

Operation Rheinübung CLWG Conference December 2005

Introduction

This is a game of the war in sea war in the North Atlantic in May 1941 – the time of the invasion of Crete and the Bismarck break-out. This is not a strict re-creation of history, but a plausible alternative scenario. This is a development game- in particular, the umpire system is computer-assisted: this should not be apparent to players unless things go wrong. Since the previous version, the game has also changed in terms of the combat system (simplified) and in terms of the scenario. In this game, we will try to set the game start at a point where the German teams must decide when to break out and with which units (and which route). If any of this goes horribly wrong, then we might need to start again.

Game Overview

Players will take the part of flag officers in the British and German navies. Players with operational units will issue orders to those units directly. Players at HQ will radio instructions and rely on the men on the spot to follow them.

Play will be turn-based, with each turn representing 4 hours. We will aim for 15 minutes per turn, but this will vary according to the amount of action in the turn. If significant action takes place, the turn might well be broken into sections shorter than 4 hours. Most action will take place on maps of the north Atlantic but when (if) opposing units come into contact (i.e. closer than 15 miles) then turns will be suspended while tactical action is resolved.

By the beginning of each turn, each team should give their orders to the umpire. These orders should specify any changes to any unit's bearing or speed. Orders should also be given for submarine attacks and for aircraft sorties (see detail later).

There is a ship status sheet for each capital ship and cruiser involved. Importantly, this shows the fuel available to that ship and also contains information to be used in combat. Destroyers will generally not be played separately. U Boats will be shown with their torpedo and fuel status, but the fuel will not be tracked in the game except in a general way (e.g. If a U-boat has only 2 days' fuel left, then after 2 days, it will start to return home). Convoy status is not tracked.

Maps and Movement

Most activity will take place on maps of the north Atlantic. Each team will have a map and should plot unit positions carefully on it. The map projection is a little different to the normal projection, allowing distances to be more accurately represented. Positions on the map are referenced by degrees west and degrees north (using e.g. 41.5 degrees rather than using degrees and seconds). A grid showing degrees is superimposed on the map. Each degree is roughly 40 nautical miles across. As each turn is 4 hours, a ship travelling at 10 knots will travel 1 degree in a turn. Measures on the same scale as the map are provided. The grid is a square grid and bearings are made in degrees with reference to that grid (e.g. A bearing of 45 degrees will go along a line from bottom left to top right of the squares).

Players should keep track of their own formation positions on their map. The umpire will also have a plot showing positions - this will be the accurate plot and a position report can be requested at any

time, but it will involve the probability of enemy RDF.

Ice is a hazard near to the Greenland coast. The normal limit of dense ice is shown on the map, but ice is not the same as land - it is possible to go through ice, but high speeds and fog increase the chance of a collision with the ice - the chance is also increased the deeper into the ice a ship goes.

There are unfinished minefields in the Iceland-Faeroes gap. The declared minefield area is shown on the German maps, the actual minefield area is shown on the British maps. Going through a minefield at high speed is a very hazardous occupation!

Fuel is used at the following rates:

<i>Speed</i>	<i>Fuel Used in a Turn</i>
0-10 knots	1 unit
11-15 knots	2 units
16-20 knots	4 units
21-25 knots	8 units
26-30 knots	12 units
31+ knots	16 units

A capital ship may opt to zigzag or may operate with a destroyer screen. The maximum speed of a unit is reduced by 5 knots if a destroyer screen is operating and/or the unit is zigzagging. Both reduce the likelihood that a submarine attack will be successful. Any aircraft attack on a formation will be split evenly between the ships in a formation.

Scenario

It is May 1941. In Crete, an invasion using paratroops has begun. The RN is stretched in the Mediterranean and now expecting further action to support British troops in Crete. In the North Sea, a German squadron has moved through the Skagerrak and headed towards Norway.

To simplify matters, we will take daylight hours as the same throughout the theatre. Daylight starts at 4am and ends at 8pm.

Further information is given in national briefings, but the exact scenario will be specified separately as it depends on the starting orders from the command teams.

Organisation and Roles

There are 4 teams. Each team should have 2 players. It might be necessary to combine some teams on the day or even to over-staff some teams (we should be so lucky), but the main effect will be to speed up or slow down the action. Each team will have a map and it will be a good idea for one person to take on the communications while the other takes on updating the map.

German:

Operational Team

Fleet Commander(Lutjens): commands any German task force and any unit allocated by Group West.

HQ Team

Fuhrer des Untersee Boot (Donitz): commands the U Boats

Group West: commands all other units and co-ordinates all German activity. Requests air activity from Luftflotte 3

British:

Operational Team

CinC Home Fleet(Tovey): flagship is King George V (KGV) and he commands any units allocated to him by the Admiralty.

Other units commanded (e.g. Wake-Walker or Somerville) would often comprise a task force such as Force H or a cruiser squadron, as allocated by Admiralty.

HQ Team

Admiralty: commands capital units not directly with CinC Home Fleet or with convoys and decides on allocation of ships to roles/organisation.

Western Approaches command (Noble and Robb): commands all convoy movements and all air operations.

Communications

There is a telephone link between the teams of the same nationality and between all teams and the umpire. Any radio communication from operational units could well lead to tracking that unit via direction finding (RDF). The technology is not, however, precise. Any change in orders should be communicated to the umpire at any time, but will not take effect until the next turn (unless the umpire judges it important to change things mid-turn and he has the time to do so).

Weather

Each turn the weather will be decided for each 10-degree square. The weather can be clear, fog or storm. Storm will increase the fuel use of every ship by 3 units per turn and limit maximum speeds to 15 knots (5 knots for submarines). Storm and fog will stop all flying and submarine attacks. Weather can be assumed to be clear unless the umpire tells you otherwise - weather information is only available for units in the square. Weather systems in the Atlantic tend to move from West to East, often with a slight northerly angle. Fog is very common near the ice limit, particularly when clear weather has been around for a while.

Visibility

Visibility is somewhat simplified from reality. In clear weather, a ship is visible to another at 15 miles during the day. Radar increases this - by an amount given in the team briefing.. The ship status sheet shows whether a ship is fitted with radar. Fog decreases visibility to 2 miles, although, of course, radar is unaffected. Aircraft visibility is the degree square the plane is in. Flying does not take place in fog or storm. Misidentification of a target is possible.

Aircraft Search

Each aircraft type has a search range. This is the furthest distance that they can operate from their base, in degrees. Each squadron has a search area – the number of degree squares that its aircraft

can search in a day (each degree square searched must be within range). The normal search operation is conducted by filing a flight plan with the umpire. This should be done by marking off squares on a (provided) small map. A flight plan must be filed by 8pm for a 4am start and will last all day. If you wish to change the flight plan during the day, ask the umpire who will make a ruling (depending on daylight left, type of aircraft, distance of the search from base etc.). Combined search and attack missions are not possible.

Combat

Combat can involve aircraft, submarines, convoys and surface ships. All except surface ships are resolved with dice. Combat involving surface ships takes place on the battle board.

Aircraft Attack

Aircraft with bombs or torpedoes can attack ships, submarines or convoys. Flying only take place during the day. If air-to-air combat is likely, the umpire will make something up. Each aircraft will need to attack successfully and then find out the damage:

Attack on convoy

Attack successfully: 6 on a d6
Effect: one ship sunk

Attack on submarine: only from bomber

Submarine always dives
Attack does damage 6 on a d6
Attack sinks submarine: damage done (i.e. Previous roll was a 6) then 6 on a d6
Submarine surfaces after d6-1 hours

Attack on surface ship

Attack successfully: 6 on a d6 (1 means that the aircraft is shot down)
Bomber successful: plunging fire cards as specified in the national briefing
Torpedo successful: side hit cards as specified in the national briefing, ignoring any turret damage

Aircraft can, instead, shadow a convoy or surface ship. This is automatic while daylight and while weather is clear, but no other mission can take place (i.e. It must be there without bombs or torpedoes).

Submarine Attack

Submarines have a number of torpedo attacks available. Each torpedo attack is a spread of torpedoes that can be fired in one turn. A storm will stop attacks. Otherwise, a submarine may attack any target within two miles and any slower target in visibility range.

The effect of attacks are:

Attack on convoy

Attack successfully: 5,6 on a d6
Effect: one ship sunk
Submarine sunk 1 on a d6, only if the convoy is escorted.

Attack on surface ship

Attack successfully: 5,6 on d6 (-1 on die if target traveling at 25+ knots
-1 on die if target is zigzapping or there is a destroyer screen)
Torpedo successful: 5 side hit cards, ignoring any turret damage

Surface Ship Attack

Surface ships in visibility range of convoys or other surface units will stop the main game and transfer action to the battle board. Destroyer screens are ignored for these purposes. The battle board is a square grid with each square being 1 nautical mile. The range between ships is calculated as the number of rows of squares between the ships plus 1 for every 4 columns separating the ships. Combat (and visibility) ceases when the range is greater than 15 miles.

Action on the grid is carried out sequentially, in phases. The side starting the action is the side with a ship with longest range, with highest speed, with the greater number of ships or by highest die roll – in that order. Each phase is carried out for each side.

Damage is calculated by allocating damage cards – side damage for short range and plunging fire for long range. Firing is only successful if a ship has successfully straddled a target.

The umpire will set up the battle board initially and then the following sequence will be observed:

1. **Fire** - all units on one side may fire on units opposite. Each ship status sheet will show ranges and chances of straddling. Initially, a target must be straddled. The chance of a straddle are given on the ship status sheet and applies once for the ship. If a ship has successfully straddled a ship on the previous turn, then a die is rolled for each gun involved and a damage card of the appropriate type (refer to the ship status sheet and the range) is drawn for each 6 rolled. The ship status sheet will also show other effects of firing.
2. **Steer** - all units on one side may change direction. A ship may steer in any direction. The turrets of a ship bear for 270 degrees – most of the time, this will be obvious but umpire decision rules when there is uncertainty. A ship presents a target which is head-on (only very minor deviation from directly towards a ship is allowed to be counted as head-on), on the beam (the intention here is that the target bearing is 60 -90 degrees from the ship's bearing, but again, most of the time it will be obvious) or on the quarter (everything else).
3. **Move** - all units on one side may move. If a unit is facing a square side directly, then it may move 2 squares directly forward, otherwise it may move one square forward and optionally one square to the side.
4. **Effects** - if a ship has changed direction more than 90 degrees and has moved at all, then any straddle it has from an enemy will be lost if it rolls 1 or 2 on a d6. Similarly, any straddle it has achieved will be lost on a roll of 1 on a d6. Each turn uses 1 fuel for every ship in the combat.

If a German surface ship is on the board with a convoy, and it is within 4 miles of any part of the convoy, then it may opt to sink a convoy ship rather than take any other action.