would like additional information on the AGW, chapter guidelines, national constitution, and a copy of the first issue of their newsletter, "Outreach", please send a $1.00 to cover postage handling to Christopher Cummins, AGW National Director (11395 Columbia Pike, #C-12, Silver Spring, MD 20904).

Contest 331 brought quite a few "closet artists" out and had the best response we've seen in some time to this feature. Many fine pieces were submitted, clever ideas abound, and the choice the three judges (Bruce Shelley, Charles Kibler and myself) faced was tough. When we had independently voted, 19 entries had at least one proponent. Despite some arguments, we finally settled on the top five entries for the best! I hope the winners are encouraged to submit entries to our and other card games. Unfortunately, no subscriptions are available, the editors being determined that it be a free service to those who, like them, have a great love of this particular pastime— and a look for a copy at your local store. For hobby shop owners and others who may desire more information, sample copies may be obtained from the editor, Ms. Debbie Driscoll (PO. Box 2157, Flemington, NJ 08822).

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Almost Gone! The SQUAD LEADER modules are history. Very few remain in inventory. Remember! ADVANCED SQUAD LEADER was designed to replace the three SQUAD LEADER modules: CROSS OF IRON, CRESCENDO OF DOOM and G.I. ANVIL OF VICTORY.

This is what we have left:

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COUNTERS: Infantry A, Infantry B, Artillery, German Vehicle, Russian Vehicle ... each $3.00.
Be sure to specify exact Counters by title.
RULES ... $4.00

Crescendo of Doom
COUNTERS: French Infantry, British Infantry, Neutrals Armor & Ordnance, French Armor & Ordnance, British Armor & Ordnance, British Armor ... each $3.00.
Be sure to specify exact Counters by title.
SCENARIO/CRT Card Set ... $3.00
RULES ... $4.00

G.I. Anvil of Victory
COUNTERS: U.S. Army, U.S. Ordnance, British Armor, U.S. Infantry, U.S. & German SW; French HS, British HS; SS & Unarmed Infantry, German Infantry ... each $3.00.
Specify exact Counters by title.
SCENARIO/PLAYER AID CARD/TERRAIN OVERLAY ... $5.00
RULES ... $4.00

While They Last . . .

Someone in our production department was bright enough to overrun some of the more popular module parts, such as Counters and Scenarios.

As such, we held back on assembling each and every component. Now that the modules themselves are gone, we still have individual components remaining in stock. Specifically, those shown on this page.

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Deduct 20% from total cost after totalling entire order including 10% for postage and handling.

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- G.I. Anvil of Victory Rules ... 4.00

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DIVISION OF MONARCH AVALON, INC.
4517 Harford Road ★ Baltimore, MD 21214
Subscribe NOW and be Eligible to WIN one of 100 PRIZES!

“If Moses had played Outdoor Survival, he wouldn’t have gotten his followers lost in search of the promised land.”

... is what a caption for this picture might say!

We might say that a subscription to our magazine, The General, would explain the benefits of playing all Avalon Hill games.

We might also say that you can win a FREE SUBSCRIPTION FOR LIFE to The General if you can come up with a better caption than the (groan) one stated above.

In fact, we’re even going to let you WIN FREE GAMES FOR LIFE if you can come up with a caption focusing on any Avalon Hill game. Some examples:

“If the German High Command had played D-Day, they wouldn’t have left Normandy so lightly defended.”

“If Robert E. Lee had played Gettysburg, we might be speaking a different language, y’all.”

100 WINNERS!

It doesn’t matter which Avalon Hill game you write a caption about; winning entries will be chosen on originality and cleverness of caption.

Here’s what you can WIN!

Grand Prize: Every new Avalon Hill board game sent to you at no charge for the rest of your life.

Mini-grand Prize: Subscription to The General at no charge for the rest of your life.

3rd to 10th Place Prizes: Extension of your subscription to The General at no charge for one additional year.

11th to 100th Place Prizes: Awards certificates worth $10 in merchandise value. (90 to be given away.)

Why You Should Read The General

It’s stood the test of time—over 20 years and still full of articles on strategy, tactics, and reviews of Avalon Hill games, written by game designers, and others who know what they’re all about.

Each issue is loaded with full-color graphics, numerous maps, illustrations, and diagrams. We accept no outside advertising, so each issue is loaded with 48 full pages of game material including Series Replays, game contests, historical background pieces, information on conventions, even gossip on what’s happening in the game world. And best of all, The General tells you about upcoming new games before the general public knows. You get all this normally for only $12 a year. And if you use the discount coupons to the fullest, you get half of that back. And for a mere $18—the cost of an average game—you get a 2-year subscription which includes $12 in discount coupons. Obviously, the best wargaming value around is The General. Take out a 2-year subscription today—you may be eligible to win one of 100 prizes—maybe even a lifetime of games!

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[Please note that U.S. subscriptions are Postage Free. Canadian and Mexican subscribers must add $18.00 to the above price, overseas subscribers must add $26.00. Thank you.]

My Great Caption:

Here's my creation: [My caption is too clever to fit on the lines below—so I've enclosed a separate sheet.]

Signature: _______________________

Why you Should Read The General

Please send Subscription Forms and payment to:

The Avalon Hill Game Company
DIVISION OF MONARCH AVALON, INC.
4517 Harford Road, Baltimore, Maryland 21214

Winners to be Announced at the National Game Convention—Baltimore 1987

Deadline for mailed-in entries is June 10, 1987. Winners will be announced at ORIGINS '87, the national game convention held at the Baltimore Convention Center. Judges decisions are final and will be based on neatness, originality, and the whim of the eccentric manager of the advertising department.

How to Enter

All you have to do is take out a 2-year subscription (or extend your current one for an additional two years). Simply complete the GREAT CAPTION CONTEST ENTRY BLANK, then send it along with your payment to The Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214.

In the event of my winning one of the 100 prizes in this contest, I give permission for The Avalon Hill Game Company to use my name in any and all press releases and advertising relating to this promotion.

Signature: _______________________

[This form will be invalid if submitted after June 30, 1987. The Avalon Hill Game Company further reserves the right to reject any entry without prejudice. This drawing is not open to the employees or staff of The Avalon Hill Game Company or of Victory Games, Inc.]
TIMOSHENKO'S ATTACK

ASL SCENARIO G1

GOMEL, RUSSIA: July 12, 1941: German armored spearheads were advancing on Smolensk. In a desperate bid to save the city, Timoshenko gathered together a mixed force of twenty divisions and launched a flanking attack. The thin screen of infantrymen of the German 10th Motorized Division were to bear the full brunt of the Russian assault.

VICTORY CONDITIONS: The Russian player must exit ≥ 13 VP off the north edge of any one mapboard.

BOARD CONFIGURATIONS:

BALANCE:
+ Add one 4-6-7 squad, one 8-1 and one ATR to German OB.
☆ The Russian player may hold back any three squads and one leader from any group for entry on the south edge of any single board on Turn 2.

TURN RECORD CHART

See SSR 2 and 3
☆ RUSSIAN Moves First

SPECIAL RULES:
1. EC are Moderate, with no wind at start. The stream is Shallow.
2. The Russian forces, prior to setup, are allocated by the Russian player with one group per board; one group must enter the south edge of each mapboard. Following the German setup, these groups must set up offboard for entry on Turn 1.
3. The German forces are, prior to setup, divided into four groups by the German player in any manner. Three groups must set up on the mapboards, one group to each board. The fourth group is the reserve and portions, or all of it may be called into play (as reinforcements) on any board(s) after a one-turn delay. (Thus, if called upon during the German RPh of Turn 1, they would arrive during the German MPh of Turn 2.) When he calls for reserves, the German player must declare what will enter and on which mapboard. All German reserves enter anywhere along the north edge of the mapboard declared. All reinforcements need not be called into play.
4. Reinforcements may only be called for at the end of a German RPh. A radio is not necessary to call for reinforcements.
5. German reinforcement groups may be as few or as many as desired, and comprise any portion of the remaining reserve. But, for each board and each turn that reinforcements enter, there must be at least one leader with the group.
6. Although all three boards are placed side by side, they represent three separate attack lanes. Play is simultaneous on all three boards, but no movement, fire or LOS is allowed between them. It is suggested that players leave a slight space between the mapboards as a reminder.
7. Once on board, units may not be moved offboard (other than for Victory Conditions).
8. All level 2 buildings are treated as single-story buildings.
9. Bore Sighting and Pre-Registered (for one hex) Fire are available for the appropriate weapons/radio that set up onboard.
10. The German radio represents a module of 105mm artillery; the Russian radio, a module of 81mm MTR.
11. Battlefield Integrity rules (A16) are not in effect.

AFTERMATH: The German line, though outgunned and outnumbered, held just long enough for reserves to rebuff the initial Russian surge. Though battered, the 10th Motorized Division held their positions. Smolensk fell, and Timoshenko was forced to withdraw his forces.
Opponent Wanted 50¢

1. Want-ads will be accepted only when printed on this form or a facsimile and must be accompanied by a 50¢ token fee. No refunds. Payment may be made in uncancelled U.S. postage stamps.
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 state and game abbreviations. Don’t list your entire collection, list only those you are most interested in locating opponents for.
6. Authenticity: We won’t ask you to objectively 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 less) games which you’ve spent the most time with since you received your last issue of The GENERAL. With this we can generate a consensus list of what’s being bought. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.
7. Please feel free to list any game regardless of manufacturer. There will be a built-in bias to the survey because you all play our games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual’s discretion.
8. The games I’ve spent the most time playing during the past two months are:

Contest 133

1st Turn Moves:

2nd Turn Moves:

Code Type Hex Placed Depth Setting
A HH
B DCK
C DCK
D DC
E DC
F DC
G DC
H DC
I DC
J DC

Issue as a whole . . . (Rate from 1 to 10, with 1 equating excellent, 10 equating terrible)
Best 3 Articles:
1.
2.
3.

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