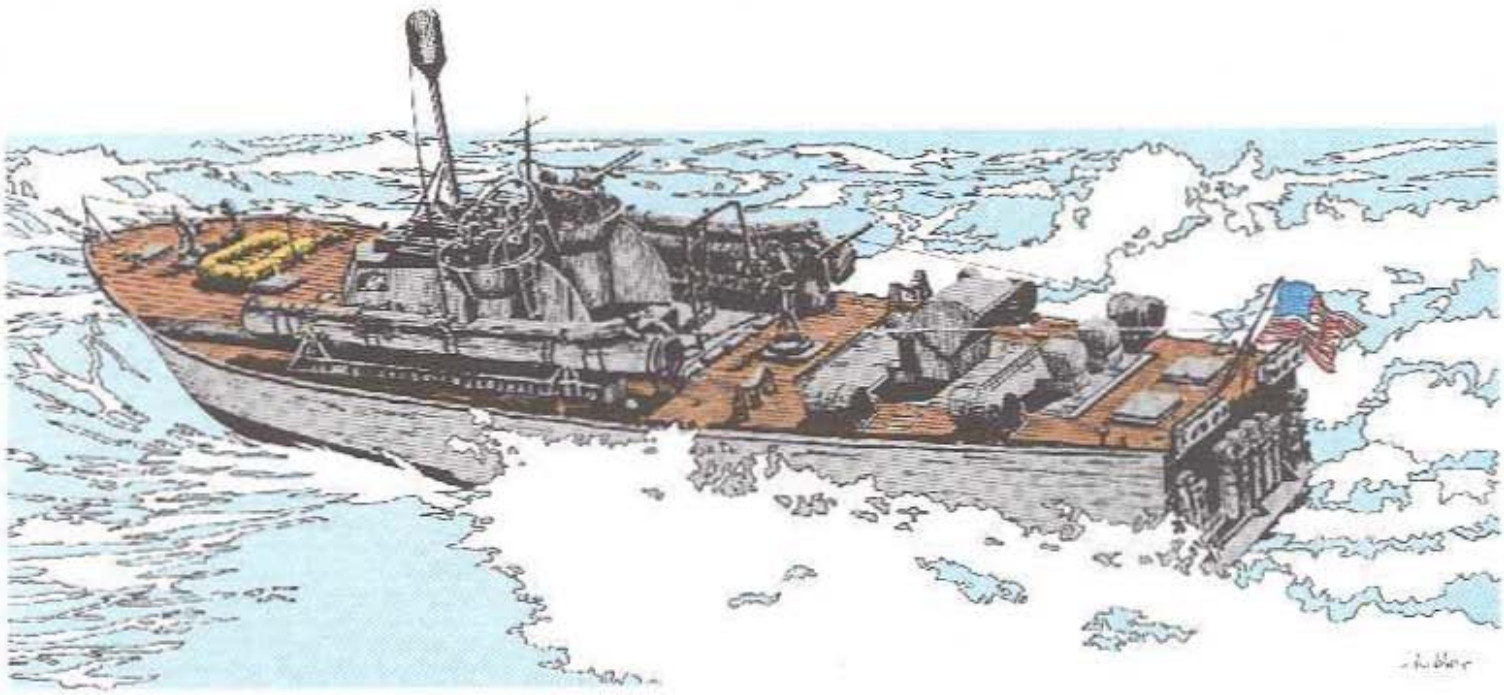


# WAR IN THE SHALLOW SEAS

## 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 intelligence agents on lonely enemy shores, boarded and captured enemy merchant ships in a manner reminiscent of the buccaneers. They acted as naval scouts, seeking enemy ships and hidden bases. They rescued 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 partisans 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-

craft or scuttled by their crews. But with determination and skill, the surviving crew members formed a core for the final victory. The Japanese did less than any of the other major powers in the development of motor torpedo boats. Their sole contribution to the progress of small boat operations was the *Shinyo*, the marine equivalent of the *kamikaze*. 16 to 18 feet in length and armed with a charge of 4000 pounds of explosives in their bows.

And, of course, there were other areas of the world where small craft kept up the monotonous and watchful work of patrolling and seldom, if ever, came into contact with the enemy. Areas such as the Caribbean, off the American coasts, in the Aleutians, in the frigid Baltic, and off the shores of West and South Africa. 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 Austrian coastal region), there had been much interchange of 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 motor 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 Lurssen 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 PT boat; the American Packard engine was to be the main power unit for all British boats; 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 temperament between these men and the airmen 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 sailors fought a war 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 contribution to the course of 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 merchants; 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 warships losses, such as cruisers 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 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 similiar craft and there is 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 HDML's. Confirmed German and Italian warship losses credited to MTBs totalled 70 ships of 34554 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 operational service 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 and credited to S boats total some 40 ships of approximately 25000 tons including two cruisers and seven destroyers; Allied merchant ship 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 merchants, 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 percent of the total Allied merchant ship losses of 21,570,720 tons (as against 68.1 percent by submarines). But the story does not end there. It was as the 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—indeed 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 to take up new privateering careers as gun-runners or smugglers, others to end in a more gentle manner as pleasure craft, where only 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.

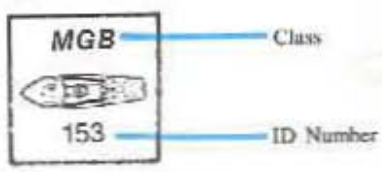
## 2.0 COMPONENTS

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




#### 2.2.3 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-gun 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 ML/MTB 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.

# ADVANCED SURFACE SHIP DATA CHARTS

### GERMAN

| ID | Type | Class | Def. Type | Speed | Damage | Torp. Tubes | Anti-Submarine Weapons: ATW | K-gun | DC | Surface Gunnery: Fwd | Bde | Aft | VP | Avail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G1 | ML | R17 | 2 | 6 | 3 | | | | 4 | — | — | — | 1 | F '39 |
| G6 | ML | R151 | 2 | 8 | 1 | — | — | — | 4 | | | | 1 | Sp '40 |
| G12 | MTB | S2 | 1 | 11 | 1 | 2 | — | — | — | (1) | (1) | — | 1 | W '39 |
| G13 | MTB | S7 | 1 | 11 | 1 | 2 | — | — | — | (2) | (2) | — | 1 | F '34 |
| G14 | MTB | S15 | 1 | 12 | 2 | 2 | — | | | (2) | (4) | (2) | 2 | F '38 |
| G15 | MTB | S26 | 1 | 12 | 2 | 2 | — | — | — | (2) | (6) | (4) | 2 | F '40 |
| G16 | MTB | S119 | 1 | 12 | 2 | 2 | — | — | — | 2(6) | 2(6) | (2) | 2 | S '43 |
| G17 | MTB | S193 | 1 | 13 | 2 | 2 | | | 4 | 2(2) | 3(4) | 2(2) | 2 | S '44 |
| G18 | MTB | S218 | 1 | 13 | 2 | 4 | — | — | 4 | 3(4) | 3(6) | 1(4) | 3 | W '44 |
| G19 | ML | R3 | 2 | 7 | 1 | — | — | — | — | 1(3) | 1(4) | (2) | 1 | S '38 |

### ITALIAN

| ID | Type | Class | Def. Type | Speed | Damage | Torp. Tubes | Anti-Submarine Weapons: ATW | K-gun | DC | Surface Gunnery: Fwd | Bde | Aft | VP | Avail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I1 | MTB | Spica | 1 | 10 | 4 | 2 | — | — | 4 | 1(2) | 2(4) | (2) | 3 | Sp '39 |
| I9 | MTB | MAS 423 | 1 | 12 | 2 | 2 | — | — | — | (1) | (1) | — | 1 | S '29 |
| I10 | MTB | MAS 502 | 1 | 12 | 2 | 2 | | | 6 | (2) | (2) | — | 1 | Sp '36 |
| I11 | MTB | MAS 526 | 1 | 12 | 3 | 2 | — | — | 6 | (2) | (2) | | 2 | W '37 |
| I12 | ML | MS11 | 2 | 10 | 4 | 2 | — | 4 | 10 | (4) | (4) | (2) | 3 | F '41 |
| I13 | ML | MS 51 | 1 | 10 | 4 | 4 | | 4 | 12 | (4) | (4) | (2) | 3 | F '42 |
| I14 | ML | VAS 201 | 2 | 5 | 5 | 2 | — | 4 | 20 | (2) | (2) | — | 3 | Sp '42 |
| I15 | ML | VAS 231 | 2 | 5 | 5 | 2 | — | 4 | 20 | (4) | (4) | (2) | 3 | Sp '43 |

### JAPANESE

| ID | Type | Class | Def. Type | Speed | Damage | Torp. Tubes | Anti-Submarine Weapons: ATW | K-gun | DC | Surface Gunnery: Fwd | Bde | Aft | VP | Avail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J23 | MTB | T1 | 2 | 11 | 1 | 2 | — | — | — | 1(2) | 2(2) | 1(2) | 1 | Sp '41 |
| J24 | ML | T1 Var. I | 2 | 11 | 1 | — | | | 6 | 1(2) | 2(2) | 1(2) | 1 | Sp '41 |
| J25 | MTB | T51 | 2 | 9 | 2 | 4 | — | — | 8 | (3) | (3) | (1) | 2 | S '43 |
| J26 | MTB | T14 | 1 | 10 | 2 | 2 | — | — | — | (2) | (2) | — | 1 | S '44 |
| J27 | ML | MG7 | 1 | 10 | 1 | | | | — | 1(3) | 2(5) | 1(3) | 1 | W '40 |
| J28 | ML | Mg7 Var. I | 1 | 10 | 1 | — | — | — | 4 | (3) | (3) | (3) | 1 | W '40 |
| J29 | ML | Shinyo | 1 | 9 | 1 | — | — | — | — | — | — | — | — | F '44 |

### BRITISH

| ID | Type | Class | Def. Type | Speed | Damage | Torp. Tubes | Anti-Submarine Weapons: ATW | K-gun | DC | Surface Gunnery: Fwd | Bde | Aft | VP | Avail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B27 | MTB | BPB | 1 | 9 | 1 | 2 | — | — | — | (1) | (1) | (1) | 1 | W '35 |
| B28 | MTB | Vosper I | 1 | 12 | 2 | 2 | — | — | — | 1(2) | 2(2) | 1(2) | 1 | S '39 |
| B29 | MTB | Vosper II | 1 | 12 | 2 | 2 | | | — | 2(2) | 2(2) | (2) | 2 | S '42 |
| B30 | MTB | Vosper II Var. I | 1 | 12 | 2 | 2 | | | | 3(6) | 3(6) | — | 2 | W '43 |
| B31 | MTB | Vosper III | 1 | 12 | 2 | 4 | — | — | — | 1(3) | 1(6) | (3) | 3 | Sp '44 |
| B32 | ML | MA/SB | 2 | 7 | 1 | — | — | — | 2 | (2) | (2) | (1) | 1 | Sp '39 |
| B33 | ML | MA/SB Var. | 2 | 7 | 1 | | | | | 1(2) | (2) | (1) | 1 | F '40 |
| B34 | ML | MGB | 1 | 12 | 1 | — | — | — | 2 | 2(4) | 2(6) | (3) | 2 | Sp '42 |
| B35 | ML | HDML | 3 | 3 | 2 | — | — | — | 6 | 1(2) | (2) | — | 1 | Sp '40 |
| B36 | ML | Fairmile A | 2 | 7 | 3 | | | | — | 2(3) | (2) | — | 1 | Sp '40 |
| B37 | ML | Fairmile B | 2 | 6 | 3 | — | — | — | — | 2(3) | (2) | | 1 | W '40 |
| B38 | ML | Fairmile C | 2 | 8 | 4 | — | — | — | — | 3(4) | (6) | (3) | 2 | W '41 |
| B39 | ML | Fairmile D | 2 | 9 | 4 | — | — | — | 2 | 2(4) | (4) | (2) | 3 | F '42 |
| B40 | MTB | Fairmile D Var. I | 2 | 8 | 4 | 4 | | | — | 4(6) | 2(6) | (2) | 4 | F '42 |
| B41 | MTB | Fairmile D Var. II | 2 | 9 | 4 | 3 | | | | 2(4) | (4) | (2) | 3 | F '42 |

### AMERICAN

| ID | Type | Class | Def. Type | Speed | Damage | Torp. Tubes | Anti-Submarine Weapons: ATW | K-gun | DC | Surface Gunnery: Fwd | Bde | Aft | VP | Avail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A18 | MTB | Elco | 1 | 12 | 2 | 4 | — | 2 | — | (2) | (2) | | 2 | Sp '40 |
| A19 | MTB | Higgins | 1 | 12 | 2 | 4 | — | — | 2 | (2) | (2) | — | 2 | Sp '40 |

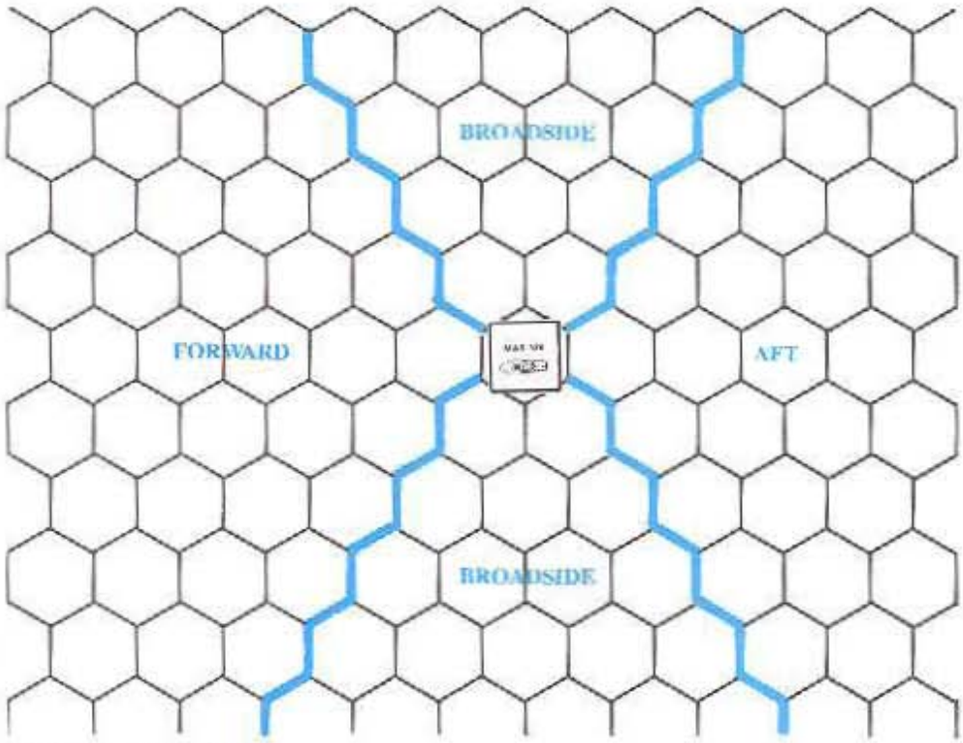



Figure 1: Field of Fire for a ML/MTB

## 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 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* as 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, 35.0). 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** Surfaced submarines 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.

**15.4.4** 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.

**15.4.5** 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 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.

**15.5.6** Depth charge counters, when discharged from ML/MTB K-guns must be placed in the locations as illustrated in Figure II.

**15.5.7** A ML/MTB may enter a hex occupied by a K-gun depth charge.

**15.7** 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.

**15.8** A ML/MTB carried only a limited number of depth charges. Thus, the number designating the per-turn depth charge capacity is equal to the scenario depth charge capacity (61.0).

**15.11** ASW Attacks against Surface Ships:

**15.11.1** In early 1940 British crews operating small boats in the Channel perfected a daring method of attack against the slower-moving merchant vessels utilizing their relatively useless depth charges; the German crews were quick to adapt this tactic, but its employment among the other naval powers was not widespread. Therefore, only British and German ML/MTBs may conduct ASW attacks against surface ships, unless otherwise specified by the scenario in play.

**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 DC 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 "5" 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 hex being fired into contains more than one ML/MTB, only one may be selected as the target vessel.

**17.4.1** 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.

**17.4.2** 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 either an escort, a merchant ship or a surface warship.

**17.4.3** The two surface gunnery strength values may never be combined.

**17.4.4** In those instances in which only one surface strength value is available, the ML/MTB has no heavy surface gunnery and may not fire upon escorts, merchant ships or surface warships. The heavier surface gunnery is always effective against all vessels, including ML/MTBs and submarines.

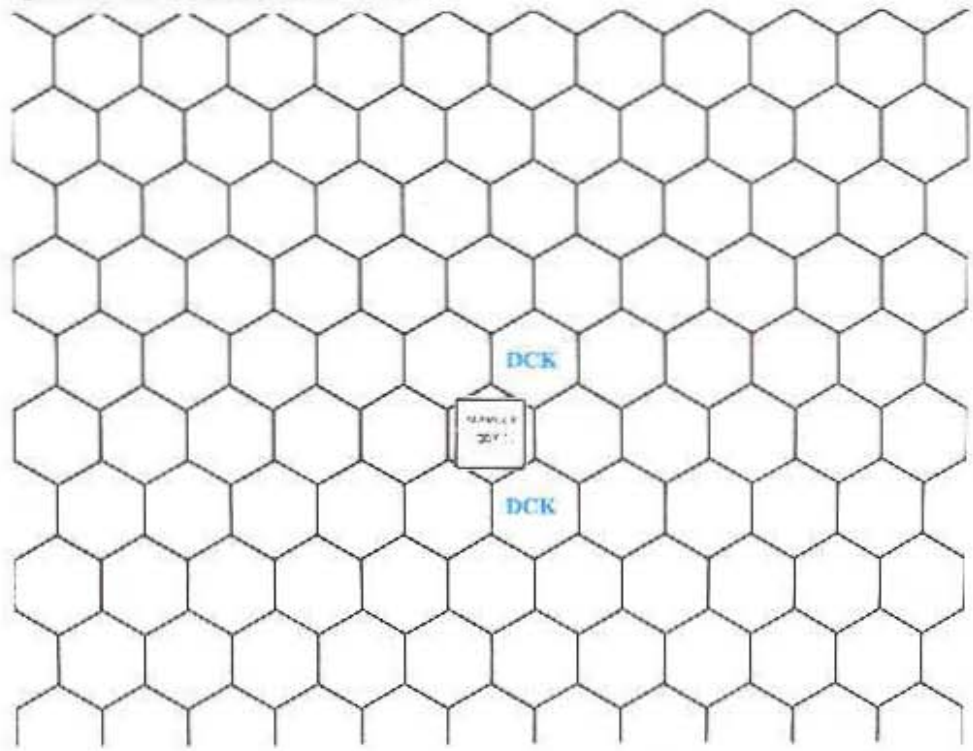
## 18.0 BLOCKED LINE OF SIGHT

**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.

Figure II: Deck Depth Charge Placement for a ML/MTB



## SCENARIO 1
## STRAITS OF DOVER

### I. Introduction

On the night of 9 May 1940, four boats of *Kapitänleutnant* Rudolph Petersen's 2nd Schnellboote Flotilla were in position in the English Channel – the first German patrol of the war in British home waters – in land 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 melee, HMS *Kelly* 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
   *Jamaica*, Class Hunt

### III. Starting Location

1. *S30*—O53, Bd A, Dir. 1
   *S31*—O48, Bd A, Dir. 1
   *S32*—I48, Bd A, Dir. 1
   *S33*—I53, Bd A, Dir. 1

2. *Dundee*—V23, Bd S, Dir. 5
   *Kelly*—D31, Bd 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 S 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
## BLANC NEZ

### I. Introduction

After months of frustration, Dover Command received reports of a German convoy running the straits on 8 September 1941. Only three boats of the polyglot 6th MTB Flotilla – composed 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 merchants and two S-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

2. British Player—*MTB 35*, Class Vosper I
   *MTB 54*, Class Vosper I
   *MTB 216*, Class Vosper I
   *MGB 43*, Class Fairmile B
   *MGB 52*, Class Fairmile B

### III. Starting Location

1. C2 Merchant—E22, Bd B, Dir. 4
   C2 Merchant—L19, Bd B, Dir. 4
   *S51*—J31, Bd B, Dir. 4
   *S52*—P14, Bd B, Dir. 4
   *S53*—H14, Bd B, Dir. 4
   *S54*—D28, Bd B, Dir. 4
   *S55*—C19, Bd B, Dir. 4
   *S56*—G21, Bd B, Dir. 4

2. *MTB 35*—Q55, Bd C, Dir. 5
   *MTB 54*—Q51, Bd C, Dir. 5
   *MTB 216*—V51, Bd C, Dir. 5
   *MGB 43*—Enter on Turn 6 on hex D1, Bd A
   *MGB 52*—Enter on Turn 6 on hex J1, Bd A

### IV. Victory Conditions

The British player must accrue at least 8 V.P. more than the German player. Any other result is a German victory.

### V. Game Length

12 Turns, Night Scenario

### VI. Special Rules

On the first turn of the game, the German S boats may not exceed a speed of four hexes. The German merchant ships must move as a fast convoy (30.0). The German player is considered to be the defensive player.

British MGBs may enter play at full speed.

## SCENARIO 3
## BJOKKA 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 *Draug* left the Scapa 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, ascorted and northward bound. The British boat sank the tanker by torpedo 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
   *S63*, Class S26

2. British Player—*MTB 56*, Class Vosper I

### III. Starting Location

1. T2 Tanker—H19, Bd B, Dir. 3
   *S57*—D23, 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 German 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 tanker must move as a slow convoy (30.0). The German player is considered to be the defensive player.

The following hexes represent shallow waters and, as such, should the tanker enter (with either bow or stern) any of these hexes it is immediately "dead in the water": all hexes and half-hexes on Bd A, all hexes numbered 54 and above on Bd C, all hexes lettered N and above on Bd C. These hexes do not affect the small boats or torpedoes in any manner.

## SCENARIO 4
## BINANGA BAY

### I. Introduction

At the beginning of the conflict in the Pacific only six boats were available for the coming four-month struggle to defend the Philippines against the invading Japanese – the six boats of PT Squadron 3, under the command of Lt. John Bulkeley. Despite the hopeless situation, these PT boats harassed Japanese naval movements at every opportunity. On 18 January, Bulkeley received orders to make a night attack on four ships, possibly including an enemy destroyer, that had been sighted. Selecting two boats which seemed to be in the best condition, he intercepted three merchantmen escorted by a fleet destroyer, shortly before midnight. Attacking, a Japanese 5000 ton merchant ship was sunk before the American boats were forced to flee the gunfire from *Oboshushu*. Their jubilation was dampened, however, when PT 31 was lost on a reef during the return voyage.

### II. Order of Battle

1. Japanese Player—Three C2 Merchantmen
   *Oboshushu*, Class Kamikaze

2. American Player—*PT 31*, Class Elco
   *PT 34*, Class Elco

### III. Starting Location

1. *Oboshushu*—B28, Bd B, Dir. 3
   C2 Merchant—H28, Bd B, Dir. 3
   C2 Merchant—H21, Bd B, Dir. 3
   C2 Merchant—H14, Bd B, Dir. 3

2. *PT 31*—X28, Bd C, Dir. 4
   *PT 34*—W32, Bd C, Dir. 4

### IV. Victory Conditions

The American player must inflict at least 8 damage points upon the *Oboshushu* or sink at least one merchantman. Any other result is a Japanese victory.

### V. Game Length

14 Turns, Night Scenario

### VI. Special Rules

The Japanese merchant ships must move as a slow convoy (30.0).

## SCENARIO 5
## CRETE

### I. Introduction

Nowhere was the fight for the shallow seas fought more bitterly than in the warm waters of the Mediterranean, where control of the seaborne 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 502
   *MAS 526*, Class MAS 526
   *MAS 536*, Class MAS 526

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

### III. Starting Location

1. *MAS 516*—O39, Bd C, Dir. 5
   *MAS 520*—J6, Bd C, Dir. 4
   *MAS 526*—K9, Bd C, Dir. 4
   *MAS 536*—S36, 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" (19.1) 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 MLE/MTB movement (Phase 6) but prior to torpedo launch and movement (Phase 8).

## 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.D. 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 MGBs 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
   *S110*, Class S26
   *S113*, Class S26
   *S114*, Class S26
   *S118*, 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
   *S110*—J34, Bd C, Dir. 3
   *S113*—Z24, Bd B, Dir. 3
   *S114*—H25, Bd C, Dir. 3
   *S118*—Y37, Bd B, Dir. 3

2. *Albrighton*—V43, 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 V.P. 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

a fast convoy. The German player is considered to be the defensive player.

## SCENARIO 7
## CAP DE LA HAGUE

### I. Introduction

In the fall of 1942, the British Admiralty finally had the ships and boats available to base a 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 Ushant. One such operation took place on the night of 13 October 1942, when the Germans tried to bring the armed merchant raider *Komet* through the Channel to Cherbourg, from which she could strike at th 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 5 boats, the destroyers were unable to halt her escape. But, at that 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. German Player—*Komet*, Merchant Raider
   *S96*, Class S26
   *S97*, Class S26
   *S98*, Class S26
   *S99*, Class S26
   *S101*, Class S26
   *S116*, Class S26
   *S117*, Class S26

2. British Player—*Cannonier*, Class Hunt
   *Cotswold*, Class Hunt
   *MTB 236*, Class Vosper II

### III. Starting Location

1. *Komet*—V21, Bd B, Dir. 3
   *S96*—S24, Bd B, Dir. 3
   *S97*—Z17, Bd R, Dir. 3
   *S98*—D13, Bd C, Dir. 3
   *S99*—Y24, Bd R, Dir. 3
   *S101*—O19, Bd B, Dir. 3
   *S116*—V10, Bd B, Dir. 3
   *S117*—Q17, Bd B, Dir. 3

2. *Cottesmore*—D27, Bd A, Dir. 1
   *Cotswold*—D32, Bd A, Dir. 1
   *MTB 236*—Enter on Turn 0 on hex X58, Bd B.

### 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 with the following surface gunnery strengths: Fwd 3, Side 6, Aft 3. It is represented as a converted C3 Merchant, with appropriate Def. Type and Damage values. It must move as a fast convoy (30 0).

In the first turn of the scenario, the German S boats may not exceed a speed of four hexes. The German player is considered to be the defensive player.

The British MTB may enter play at full speed.

## SCENARIO 8
## SKJAERGAARD FJORD

### I. Introduction

To raid the shipping lanes along the coast of Norway, the 30th MTB Flotilla, equipped with the new Fairmile D craft and manned by officers and men of the Royal Norwegian Navy under the command of Lt. Cdr. RA. Tambs, was formed in October 1942 and based in the Shetlands. Their first success came early in the morning of 27 November. In spite of a brilliant full moon, two of the boats managed to penetrate the Skjaergaard unseen, avoid the patrolling S boats, and torpedoed two large merchant ships anchored there. The Allied boats returned home unscathed, although they had to weather a full gale on the return voyage.

### II. Order of Battle

1. German Player—Three C3 Merchantmen
   *S86*, Class S26
   *S89*, Class S26
   *S91*, Class S26

2. British Player—*MTB 136*, Class Fairmile D Ver. I
   *MTB 158*, Class Fairmile D Ver. I

### III. Starting Location

1. C3 Merchants—at anchor (see *Special Rules*)
   *S86*—K37, Bd R, Dir. 2
   *S89*—O30, Bd A, Dir. 3
   *S91*—L36, Bd C, Dir. 4

2. *MTB 136*—Enter on Turn 1 on any hex numbered 58
   *MTB 158*—Enter on Turn 1 on any hex numbered 58

### IV. Victory Conditions

The British player must inflict at least 12 damage points, in any configuration, upon the German merchant ships. Any other result is a German victory.

### V. Game Length

15 Turns, Night Scenario

### VI. Special Rules

The German merchants are anchored for the night. These ships may not move nor change facing for the duration of the scenario. During initial placement, the German player may place these ships, in any facing, anywhere within ten hexes, inclusive, of Hex III on Bd B but no closer than seven hexes, inclusive of any hex occupied by another merchantman.

All German merchantmen have the following surface gunnery strengths: Fwd 0, Side (2), Aft 0. The German player is considered to be the defensive player.

## SCENARIO 9
## KUMUSI RIVER

### I. Introduction

The first PT boats arrived in the southwest Pacific theater in mid-December 1942. There were only six boats, formed into "Division 17" commanded by Lt. Daniel S. Baughman. The first victory of these few boats in the desperate warfare around New Guinea was dramatic. On the night of Christmas Eve, while on patrol from the advance base at Taf, Lt. Baughman in PT 122 sighted a surfaced submarine off the mouth of the Kumusi River. Beyond it was a dark object which proved to be another Japanese submarine. The rapid American attack by two boats sank the I22 and avoided the return fire from the other submarine to speed away to safety.

### II. Order of Battle

1. Japanese Player—*I22*, Class I15
   *I37*, Class I15

2. American Player—*PT 120*, Class Elco
   *PT 122*, Class Elco

### III. Starting Location

1. *I22*—X27, Bd A, Dir. 4
   *I37*—U25, Bd A, Dir. 2

2. *PT 120*—T41, Bd B, Dir. 3
   *PT 122*—S36, Bd B, Dir. 5

### IV. Victory Conditions

The American player must sink at least one Japanese submarine. Any other result is a Japanese victory.

### V. Game Length

9 Turns, Night Scenario

### VI. Special Rules

The Japanese submarines must commence the scenario on the surface (0 ft. depth). Further, they must remain on the surface until a PT boat is sighted (utilizing the Night Visual Search Table) or either submarine is fired upon with surface gunnery or incurs damage from a torpedo. The Japanese submarines may move normally while on the surface.

Due to the shallow waters, the Japanese submarines may not dive to a depth exceeding 125 ft. A dive to 150 ft. depth or lower removes the submarine from play and results in an automatic American victory.

### VII. Optional Rules

The Japanese player may, at his option, utilize Hidden Submarine Movement (21.0). In this case, the American player may utilize Night Visual Search (47.0) and Game Length is extended to 20 turns.

## SCENARIO 10
## TRIPOLI HARBOR

### I. Introduction

Early in 1943 the MTBs based at Malta achieved their first major success. Four boats left the island at midday on 19 January on patrol towards Tripoli. Approaching the harbor at ten knots on silent engines, the three boats which made landfall chanced upon a stationary Italian submarine, the *Santoro Santorosa*, which was actually grounded on the shoals a mile outside the harbor. Engaged by cannon fire from the submarine, the MTBs maneuvered to place their torpedoes, but were driven off by a German destroyer which had emerged from the harbor. However, after a few minutes, the small boats tenaciously returned to the attack and, at 0220 hours, were rewarded when a torpedo from MTB 220 struck the submarine aft of the conning tower. The other boats quickly broke off their action with the destroyer and at three arrived at Malta in the dawn light of 20 January.

### II. Order of Battle

1. German/Italian Player—*Santoro Santorosa*, Class Cagni
   *Anselchen*, Class Z

2. British Player—*MTB 260*, Class Fairmile D Ver. II
   *MTB 264*, Class Fairmile D Ver. II
   *MTB 272*, Class Fairmile D Ver. II

### III. Starting Location

1. *Santoro Santorosa*—N27, Bd R, Dir. 6 (aground)
   *Anselchen*—Enter on Turn 4 on any hex numbered 1

2. *MTB 260*—Enter on Turn 1 on any hex
   *MTB 264*—Enter on Turn 1 on any hex
   *MTB 272*—Enter on Turn 1 on any hex

### IV. Victory Conditions

The British player must accumulate at least 20 VP. Any other result is an Axis victory.

### V. Game Length

14 Turns, Night Scenario

### VI. Special Rules

The Italian submarine is grounded and may neither move, dive nor change facing.

The following hexes represent the sand bar and, as such, should the German destroyer or any British MTB enter (with either bow or stern) any of these hexes, it is immediately "dead in the water", all hexes along the hex grain extending from hex C21, Bd R to hex P36, Bd C, inclusive. Torpedoes may not pass over these hexes, and will detonate if they do so.

## SCENARIO 11
## RAS-EL-MIRH

### I. Introduction

In April 1942 the first boats of the American PT Squadron 15, commanded by Lt. Cdr. Stanley Barnes, arrived at the British base at Bone. Until the Sicily landings in July, this squadron of twelve boats was the only representative of the US Navy in offensive action in the Mediterranean. On 8 May the PT boats, patrolling with experienced MTB commanders, scored their first success when PT 206 sank an Italian freighter and evaded the accompanying S boats. Unfortunately, MTB 61 ran aground 300 yards from shore during the action and, as the shore guns opened fire from the fort at Kalba, was abandoned and the crew picked up by the surviving American and British craft.

### II. Order of Battle

1. German/Italian Player—*C2 Merchantmen*
   *S56*, Class S26
   *S59*, Class S26
   *S35*, Class S26

2. American/British Player—*PT 206*, Class Higgins
   *MTB 61*, Class Vosper II
   *MTB 77*, Class Vosper II

### III. Starting Location

1. C2 Merchant—K33, Bd C, Dir. 3
   *S56*—K42, Bd C, Dir. 3
   *S59*—O28, Bd C, Dir. 3
   S35—H37, Bd C, Dir. 3
2. *PT 206*—Y34, Bd A, Dir. 1
   *MTB 61*—Z29, Bd A, Dir. 1
   *MTB 77*—W26, Bd A, Dir. 1

### IV. Victory Conditions

The Allied player must accrue at least 8 VP more than the Axis player. Any other result is an Axis victory.

### V. Game Length

10 Turns, Night Scenario

### VI. Special Rules

The following hexes represent shallow waters and, as such, should any ship or boat enter (with either bow or stern) any of these hexes, it is immediately "dead in the water", all hexes lettered Q and above are Bd. C. These hexes do not affect torpedoes in any manner.

On the first turn of the scenario, the German S boats may not exceed a speed of four hexes. The Italian merchant ship must move as a slow convoy (30 0). The Axis player is considered to be the defensive player.

## SCENARIO 12
## STRAITS OF MESSINA

### I. Introduction

With the invasion of Sicily, it now became vital for the Allied forces to secure control of the Messina Straits, to prevent the enemy from supplying and reinforcing the defenders or, later, evacuating the survivors to the mainland. This task fell to the British MTBs, based at Malta initially, later moved to Syracuse. On 14 July 1943, three boats of the 24th Flotilla from Malta were lying in mid-channel with engines silent when two surfaced U-boats suddenly came bearing down on them. A torpedo, fired from a range of 700 yards, sank the hapless U561 but the other submarine crashdived. As the MTBs were searching for survivors, a group of S boats passed by at high speed, and the British gave chase while radioing ahead to the southern patrol.

### II. Order of Battle

1. German Player—*U561*, Class IXC
   *U275*, Class IXC

2. British Player *MTB 77*, Class Vosper II
*MTB 81*, Class Vosper II
*MTB 84*, Class Vosper II

III. Starting Location

1. *U561*—P14, Bd B, Dir. 3
*U375*—T16, Bd B, Dir. 3

2. *MTB 77*—anywhere within ten hexes, inclusive, of Hex IV on Bd B
*MTB 81*—anywhere within ten hexes, inclusive, of Hex IV on Bd B
*MTB 84*—anywhere within ten hexes, inclusive, of Hex IV on Bd B

IV. Victory Conditions

The British player must sink at least one German submarine. Any other result is a German victory.

V. Game Length

10 Turns, Night Scenario

VI. Special Rules

The German submarines must commence the scenario on the surface (0 ft. depth). Further, they must remain on the surface until a MTB is signed fulfilling the Night Visual Search Table or either submarine is fired upon with surface gunnery or incurs damage from a torpedo. The German submarines may move as normal while on the surface.

On the first turn of the scenario, the British MTBs may not exceed a speed of four hexes.

VII. Optional Rules

The German player may, at his option, utilize Hidden Submarine Movement (21.0); in this case, the British player may utilize Night Visual Search (17.0) and Game Length is extended to 20 turns.

## SCENARIO 13
## STRAITS OF MESSINA

I. Introduction

On 14 July, the southern patrol in the Straits was comprised of MTBs 655, 656 and 633. Upon receipt of the message from MTB 77 to intercept the S boats, these three boats engaged the German craft at 2340 hours—an hour on a half after the sinking of U561. Shortly after, seven MAS boats and the northern British patrol arrived. Thus commenced what was to develop into the largest "dogfight" of the war in coastal waters, as further reinforcements joined in over the course of the next few hours. Despite the shells expended, the battle was inconclusive: two S boats were lost, the rest retiring to the mainland; the MAS boats, utilizing their superior speed, fled north; and even with heavy damage and casualties on several boats, the Allied craft all returned to port.

II. Order of Battle

1. German/Italian Player *S47*, Class S26
*S57*, Class S26
*S59*, Class S26
*S62*, Class S26
*MAS 543*, Class 526
*MAS 540*, Class 526
*MAS 553*, Class 526
*MAS 554*, Class 526
*MAS 555*, Class 526
*MAS 558*, Class 526
*MAS 557*, Class 526

2. British Player—*MTB 655*, Class Fairmile D
*MTB 656*, Class Fairmile D
*MTB 633*, Class Fairmile D
*MTB 77*, Class Vosper II
*MTB 81*, Class Vosper II
*MTB 84*, Class Vosper II

III. Starting Location

1. *S47*—P24, Bd B, Dir. 4
*S57*—X23, Bd B, Dir. 4
*S59*—W17, Bd B, Dir. 4
*S62*—N18, Bd B, Dir. 4
All MAS boats—Enter on Turn 6 on any hex numbered 58 on Bd A.

2. *MTB 655*—P42, Bd B, Dir. 6
*MTB 656*—R47, Bd B, Dir. 6
*MTB 633*—M44, Bd B, Dir. 6
*MTB 77*—Enter on Turn 8 on any hex lettered Z on Bd. C
*MTB 81*—Enter on Turn 8 on any hex lettered Z on Bd. C
*MTB 84*—Enter on Turn 8 on any hex lettered Z on Bd. C

IV. Victory Conditions

Whichever player accumulates the most V.P. is the victor.

V. Game Length

16 Turns, Night Scenario

VI. Special Rules

The Axis player is considered to be the defensive player.

VII. Optional Rules

This scenario may be played utilizing the results of Scenario 12 above. Thus, damage acquired by MTB 77, MTB 81 and MTB 84

# VARIANT NOTES

The intent of this article—actually a rewrite of the rules—was simply to enable players of *SUBMARINE* to include the small boats in the flow of the game. As will be instantly obvious, I've kept the same format as the original rules and scenarios published in 1978. Thus, to utilize this variant a reader will need a copy of the game, and should refer back to the published rule sections as he reads the article in order to fully understand how the small boat rules are incorporated. I strove to keep new rules to a minimum; this causes a minor distortion possibly, but keeps the playability of the original intact.

Each scenario included in the article presents a slightly different tactical problem. But, to me, the most fascinating aspect of any tactical game is its DYO potential. Notice that the National Data Charts have been included so that players may do so if they wish. These Data Charts are as complete as I could make them. As the long-time aficionado of *SUBMARINE* can readily see, however, I've not touched the basic tables of play (revising only the *Night Search Table* for visual search for ML/MTBs) and introduced no new ones. Hopefully, this will lessen confusion and—again—retain the playability of the original.

A few words might be in order on some of 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. guns and the like, while those values in parentheses are the small armament added to those (the machine guns, AA guns, and 20mm cannon). 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, vulnerability of critical areas such as engines and ammo storage, etc.). The V.P. values are my judgement as to the relative worth of the boat type in battle and the rarity of the boat type in the war. Def Type is included only with an eye toward the future. A few of the class designations are somewhat unrealistic in that I lumped several boat models produced by various companies but with similar functions, speeds and armaments together under one class (e.g., the MGB class represents all non-Fairmile and Vosper MGBs) in order to simplify matters and reduce the impulse to recreate data on every one of the hundreds of small boat variations that were used in the war.

As to the rules, the first that I'd expect some flak on are the two surface gunnery rules limiting the small weaponry to fire only on ML/MTBs and submarines—the two craft that I felt to be most susceptible to damage by heavy MGs and 20mm cannon. Many will wonder then at not assigning small weaponry values to all the escorts and surface warships. However, my readings indicate that this weaponry was not all that common on these ships and was rarely designed to fire at the surface of the sea, where the small boats would be operating below the level of these guns' fire arc. Further, instead of modifying the gunnery values of the escorts as I attempted to do earlier (the larger weaponry was notoriously inaccurate against a small, fast moving target at a lower level), I simply kept the values the same and now allow these to reflect the overall effectiveness of *all* fire from the escorts and surface ships against the small boats.

Next, not adding smokescreen capabilities to the ML/MTBs was done since most actions took place at night (both historically and in these scenarios), rendering smokescreens relatively pointless. The rules for the Shinyo suicide boats and on engine malfunction seem obvious to me, but I would appreciate your comments.

Forcing the defensive ML/MTB player to move first was found to be the best method of offsetting the defender's advantages in regard to numbers, victory conditions, and usually greater firepower. I at one time toyed with the idea of an incremental movement system for those times when opposing small boats are in combat. But this proved to slow the game considerably and I settled for a more playable solution.

The radar rules are at best approximations of the uselessness of conventional radar and partial effectiveness of 3cm radar. In all that I've read, most escort personnel seem to indicate the useless nature of radar once combat with small boats at the range represented by the mapboards is joined. Crew effectiveness (the "eliteness rating") is a mote point and has little bearing on the combat operation of the boat.

Finally, a brief word on tactics for the readers. First, don't be afraid to lose the small boats to gain an advantage or a victory—in all the Naval High Commands, the crews and boats were looked upon as cheap and expendable, certainly more so than any other type of warship. So be ruthless and bold. Next, do not get too close to an escort. A favorite tactic of destroyer captains on both sides when faced with small boats was to run them down. The larger ship didn't suffer anything worse than some expended fuel. Remember the sequence of phases and avoid the awful feeling of watching your boats run down by a single frigate or destroyer.

Which leads 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 joined. Coordinate your attacks—sure; but attack from several sides or in waves. Against other small boats, this is not such a threat; but against a naval escort, bunching your small boats is sure death. Use every advantage at your disposal. Use every weapon you have if possible. Don't rely just on your torpedoes; you may have heavy guns or depth charges. If you have them, use them.

One last important point to keep in mind: your greatest advantage is surprise. That means that you should always use the rules for hidden movement. Three or four hidden ML/MTBs on board, operating indpendently, placing themselves in position for an attack without revealing themselves (i.e., keep your speed down) and then using their speed to close in fast, launching torpedoes at optimum range and taking every surface gunnery shot possible, firing flares to confuse the enemy and then racing away to ready another attack is the traditional, tried and true, use of your small boats. Of course, should the other player also have ML/MTBs, hidden movement means a deadly cat-and-mouse game while you set up your attack. Should your ML/MTBs be "babysitting" (acting as escorts), stick close to your wards. The enemy has to come through you to get at the target. And fire star shells every turn. This may give your enemy some idea where your boat is, but—who knows—you may get lucky and if he is an experienced player he'll have a good idea of your locations anyway.

during the course of that scenario must be applied to the relevant boat. Further, entry of any MTB which suffered an unrepaired engine malfunction in Scenario 12 must be denied for an additional six turns (and thus may not enter play until Turn 14).

Scenario 13 represents only the initial actions during the great "dogfight" of 14 July. For those players more adventuresome, the following changes may be incorporated to reflect the first hour of the lengthy battle. Game Length is increased to 60 turns. The following reinforcements may enter play on any board-edge hex:

Turn 19 – Four German S boats, Class S26
Turn 24 – Three British MTBs, Class Vosper II
Turn 30 – One American PT boat, Class Higgins
Turn 41 – Five German S boats, Class S26
Turn 42 – Two Italian MS boats, Class MS51
Turn 45 – Six British MTBs, Class Fairmile D Var. II

Victory conditions for the extended scenario remain the same.

## SCENARIO 14
## STRAITS OF MESSINA

### I. Introduction

On 23 July Palermo fell. The American PT squadron, which had seen little action thus far, was established there and on the following day began patrolling the northern approaches to the straits. On the night of 29 July the PT boats finally hit back at a target that far too elusive for them – the Italian-built MAS boats now crewed either by Germans or loyal 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 513*, Class MAS 502
   *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 – J30, Bd B, Dir. 5

   *MAS 513* – F26, Bd B, Dir. 5
   *MAS 529* – U26, Bd B, Dir. 5
   *MAS 533* – O23, Bd B, Dir. 5
   *MAS 534* – N37, Bd B, Dir. 5

2. *PT 204* – R40, Bd C, Dir. 5
   *PT 217* – O42, Bd C, Dir. 5

### IV. Victory Conditions

The American player must accrue more VP than the Italian player. Any other result is an Italian victory.

### V. Game Length

12 Turns, Night Scenario

### VI. Special Rules

All Italian merchantmen have the following surface gunnery strengths: Fwd (1), Bde (2), Aft 0. 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 (30.0). 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 thus 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 ex-Yugoslavian cruiser *Dalmacia*, renamed by the Germans *Niobe*, was aground off Silba Island. Two MTBs of the 20th Flotilla were dispatched from Vis. Sighting the cruiser at 0100 hours, the British boats approached silently and fired four torpedoes. A series of violent explosions wracked the *Niobe*. Avoiding the fire of the German patrol craft, the MTBs returned to base at dawn.

### II. Order of Battle

1. German Player – *Niobe* (as per Japanese Mogami)
   *S46*, Class S26
   *S49*, Class S26
   *S67*, Class S26

2. British Player – *MTB 226*, Class Vosper II
   *MTB 298*, Class Vosper II

### III. Starting Location

1. *Niobe* – C28, Bd B, Dir. 1 (aground)
   *S46* – X29, Bd A, Dir. 5
   *S49* – H21, Bd B, Dir. 5
   *S67* – H37, Bd B, Dir. 1

2. *MTB 226* – P44, Bd C, Dir. 5
   *MTB 298* – N47, Bd C, Dir. 5

### IV. Victory Conditions

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

### V. Game Length

10 Turns, Night Scenario

### VI. Special Rules

The *Niobe* is aground and may neither move nor change facing. The German player is considered to be the defensive player.

## SCENARIO 16
## HARWICH

### I. Introduction

With the new generation of 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 out a group of British boats. A flock of S boats had been spotted and the corvettes *Mallard* 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 Ijmuiden. Briefly losing 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
   *S122*, Class S119
   *S123*, Class S119
   *S127*, Class S119
   *S133*, Class S119
   *S134*, Class S119

2. British Player – *Mallard*, Class Flower
   *Shearwater*, Class Flower
   *MTB 433*, Class Fairmile D
   *MTB 441*, Class Fairmile D
   *MTB 444*, Class Fairmile D
   *MTB 455*, Class Fairmile D

### III. Starting Location

1. *all* S boats – Enter on Turn 1 on any hex numbered 1

2. *Mallard* – Enter on Turn 9 on any hex lettered A on Bd. A
   *Shearwater* – Enter on Turn 9 on any hex lettered A on Bd. A
   *MTB 433* – I28, Bd B, Dir. 2
   *MTB 441* – R31, Bd B, Dir. 2
   *MTB 444* – E25, Bd B, Dir. 2
   *MTB 455* – M33, Bd B, Dir. 2

### IV. Victory Conditions

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

### 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 off Ijmuiden, MTB 441 may not exceed a speed of seven hexes at any point during the scenario.

## SCENARIO 17
## CHERBOURG

### I. Introduction

The invasion of Normandy set off a furious battle in the French coastal waters as the Allied boats sought to protect the flanks of the cross-channel routes and the S boats sought to strike at Allied supply and transport shipping. As the fight intensified, the British attempted to intercept enemy craft at their points of departure – Cherbourg and Le Havre – the major S boat bases. Thus, at midday on 7 June, the frigate *Stayner* and two MTBs intercepted a group of boats from Kptlt. Mirbach's 9th Schnellboote Flotilla. After a brief, inconclusive action, the S boats returned to the shelter of the harbor.

### II. Order of Battle

1. German Player – *S119*, Class S119
   *S120*, Class S119
   *S126*, Class S119
   *S130*, Class S119
   *S132*, Class S119

2. British Player – *Stayner*, Class River
   *MTB 448*, Class Fairmile D Var. I
   *MTB 473*, Class Fairmile D Var. I

### III. Starting Location

1. *all* S boats – Enter on Turn 1 on any hex numbered 58 on Bd. B

2. *Stayner* – N36, Bd B, Dir. 2
   *MTB 448* – M40, Bd C, Dir. 4
   *MTB 473* – M32, Bd B, Dir. 2

### IV. Victory Conditions

The German players must exit three S boats off any hex numbered 1 on any board. The British player must sink three S boats. Any other result is a draw.

### V. Game Length

12 Turns, Day 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. But on 11 June, German craft slipped through the blockade with ease. In the Baie de Seine, boats from Le Havre encountered HMS *Halstead* escorting three merchant ships. Attacking, the S boats isolated the frigate from the convoy. Before Allied reinforcements could arrive, the *Halstead* and one merchant ship were torpedoed and left sinking.

### II. Order of Battle

1. German Player – *S137*, Class S119
   *S151*, Class S119
   *S156*, Class S119
   *S157*, Class S119

2. British Player – Three C3 Merchantmen
   *Halstead*, Class River

### III. Starting Location

1. *S137* – I32, Bd A, Dir. 1
   *S151* – C51, Bd A, Dir. 1
   *S156* – C35, Bd A, Dir. 1
   *S157* – I157, Bd A, Dir. 1

2. C3 Merchant – E24, Bd B, Dir. 4
   C3 Merchant – I21, Bd B, Dir. 4
   C3 Merchant – S19, Bd B, Dir. 4
   *Halstead* – P27, Bd B, Dir. 4

### IV. Victory Conditions

The German player must accrue at least 10 V.P. 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), Aft (2). The British merchant ships must move as a slow convoy (30.0).

## SCENARIO 19
## LE HAVRE

### I. Introduction

As the battle in Normandy reached its culmination, Allied efforts concentrated on maintaining a close blockade of Le Havre as the Germans tried to move supplies and reinforcements in and, at the same time, evacuate shipping from the harbor. Typical of this period were the actions of 25/26 August. A trio of S boats slipped from Le Havre to act as a diversionary force to draw off the MTBs from a convoy forming outside Fecamp. With their slight advantage in speed and the cover of darkness, the S boats shook off their pursuers and joined the convoy to act as escorts. The scattered Allied forces now concentrated on the convoy. At 0230, the frigate *Thornborough* engaged the convoy and was soon joined by three British MTBs. Meanwhile, under cover of this action, the French destroyer *La Combattante* crept up on the convoy unobserved. In a battle lasting nearly an hour, all five merchants, one S boat and one minesweeper were lost. No vessels managed to reach Le Havre that night.

### II. Order of Battle

1. German Player – Five C2 Merchantmen
   *R35*, Class R17
   *R39*, Class R17
   *S137*, Class S119
   *S142*, Class S119
   *S143*, Class S119

2. British/French Player – *Thornborough*, Class River
   *MTB 473*, Class Fairmile D Var. I
   *MTB 519*, Class Fairmile D Var. I
   *MTB 523*, Class Fairmile D Var. I
   *La Combattante* (as per British Tribal Class)

### III. Starting Location

1. C2 Merchant – H28, Bd B, Dir. 3

CZ Manchuria—H21, Bd B, Dir. 3
CZ Manchuria—H14, Bd B, Dir. 3
CZ Manchuria—G26, Bd B, Dir. 3
CZ Manchuria—G21, Bd B, Dir. 3
*R35*—35, Bd B, Dir. 3
*R39*—S34, Bd B, Dir. 3
*S127*—Y20, Bd B, Dir. 3
*S142*—C11, Bd B, Dir. 3
*S143*—S20, Bd B, Dir. 3

2. *Thornbrough* 139, Bd A, Dir. 1
all British MTBs—Enter on Turn 4 on any hex lettered A on Bd A
*La Combattante*—Enter on Turn 5 on any hex numbered 1

IV. Victory Conditions

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

V. Game Length

18 Turns. Night Scenario

VI. Special Rules

The *Raubs* are minesweeper conversions. Each has the following surface gunnery strengths: Fwd 1 (2), Side 1 (2), Aft 0. All other class characteristics as per the German Advanced Surface Ship Chart for Class R17. All German merchantmen have the following surface gunnery strengths: Fwd 1 (2), Side (2), Aft 0.

On the first turn of the scenario, the German S boats may not exceed a speed of four hexes. The German merchant ships must move as a fast convoy (30:0). The German player is considered to be the defensive player.

## SCENARIO 20
## STRAIT OF SURIGAO

I. Introduction

With their inner defenses breached by the Leyte landings, the Japanese High Command was prepared to form a new engagement to regain the initiative. One of these Japanese task forces, a collection of battleships and cruisers and destroyers, entered the Surigao Strait, divided into two fleets under the commands of Vice-Admiral Shoji Nishimura and Vice-Admiral Kiyohide Shima. Brushing a screen of American PT boats and destroyers aside, Nishimura's force was defeated in a heated action with US Navy capital ships on 20 October 1944. The destroyer *Shigure* was the only ship of Nishimura's van to survive the battle. Retreating down the Strait, it 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 Shima's force was entering the area and the torpedo ploughed on to strike the cruiser *Abukuma*, so damaging it that it was forced to drop out of the formation. Shima's destroyers scattered the PT boats, sinking two. But the crippling of the *Abukuma* threw Shima's timetable and plans into total confusion. Shima chose to withdraw.

II. Order of Battle

1. Japanese Player—*Nashi* (as per German Scheer)
*Ashigara* (as per German Scheer)
*Abukuma* (as per Japanese Mogami)
*Shimanto*, Class Shimkaze
*Shigure*, Class Shimkaze
*Shimoa*, Class Shimkaze
*Kiyoshima*, Class Matsu

2. American Player—*PT 152*, Class Elco
*PT 493*, Class Higgins
*PT 137*, Class Higgins

III. Starting Location

1. *Nashi*—K30, Bd A, Dir. 1
*Ashigara*—D34, Bd A, Dir. 1
*Abukuma*—N34, Bd A, Dir. 1
*Shimanto*—Z6, Bd A, Dir. 1
*Shigure*—T39, Bd B, Dir. 4
*Shimoa*—H26, Bd A, Dir. 1
*Kiyoshima*—V30, Bd A, Dir. 1

2. *PT 152*—S35, Bd C, Dir. 4
*PT 493*—P54, Bd C, Dir. 5
*PT 137*—S28, Bd C, Dir. 4

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 *Nashi*, *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 (30:0).

The Elco *PT 493* is a modified 1943 version, and has the following surface gunnery strengths: Fwd 2(4), Side 2(4), Aft (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 air patrols and surface vessels, the German craft were finally defeated. The patrolling frigate *Skva* 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 they 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—*S195*, Class 193
*S205*, Class 193
*S220*, Class 218
*S221*, Class 218
*S223*, Class 218

2. British Player—*Skva*, Class Captain
*MTB 623*, Class Vosper III
*MTB 654*, Class Vosper III

III. Starting Location

1. *S195*—W53, Bd C, Dir. 6
*S205*—X55, Bd B, Dir. 6
*S220*—Y51, Bd B, Dir. 6
*S221*—B48, Bd C, Dir. 6
*S223*—F51, Bd C, Dir. 6

2. *Skva*—M23, Bd A, Dir. 2
*MTB 623*—P20, Bd A, Dir. 2
*MTB 654*—E23, Bd A, Dir. 2

IV. Victory Conditions

The German Player must exit three S boats off any hex numbered 1 on Bd A. Any other result is a British victory.

V. Game Length

12 Turns. Night Scenario

VI. Special Rules

The British player is considered to be the defensive player.

## SCENARIO 22
## CAORLE LIGHT

I. Introduction

The last successful action by Allied naval forces in the Mediterranean came on 13 April when two boats of the 57th MTB Flotilla attacked 1845, a German heavy torpedo boat (ex-Italian) in 1943) attempting to reach Venice. Despite heavy fire from the enemy boat, the MTBs sank it with purvis. Unfortunately, on the run home, *MTB 697*, in an area which was supposed to have been cleared of mines by Tito's partisans, struck a mine and broke in two, both halves burning furiously. Its crewmen were never found.

II. Order of Battle

1. German Player—*1845*, Class Saiga

2. British Player—*MTB 670*, Class Fairmile D Ver. II
*MTB 697*, Class Fairmile D Ver. II

III. Starting Location

1. *1845*—P37, Bd C, Dir. 5

2. *MTB 670*—K43, Bd A, Dir. 1
*MTB 697*—H34, Bd A, Dir. 1

IV. Victory Conditions

The British Player must sink 1845. Any other result is a German victory.

V. Game Length

8 Turns. Day Scenario

VI. Special Rules

The Spinn class boat was modified by the Germans and has the following surface gunnery strengths: Fwd 1(2), Side 3(4), Aft 2(4). The German boat is considered to be an escort vessel and, as such, will move in the appropriate phase.

## SCENARIO 23
## LINGAYAN GULF

I. Introduction

It was soon after the landings in the Lingayan Gulf that a new threat to Allied shipping became apparent—the Japanese suicide boats which, in the manner of the Kamikaze aircraft, were to reverse the Allies' offensive momentum. With virtually no navy left to fight with, it was to this kind of warfare that Japan was reduced in the final months of their dissolving struggle. One of the main tasks of the PT boats in 1945 was to counter these suicide craft. Thus, on 13 May, after reports of Shinyo boats had brought *PT 399* and *PT 423* into the area, and as three large American supply ships suddenly presented an irresistible target, six Shinyo craft issued from concealment on the Luzon coast and sneaked towards the merchant ships. The PT boats intercepted the attack and, in the melee, managed to sink all six.

II. Order of Battle

1. Japanese Player—six Special Attack Class Shinyo

2. American Player—Three IC3 Merchantmen
*PT 399*, Class Elco
*PT 423*, Class Elco

III. Starting Location

1. *all Shinyo boats*—Enter on Turn 1 on any hex numbered 58

2. IC3 Merchant—E30, Bd B, Dir. 2
IC3 Merchant—X27, Bd A, Dir. 2
IC3 Merchant—D23, Bd A, Dir. 2
*PT 399*—L38, Bd C, Dir. 5
*PT 423*—Q36, Bd C, Dir. 5

IV. Victory Conditions

The Japanese player must accrue 0 V.P. Any other result is an American victory.

V. Game Length

9 Turns. Day Scenario

VI. Special Rules

All American merchant ships have the following surface gunnery strengths: Fwd 1(2), Side (2), Aft 0. The American ships must move as a slow convoy (30:0). The American player is considered to be the defensive player.

## SCENARIO 24
## KOKKAWA ON BAWLE RIVER

I. Introduction

During the 33rd Arakan campaign to liberate Burma, the Japanese utilized the many inland waterways of the coastal region to supply, reinforce and evacuate their troops in the region. To halt this, the Royal Navy assigned the arduous task of closing these routes to the 36th, 37th, 48th and 55th ML Flotillas, equipped with Fairmile B craft suited for the operation. Patrols began in October 1944, as soon as the monsoon ended. But by May 1945, the British still were struggling for control of the waterways. A typical operation: On 15 May, three British boats, concealed along 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—*MG76*, Class MG7
*MG131*, Class MG7
*MG141*, Class MG7

2. British Player—*MGB 367*, Class Fairmile B
*MGB 391*, Class Fairmile B
*MGB 437*, Class Fairmile B

III. Starting Location

1. *MG76*—D26, Bd B, Dir. 3
*MG131*—L32, Bd B, Dir. 3
*MG141*—J27, Bd B, Dir. 3

2. *MGB 367*—B45, Bd B, Dir. 1
*MGB 391*—Z26, Bd B, Dir. 5
*MGB 437*—S49, Bd B, Dir. 1

IV. Victory Conditions

The British player must accrue more V.P. than the Japanese player. Any other result is a Japanese victory.

V. Game Length

12 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.

# 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 star-shell 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.

# ADVANCED GAME

## 34.0 SUBMARINE EMERGENCY MOVEMENT

**34.7** *Prolonged Attack Procedure* ML/MTBs may not be utilized to conduct prolonged attacks.

## 35.0 LAUNCHING TORPEDOES

**35.1** A ML/MTB may launch unaimed torpedoes only (35.3). A ML/MTB, due to the instability of the launching platform and the high speed normally operated at, may never fire aimed torpedoes.

## 41.0 INITIAL TORPEDO LOAD

**41.1** A ML/MTB does not possess the capacity to reload torpedo tubes while in combat. Thus, a ML/MTB is restricted to carrying only one type of torpedo.

## 46.0 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 sighting 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.

## 49.0 CREW QUALITY

Crew quality does not normally affect operations by small boats in any manner.

**49.4** ML/MTBs, when utilizing radar search if given the capability by the scenario special rules, are considered to be novice crews.

## 50.0 WEATHER

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.

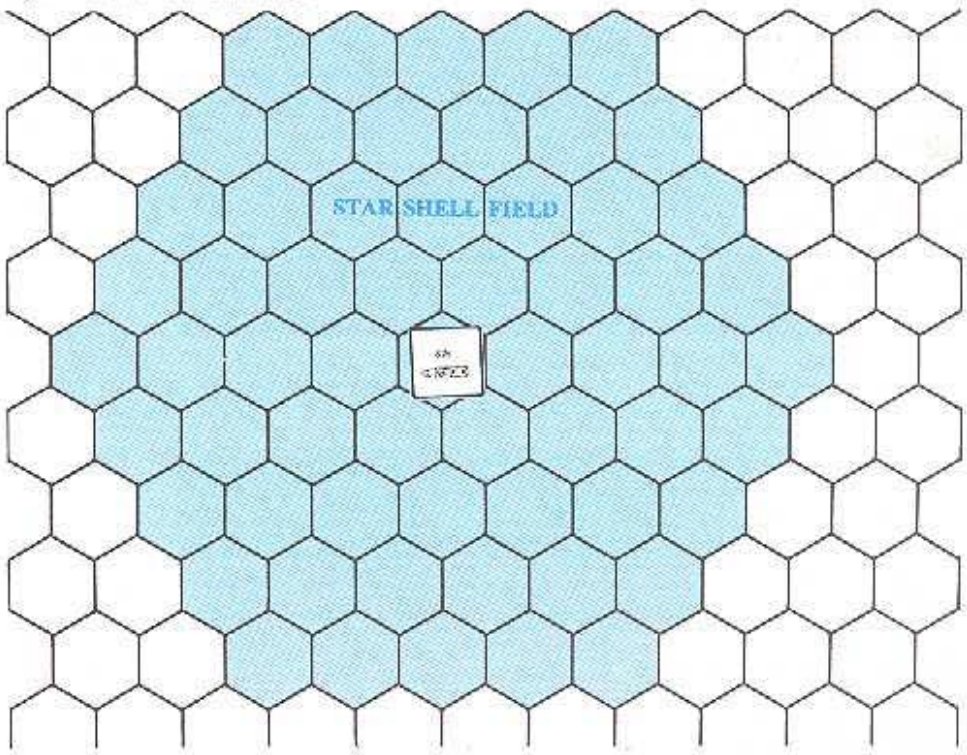
## 52. REPAIR

**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

Figure III: Star Shell Field for a ML/MTB



engines of these craft, malfunctions occurred with some frequency and proved acutely embarrassing, and occasionally fatal, for the unlucky crew.

**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 dice 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 Frashini 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. 4 and the list of winners in Vol. 23, No. 5 of The *GENERAL*.