Deadly Waters Errata and Clarifications

Operational Map

[Correction]: On the Yellow route the third Event Box from the EOMP should be EB6 (not EB8).

2.5 Setting up a Convoy for Miniatures Play

[Correction]: *Submarines:* The Axis players set up the submarines as described by the Event Box and set the heading for the submarine. Then roll a D6 to determine the submarine's actual heading.

- 1 - 2: 30° to the left of the set heading.
- 3 - 4: the heading is as set by the player.
- 5 - 6: 30° to the right of the set heading.

The exception to this is if the submarine is designated in the Event Box as firing torpedoes at the time that it appears. In that case, the submarine is heading directly towards the target of the torpedoes.

3.1 Map Event Results: Combat

[Correction and Clarification]: Whenever the Event Box Result or Investigate Sighting Box Action is **Combat** the game moves from the Operational game to tactical combat where a tactical set of rules is used to resolve the combat. The Event and Investigate Sighting Boxes can include instructions and restrictions on detection and combat for the submarines, escorts, and aircraft involved in the combat.

Submarine Combat Actions: Generally during encounters with convoys, the submarines have the advantage over a convoy. But there are also times when the submarine is surprised. Because of this, there are some special actions taken during the first turn of a tactical combat. After the first turn, the normal tactical rules apply.

If an Event or Investigate Sighting Box lists that a submarine is surprised or detected, then during tactical combat the escort unit nearest to the submarine is presumed to be in contact with the submarine. This escort is moved first, before that submarine moves. The escort can attack, attempt to ram, and illuminate the submarine during night actions. Any attacks by the escort are tested immediately for hits and damage to the submarine. If a patrolling aircraft is with the convoy, it can be the closest escort unit and would act first against the submarine. If an aircraft is with the convoy, the SOE can designate it to attack (it moves faster) with the closest escort moving next, but only if the aircraft can reach the target within a three minute move.

After the initial detecting unit is done moving, all escorts within detection range, either visual, radar, or sonar/asdic, can attempt to detect the submarine. If they detect the submarine, they can also move and attack. Any attacks by the escorts are tested immediately for hits and damage to the submarine. The SOE can direct escorts not to attack, if he does not want them to do so. This enables him to keep his screen intact.

After the escorts that detect the submarine move and attack, the submarine then gets a chance to move and attack. The submarine is assumed to have detected all the convoy ships and escorts in normal detection range.

In Deadly Waters the following Event and Investigate Sighting Boxes are cases where submarines are surprised or detected:

- NEB2 #8, #9
- NEB3 #5, #6, #7 (Italian sub only)
- NEB4 #8-#9
- ISB4 #6, #7, #8, #0

If an Event or Investigate Sighting Box does not say that a submarine is surprised or detected (it might list a submarine as undetected or just say the submarine location), the submarine has detected all the convoy ships and escorts in normal detection range. The submarine moves first and, if within range, can attack with guns or torpedoes. Any attacks by the submarine are tested immediately for hits and damage to the target. After the submarine moves the escorts move and test for detection normally.

In Deadly Waters the following Event and Investigate Sighting Boxes are cases where submarines are not initially detected:

- EB1 #9
- EB2 #8, #9
- EB3 #6
- EB5 #0
- NEB1#7, #8, #9
- NEB2 #4, #5, #6, #7, #0
- NEB3 #6, #7 (German U-boat only)
- ISB3 #9
- ISB4 #9

  NOTE: For NEB3 #7 the German U-boat is undetected and moves and attacks first. After that the escort closest to the Italian submarine moves and attacks, followed by any other escort that can detect the Italian submarine. Finally, the Italian submarine can move and attack.

In some cases an Event or Investigate Sighting Box lists submarine locations and then states the escorts can test for detection. In these cases the submarine has detected all the convoy ships and escorts within normal detection range. Escorts also check for detection of the submarine. Submarines and escorts then move in the appropriate order, based on who detected who first.

In Deadly Waters the following Event Box is a case where there can be mutual detection between escorts and submarines:

- NEB3 #9, #0

Air Combat Actions: When enemy aircraft are contacted, the Event Box will indicate the initial range, if escorts and convoy ships can fire at the aircraft, and if there is sufficient time to launch aircraft if a CAM, FCS, or aircraft carrier is present, or for CAP to intercept.

In Deadly Waters the following Event and Investigate Sighting Boxes are cases where the convoy and escorts can fire AA or intercept the attacking aircraft (with a CAM launch or CAP) before the bomb run:

- EB2 #6
- EB3 #9, #0

In Deadly Waters the following Event and Investigate Sighting Boxes are cases where the convoy and escort is surprised and cannot fire AA or intercept the attacking aircraft until after their bomb run:

- EB1 #7
- EB2 #7
- EB3 #7, #8

In Deadly Waters the following Event and Investigate Sighting Boxes are cases where the convoy and/or escorts can fire AA before the bomb run, but cannot intercept the attacking aircraft:

- EB1 #8
- ISB2 #9, #0

3.1 Map Event Results: Events Beyond Convoy

Stragglers, Rompers, and Holding Boxes

[Clarification]: Some Event Boxes result in merchant ships or warships leaving the convoy. Most commonly, this will be as a straggler, a ship that cannot keep up. But it can also be from combat damage or another event. Players should record which ships have become separated from the main convoy and when they become separated during the convoy run, so that players will know if a Wolfpack attack happens after the ship has left the convoy. It usually works best to have several small holding areas for these ships: one for Rompers, one for Stragglers, one for abandoned ships, and one for towed ships. The fate of each ship that was separated from a convoy is resolved at the end of the game by rolling on the appropriate column of the Events Beyond the Convoy Table.

Note that escorts can proceed independently of the convoy and are assumed to safely reach port.

Damaged Merchant Ships

[Clarification]: Merchant ships that are hit by a torpedo or mine immediately come to a halt to avoid further damage from flooding and collapsing bulkheads. A ship can resume movement after two tactical turns, and if able to catch up, will rejoin the convoy. If they cannot catch up, the ship continues as a straggler.

Any merchant ship that takes more than 50% flotation damage is immediately abandoned. It is placed in the abandoned ships holding box and its fate is determined at the end of the game.

The SOE can order a ship with 50% or more flotation damage, to be towed. He can also order it re-manned and designate an escort to sail with it if it can move under its own engines.

The Convoy Commodore and SOE, if in agreement, can reduce the speed of the convoy to allow a damaged ship to keep up. This can especially apply if the ship is of great importance. If they order a reduction in convoy speed, the convoy must make an extra roll on all day and night Event Boxes from that point forward. This reflects that it takes longer to move through each Event Box area.

Event Boxes

[Clarification]: Mines: Some Event Boxes will result in one or more ships hitting a mine. If the tactical rules you are using do not have mine rules, check damage as if the ship was hit by a German submarine torpedo.

[Corrections]:

EB1, #7: Change medium bombs to light bombs

EB2, #7: Change medium bombs to heavy bombs

EB3, #6: The U-boat is submerged at periscope depth.

EB3 #9: The initial altitude for the Ju-88s is Medium.

EB3 #0: Change medium bombs to light bombs.

Convoy Tactical Rules Errata and Clarifications

3.4.1 Altitude Bands

[Addition]: There are three basic altitude levels: low, medium, and high. Level bombing attacks can occur from any of those altitudes, while torpedo, rocket, and strafing attacks can only be carried out by aircraft at low level. Dive bombing attacks can be initiated from medium or low level, but the aircraft are always at low level after the bombing attack.

Aircraft can climb (increase altitude) by one level during the 3 minute turn. Single-engine aircraft with only guns and/or rockets (no bombs, torpedoes, or depth charges) and any aircraft conducting a dive bombing attack can dive (decrease altitude) by one level during one 30-second step. Multi-engine aircraft and single-engine aircraft with bombs, torpedoes, or depth charges can dive one level every three 30-second steps.

In general attacking aircraft stay at the same altitude that they enter the area at, noted in the Event Box in Deadly Waters. If the attacking aircraft can be intercepted by a CAM fighter, aircraft from a carrier, or CAP, then the Event Box states that too and the intercepting aircraft is assumed to be at the altitude of the attacking aircraft.

3.8 Depth Bands

[Correction to the paragraph after depth band list]: Submarines can change depth during a Tactical Turn without affecting their normal forward movement. When a submarine is submerged, or on the turn it dives (except for crash dives), or the turn it surfaces, the submarine's maximum speed is limited to its maximum underwater speed.

To determine the allowed depth changes for a submarine, refer to the lower portion of the Ship Damage Card for the submarine. There is a depth table with five columns on the card. The first column shows the depths the submarine can operate at. The second column shows the safe and risk for the submarine at various depth bands.

When a submarine enters a depth band that has a risk value associated with it, the sub player rolls a D10. If the result is less than or equal to the risk value listed, the submarine is crushed by the water pressure and is removed from play. If the submarine passes the die roll it does not have to check for that depth band or any shallower band again during this action.

The third column shows the normal depth changes for the submarine. The fourth column shows depth changes for emergency surfacing. Once a submarine starts emergency surfacing, it must go all the way to the surface. The fifth column shows the diving information and restrictions for crash dives. The advantage in using crash dive is that the submarine can use its current surface speed for the portion of the turn that it takes to get to the maximum crash dive depth, but the noise from a crash dive is detected by asdic/sonar out to 4,000 yds (2 nm).

[Addition]: Submarine movement example: The German submarine U-71 is on the surface at 17 knots when it detects and is detected by a convoy escort. The U-71 decides to crash dive during movement. During the first half of the move U-71 dives through periscope depth to shallow depth and moves the distance for 9 knots (half of 17 rounded up). During the second half of the move, the sub cannot go any deeper, since it uses normal depth change values and it takes one turn to go from shallow to medium depth, but it moves the distance for 4 knots (half the maximum underwater speed of 8).

If U-71 had decided to do a normal dive, it can still reach shallow depth, but it would be limited to a speed of 8 knots, the maximum underwater speed for the submarine.

4.4 Asdic/Sonar

[Addition]: Losing contact: When hunting a submerged submarine that is attempting to break contact, if contact is lost for three consecutive moves, the submarine is removed and considered to have escaped. Similarly, if a submerged submarine suffers damage listed as requiring it to return to base, the submarine is removed and considered to have escaped, even if the escorts still have contact with it. The escorts then return to the convoy. This avoids prolonged submarine hunts that are historically incorrect for this time period and slow the game down.

If contact is lost with a submerged submarine when the submarine is attempting to close the convoy, the escort can continue on the last known course of the target or return to its convoy position. If it continues and regains contact, it can turn to the current submarine bearing.

A surfaced submarine that is attempting to break contact with the convoy and or a pursuing escort, escapes after being undetected for three consecutive night moves or four consecutive day moves. The submarine is removed and considered to have escaped.

5.1 Gunnery Procedure

[Remove]: *Example1:* Delete the reference to armor penetration of the U-boat.

5.1.1 Armor and Penetration Ratings

[Addition]: Armor and gun penetration ratings are given in letter values ranging from 'a' (highest) to 'f' (lowest). Additionally, the 'a' rating can have a number following the rating, showing increasing armor or penetration ratings. Some ship armor and gun penetration ratings are shown as a dash (-), which means, for Convoy rules purposes, the ship does not have armor or the gun does not penetrate any armor with a rating of 'f' or better. Gun penetration ratings can change with range. A gun penetrates armor if it has an equal or better penetration rating than the ship's armor. So, 'c' armor is penetrated by a gun with a rating of 'a', 'b', or 'c' for the current range and 'a3' armor is penetrated by any gun with a rating of 'a3', 'a4', or 'a5' for the current range.

If a gun penetrates a ship's armor, the Armor Penetrated Gunnery & Bomb Damage Table, if available, is used when determining damage. CVE and smaller ships do not have armor and only have one Gunnery & Bomb Damage Table.

5.2(a) Snowflake

[Addition]: Snowflake is a particularly bright rocket flare that illuminates a wide area. It is not necessary to roll for being on target. Snowflake flares illuminate for two turns, but have a reduced effect on the second turn.

5.2(a).1 Snowflake: Snowflake flares are fired almost straight up. On the turn it is fired, a Snowflake flare illuminates an area 1,000 yds either side of each ship that fires. Ships on the convoy outer side, and at each end of a column, fire their snowflake to burst 1,000 yds outside the convoy. The effect is that the entire convoy is illuminated, plus an area up to 2,000 yds to each side, ahead, and astern.

The flares are slowed by a retarded parachute and descend very slowly and stay in place when the convoy moves. On the turn after it is fired, a Snowflake flare only illuminates an area half as big (500 yds to either side) as the first turn.

Escorts can also fire them to increase the coverage.

5.2(a).2 The order SNOWFLAKE applies to the merchant ships of the convoy only.

5.2(a).3 The order GENERAL SNOWFLAKE applies to all ships of the convoy and every escort.

From 1941 onward, escorts could fire Snowflake up to 1,000 yds dead ahead, to illuminate the area ahead of them. There is no need to check for being on target. It will be presumed to burst 1,000 yds ahead of the firer and to illuminate anything within 1,000 yds of that point on the turn of firing. On the turn after being fired, it illuminates anything within 500 yds of that point.

From 1943 onward, escorts were increasingly fitted with rails on a forward gun mounting. These held three rockets on rails on each side of the mounting.

5.2(a).4 Escorts with rocket rails on a forward mounting can fire two Snowflake flares per move. They can be discharged in whatever direction the gun mount is pointing or can swivel and fire in two directions.

NOTE: Snowflake was usually only employed if it was believed a submarine was already in contact with the convoy and firing from close range, or within the columns. The disadvantage of lighting up the entire convoy was a worthwhile risk if it could force an attacker to dive or enable it to be located. Naturally it was only used if it was felt an attacker was on the surface.

NOTE: Experiments were carried out with aircraft rockets mounted each side of a forward mounting with the intent that they could be used to engage a surfaced submarine with more devastating effect that the guns of most escorts. However, test concluded that it was far too hard to hit a target. The rockets were also vulnerable to damage from salt water, and misfires could harm the firing ship. As the instance of encountering U-boats on the surface was rare after mid-war, the idea was dropped as not worth the effort. The use of illumination (Snowflake) was continued as they were designed for use at sea.

7.3 Antiaircraft fire restrictions.

[Replace Current Rule]: All ships can fire AA at medium or high altitude aircraft without restrictions.

Ships cannot fire at aircraft at low altitude if their line of sight is blocked. However, they can fire at them at the range they are at if at some point during their movement the aircraft are visible. When sailing in convoy only the ships in the column nearest to the approach line of the attacking aircraft can fire without restriction as long as their line of sight is not blocked.

If aircraft pass over the convoy at low level, only the target ships can engage the attacker without penalty. Other ships can fire on aircraft at low altitude that are not actually attacking them; however if a '7' is rolled on either D10 of the To Hit roll, the AA fire has hit a friendly ship. If a friendly ship is hit, the ship takes damage as if it had been hit by a strafing aircraft. The ship that is hit by friendly fire is the nearest ship that is directly behind the aircraft being fired at. If the flight move of the aircraft has carried it outside the convoy, the friendly fire damage is applied to the last ship the aircraft passed.

Friendly fire damage is also applicable to escorts if any other vessels fires on a low flying aircraft that passes between it and the friendly vessel during a 30-second step. Players may therefore be faced with the decision to hold fire during low-level air strikes.

NOTE: The check for hitting another ship during a low level attack does not apply to veteran crews. They can engage without checking for hits on a ship beyond the target.

7.4 Antiaircraft gun damage.

[Replace Current Rule]: When a ship or submarine takes damage to their AA guns (result C on the Gunnery Damage Table or result E on the Submarine Damage Table), the AA fire rating is reduced by 5 points, but not below zero (0). This applies to all ranges.

There is no need to determine which weapon (or weapons) were hit as the reduction presumes a general degradation of the ability to put up effective AA fire. This can be as a result of damage to directors, gunners, loaders and ammunition supply, etc., not just the loss of a weapon. The reduction is permanent for the remainder of the convoy run.

7.5 Air to Air Combat.

[Correction]: To attack another aircraft, the opposing planes must be within 1,000 yards of each other at the same altitude band.

7.9 Special Aircraft

[Addition]: Leigh Light aircraft: These aircraft are fitted with a searchlight and surface search radar. They operate at night and Event Boxes may allocate one to a convoy from time to time.

Leigh Light aircraft are assigned a position as explained by Deadly Waters rule 3.5 and, if a tactical combat occurs while the aircraft is available, are set up for play as explained in Deadly Waters rule 2.5. They can be sent to investigate or attack a contact by the SOE, or other player acting in place of the aircrew.

As a Leigh Light aircraft closes with a target, it switches on its searchlight during the 30-second step it attacks. Submarines illuminated by Leigh Light cannot fire AA during that phase as the crew is dazzled. A submarine can fire its AA at a Leigh Light aircraft if the aircraft carries out a second attack, even with its searchlight on (the crew fired at the light).

8.7 Repairs

[Addition and Clarification]: In the Repair Table; if a 0 is rolled, the equipment (rudder, electronics, machinery, guns, etc.) cannot be repaired at sea and is out for the rest of the convoy run.

After a tactical battle is complete, repair rolls are made for damaged equipment 1 hour after the battle and once per eight-hour Map Movement until the equipment is repaired, found to be non-repairable at sea, the convoy reaches port, or the ship is sunk.

NOTE: In some cases this can result in two repair rolls for a Map Movement, this is intended by the rules (this would happen when the 1 hour after a battle roll goes over into the next Map Movement, see Deadly Waters rule 3.3 for more on the timing of events).

8.9 Sinking

[Addition]: (Optional) The Torpedo Damage table uses the terms sinking rapidly and very slowly, which are not defined in these rules. To add some flavor to the game, here are some suggestions for using these terms with the normal rules for sinking.

- **Sinking Rapidly:** Make a standard roll for sinking, but divide the number rolled by2 (D10/2), giving a result of 1 ½ - 5 minutes.
- **Sinking Very Slowly:** The ship is sinking but will not sink until after the convoy is out of sight (until after the tactical action is resolved). Basically leave the ship dead in the water where it is sinking, with the convoy moving on.

ASW Attack Table:

[Correction]: On the 1943 January to June To Hit Table, the Air Attack DC Periscope/Shallow Depth value should be 20, not 2.

Submarine Damage Table

[Replace current value]: Result E - AA Gun Damage: Reduce AA fire rating at all ranges by 5, but not below zero (0).

Gunnery & Bomb Damage Table

[Replace current value]: Result C - AA Gun Damage: Reduce AA fire rating at all ranges by 5, but not below zero (0).