THE ROYAL NAVY

RULES OF PLAY

RULEBOOK INDEX

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THE ROYAL NAVY
Jack Greene 1983©

"Kepe then the sea that is the wall of England:
and than is England kept by Goddes handle."
   . . . Bishop Adam de Moleyns (1436)

"What shall we do to be saved in this world? There is no other answer but this, Look to your moat. The first article of an Englishman's political creed must be that he believeth in the sea."
   . . . Marquess of Halifax (1694)

1.0 INTRODUCTION

THE ROYAL NAVY is a tactical game to reproduce many of the small naval actions of World War I and II fought by the British Empire. Players will note that *THE ROYAL NAVY (RN)* is based on both *IRONBOTTOM SOUND* and *DESTROYER CAPTAIN* and is the design culmination of both those games. Most of the tactical battles will concern only a few ships on either side, while two scenarios (the 2nd Battle of the Sirte and Harpoon Convoy) are primarily multi-player battles.

RN has been designed to be a flexible game. The scenarios are for the most part quite balanced (which is why a battle like Matapan is absent). The optional rules are present to give more realism but go hand-in-hand with more complexity. I am a strong believer in letting the gamer pick the level of complexity desired. The game has also been designed to allow you, the player, to easily design your own scenarios with many ships being included that do not appear in any of the particular scenarios. *RN* does not include all the possible historical scenarios that could be included and few of the might-have-beens.

During both World War I and II, it would be the Royal Navy that would fight at sea, in all oceans, and against several different enemies. *RN* has chosen for its focus the struggle against the German Navy in both wars, as well as the Italian Navy in World War II. The World War I scenarios allow players to see the roots of the warship design that would be used much more frequently in the longer World War II. It would be in that latter war that, for a full year, the main area of struggle outside of Africa would be at sea between the Axis and a defiant British Empire, standing alone. It would be in World War II that decisive naval actions would be fought from the warm Mediterranean to the wind-swept South Atlantic to the frozen Arctic Circle. *RN* allows you to immerse yourself in that struggle, to glimpse for a moment the changing circumstances and the magnitude of the challenges facing the Royal Navy in this century. Technological change and growth, navies stretched to their limits, and strategic and tactical decisions all play their role in *RN*.

2.0 SYNOPSIS OF PLAY

RN is played in turns in which sequential movement is employed in the basic game. The optional game rules use movement that is secretly plotted by both players and then revealed. This allows for an element of simultaneous movement. Torpedoes are secretly aimed at specific ships and this information is recorded. During ship movement execution phase, it will be determined if any hits are achieved. Gunnery combat consists of firing guns at a specific ship. This will take place after all movement. Gunnery hits are then evaluated, using the dice. Torpedo hits and damage are now calculated. The entire combat procedure is simply a mathematical method of determining what is fired or launched from one ship, and what hits or misses the target ship. The dice have nothing to do with movement! The dice are only used to represent a range of possible outcomes reflecting the uncertainties of real combat. Expenditure of torpedoes, as well as any damage that is incurred, is recorded on the ship's "log". The ship's log lists important characteristics of each ship in play and is filled out by each player at the beginning of each scenario. These logs are tally sheets of a ship's condition as play proceeds from turn to turn. The time and movement scales for daylight versus night actions are radically different. Each scenario will explain which system to use.

3.0 COMPONENTS OF PLAY

3.1 THE MAPBOARD

The playing board consists of one mapsheet overlaid with a hexagonal grid pattern which serves the same purpose as squares

on a chess board for regulating movement. The mapsheet is entirely blue and represents the open sea. Some of the scenarios will require the placement of a "cut-out" piece of land terrain or will limit your movement in leaving the mapsheet. This is self-explanatory in each scenario once the "NORTH ARROW" is placed to indicate where north is in relationship to the scenario in play. The "Cut-Out" will have circled letters on it that will be matched up with specific hexes on the mapsheet playing area. Place the specific letters over the specific hexes mentioned. These represent land.

Each hex represents 600 yards for night actions and 1500 yards for daylight actions. Each turn represents 3 minutes of real time for night actions and 7.5 minutes for day battles. The game scale is not a straight doubling of scale because, on the average, friendly ships tend to sail closer to each other at night and further apart during daylight.

3.2 DICE

You will find two types of dice, 10-sided, and conventional 6-sided dice in *RN*. The 10-sided dice are used to evaluate gunnery damage. The 6-sided ones are used mostly for evaluating torpedo damage.

3.3 CHARTS AND TABLES

There are several player aid cards in this game. These cards include the following tables:

3.31 *Gunnery Hit Table:* Used to obtain the number of hits from gunfire. 10-sided dice are used.

3.32 *Gunnery Hit Results Table:* This table tells you what you hit.

3.33 The effects of certain gunnery hits will possibly require one to use the following three possible tables: the Fire Table, the Armor Penetration Table, and the Critical Damage Table. Occasionally non-gunnery hits will require one to use these tables as outlined in the rules.

3.34 *Torpedo Characteristics Section:* Lists the various types of torpedoes, their ranges, era of use, special characteristics (if any), all broken down by nationality.

3.35 *Torpedo Hit Table:* Used to obtain the number of hits achieved in a torpedo attack.

3.36 *Torpedo Hit Damage Table:* Used to ascertain the effects of torpedo hits as well as damage from collisions.

3.37 *Breakdown Table:* (Optional) Used for accidental problems occurring on your own ships in the heat of battle.

3.38 *Time Record Chart:* Each turn of play is marked off on this chart.

3.4 UNIT COUNTERS

The printed die-cut cardboard squares and rectangles are the playing pieces for the game. Variously called "ship counters", "ships", or "counters", each piece represents an actual ship or special game condition on the mapsheet.

3.41 Each ship counter contains the following information:
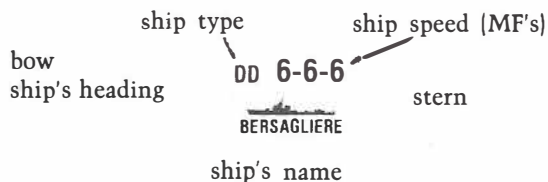
3.411 Ship Types: Ships in the various scenarios are of the following types:

BB — Battleships
BC — Battlecruiser
AS — "Pocket Battleship"
CA — Heavy Cruiser
CL — Light Cruiser
CAA — Anti-Aircraft Cruiser
DL — Destroyer Leader
DD — Destroyer
DE — Destroyer Escort (Frigate)
TB — Torpedo Boat
AMC — Armed Merchant Cruiser

3.412 Ship names are important for identifying the scenario in which they belong.

3.413 The movement factors are a quantification of the ship's speed into the maximum number of hexes a ship that is undamaged may move in one turn.

3.414 The bow of a ship is its front end. The bow always points in the direction the ship is moving.

3.415 The stern is the aft end or rear of the ship.

3.416 The ship counters are color-coded to represent various nationalities and are identified on the counter sheet.

3.42 Some counters represent special conditions and are usually ½" by ½".

3.43 Also included in the game are "log" sheets. They represent three types of ships, DDs and other small craft, Cruisers, and Battleships and Battlecruisers. You will transfer ship information to these blank logsheets for the ships in each scenario or for your design-your-own games. The required information is arranged by nationality on the scenario ship information sheet. In the course of a naval battle, the fighting condition of your ships may undergo drastic changes. These changes, due to combat, will be recorded on the log sheets. It is important to keep the log sheet up-to-date during the course of play. Owners of the game may wish to photocopy for their own use the log sheets and permission is granted for this from Quarterdeck Games.

4.0 PREPARE FOR PLAY

4.1 Select a scenario from the scenario section. All information necessary for the set-up of the scenario is found in the scenario section. It is best to start with Scenario One. Once mastered, one may move on to the other scenarios.

4.2 Now turn to the Scenario Ship Information sheet and write the given information for each ship in your scenario of choice onto the log sheets. An explanation of the Scenario Ship Information (SSI) is given on the sheet.

EXAMPLE: Below is a sample cruiser type logsheet. Numbers have been placed by each section and what those sections are for is explained below. One log sheet will be filled out before play begins for EACH ship involved in play. Not all of the sections will necessarily be used for every ship in RN.
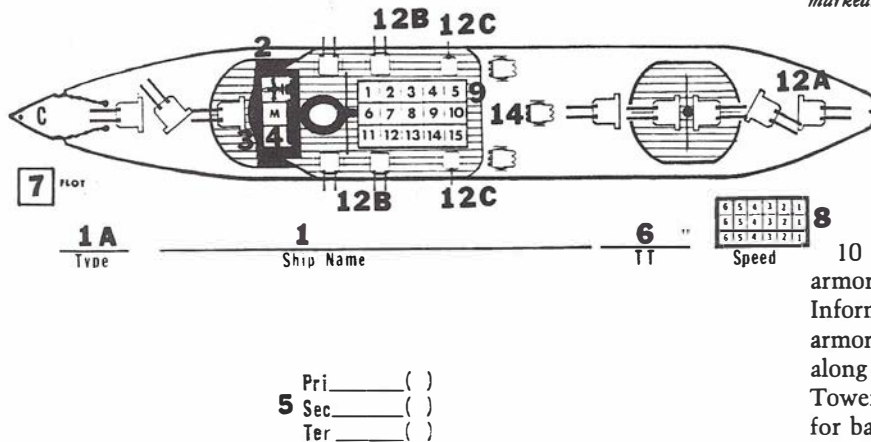
1   The ship's name goes here and the ship type goes in 1A.

2   Many non-DD type ships will carry airplanes on board. If the Scenario Ship Information sheet shows that planes are carried on board, then leave as is. Having planes on board during battle may cause additional damage. If the Scenario Ship Information Sheet shows that planes are *not* carried on board, then blacken this section. If planes are normally carried but absent during the battle (noted on the scenario ship information sheet for battles *when absent*) then cross out the box like this: ⧇

3   The Main Fire Control station is located here. If it is disabled, your gunnery will be adversely affected on the following turns. This is a very sensitive and easily damaged area of a ship.

4   If a ship carries *advanced* radar, an "R" will go here. Very few ships have effective radar in *RN*.

5   Gun Types will go here. Pri stands for primary or main guns, Sec for Secondary, Ter for Tertiary. Not all ships will have three types of armaments. The gun ranges in hexes for daylight actions will go in the parenthesis. This information, as well as special type of gun (model '24 vs model '27, etc.) is on the Scenario Ship Information sheet.

6   This is where the size and type of torpedo is recorded. Simply note type of torpedo that is carried.

7   This is the flotation box, (flot), and the flotation letter (A – I) goes here. This letter-code will place you on the correct table for ascertaining underwater damage. An "A" flotation letter usually goes with a small DD while an "E" or "G" would be for a battleship.

8   The Ship's original starting speed is filled in here. As a ship loses speed, mark it off so as to give the ship's new speed. When marking off movement factors due to damage, blacken the left most column first, working from bottom to top.

EXAMPLE: a speed of 6-5-5 is reduced by 3 MFs, becoming a 5-4-4. A speed loss of 5 MFs would make a 6-5-5 into a 4-4-3. Here is a sample speed section filled out for a 6-5-5:

9   The hull section requires the original number of hull boxes to go here. Mark off the ones not in use before play begins. If, during combat, the hull is damaged, mark off the required number of hull boxes. If all the boxes in this section are knocked out due to damage, then the ship is sunk.

EXAMPLE: the cruiser in this example begins play with 8 hull boxes and is so marked:
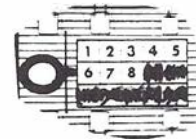
10   The cruisers and larger craft in *RN* are, for the most part, armored. Note the thickness of armor, given in the Scenario Ship Information Section, here. "PRI" stands for primary turret face armor. "BELT" stands for the thickest belt armor (which runs along the waterline) present. "BRG" stands for Bridge or Conning Tower armor (this is where the Captain of the ship is stationed for battle). "SEC" stands for the armor on the secondary gun positions. "DECK" is the deck armor. If armor is present it will follow immediately and will be expressed in inches.

EXAMPLE: The Graf von Spee has a 3" belt, 5" of armor on the primary guns, a 6" bridge and 1" on the secondary batteries, while the deck is 3" thick.

NOTE: Tertiary guns are never armored and are considered to have 0" of armor. Deck armor is unusually thick in RN as it has been modified to reflect its strength from shells hitting it at an oblique angle. Further, it should be noted that some armors have been modified to reflect their superior or inferior qualities (i.e. late 30's and 40's British armor is particularly good). Many of the smaller ships will not have armor at all and so these sections do not appear for DDs, DLs, TBS, AMCs and DEs.

11   The victory point value for ships, if sunk (or severely damaged as per scenario instructions) will be placed here. Victory Points (VP) will vary slightly due to the overall value of a type of ship to particular nation.

EXAMPLE: A British or a German DD might be the same size, but the German will be worth 1 more victory point as her loss to the German war effort would be more severe than the comparable loss to the British.

12   Each gun position will have certain characteristics. The squared boxes with numbers inside them and arrows giving their firing bearings will be present on all ships. All primary guns (12A) will be portrayed on the centerline and could be bow, midships, or aft. Secondary guns, firing to either the port or starboard only will be on the outside (12B). Tertiary guns, if present, will appear in the secondary area and are marked 12C on the example.

Small ships will not have secondary gun positions and will use the smaller DD style logsheet.

13 The arrows on the various gun positions are important in showing where and what guns may fire. Below are the several possible gun layouts and the directions they may fire:

The gun may fire to the bow arc

The gun may fire to the starboard broadside

B O W

The gun may fire to the port broadside

S T E R N

The gun may fire to the stern arc
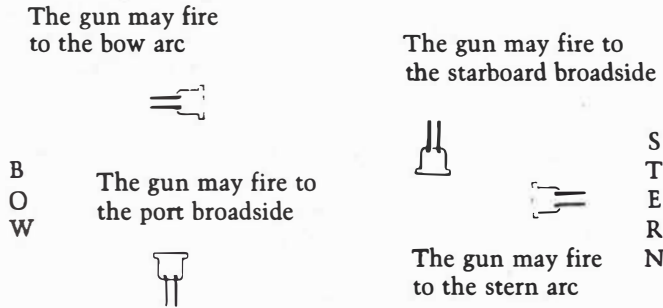
The diagram below shows the arc or broadside upon which guns may bear. *NOTE: a gun position may have up to three arrows and therefore may fire on all those bearings/arcs/broadsides.*

Any visible enemy ship within an arc of fire may be fired upon. This is further explained in the Combat section of the rules.

EXAMPLE: The Brooklyn has two bow 6" turrets that may fire on the bow arc as well as either broadside.

The secondary guns may fire on their respective broadsides.

NOTE: Certain primary guns will fire only to one broadside or the other, for example the British AC "Warrior" may fire its forward primary forward and to either broadside and is so marked. The other two forward primary guns, however, may only fire to either broadside. The way you may note this difference is if the primary guns have more than one set of arrows. A box specifically placed with an arrow ma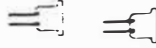y ONLY fire in the direction(s) indicated. If there is no arrow, or it is placed on the gun box line, like in the example above, then it fires with the other guns. Players may wish to note that some ships were designed with wing turrets that appear to be able to fire forward and/or aft. Blast from such wing turrets was so great that the practical affect was to keep such guns from firing directly forward or aft, unless the forward or aft centerline turrets were disabled.

14 The circled dashes with the arc arrow represent the torpedo mounts. The centerline mount is used for torpedo mounts that fire to either broadside which are marked like this: ⟨I⟩ while the two on the outside of the cruiser logsheet fire only to the broadside they are on and are marked like this: ⟨⟩ Each dash placed into the torpedo mount position represents a torpedo factor that may be fired per the torpedo rules. Cruisers and larger craft will sometimes have reloads for their torpedoes. This is noted by placing a *dash* like this ― next to the particular torpedo mount that has the reload available to it. The complete procedure for reloading torpedoes is explained in the combat section. Upon reloading be sure to cross out the reload dashes.

You are now ready to play *RN*.
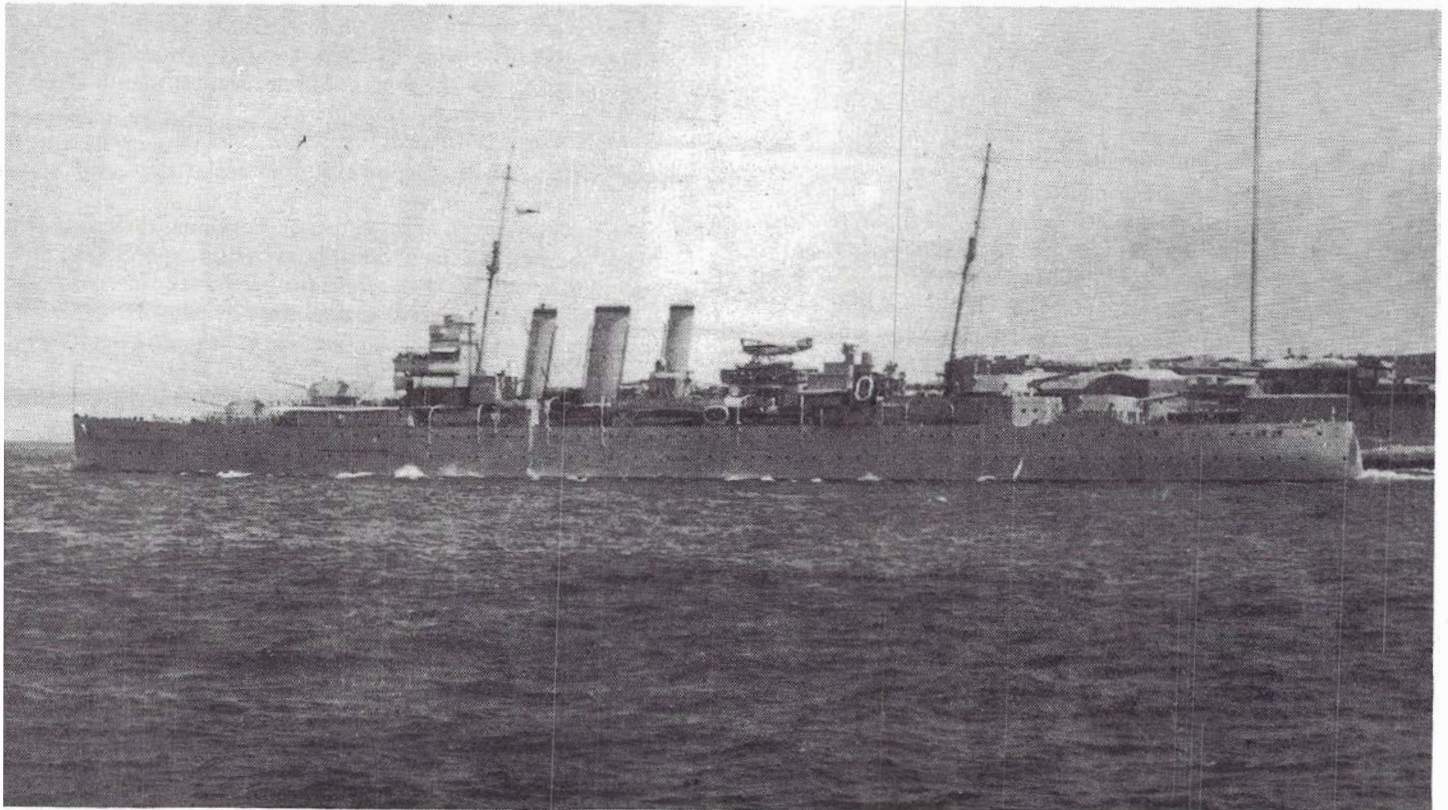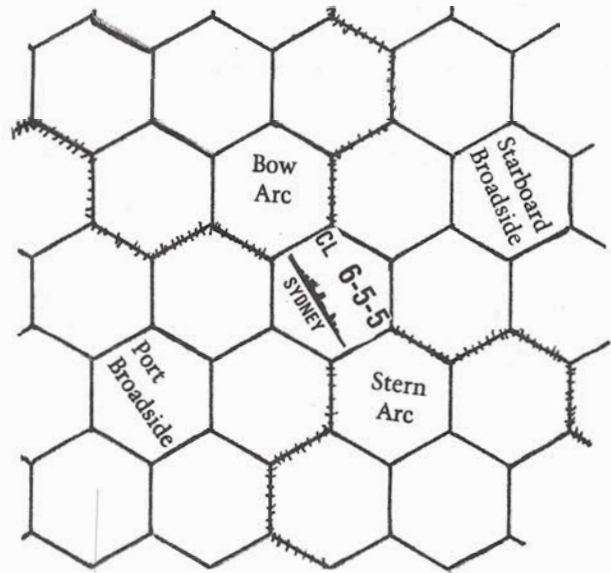
Devonshire (Ginderen)

5.0 SEQUENCE OF PLAY

Once a scenario has been chosen and set up, play begins. The game is played in turns. Each turn is divided into seven phases. The sequence of play is as follows:

5.1 Introduce reinforcements: ships that will be introduced into the game on a particular turn are placed on the edge of the mapboard on the designated entry hex. The Scenario cards give the relevant information. Ships to be introduced will enter in column and will pay movement costs as if there was a line of hexes extending off the game board. That is, the first ship to enter the board will pay 1 MF cost, the second ship behind the first will pay 2 MF's cost, the third ship will pay 3 MF's, etc. Reinforcing ships may move and fire as any other ships on the board, but they may not fire torpedoes on the turn of entry. Entry speed may be of any choice.

5.2 Torpedo launching and reloading phase: players will secretly write on their logs any torpedoes that are to be fired on this turn. They will note how many factors are to be fired, in what facing, at what point in the game turn, as well as from which hexes and at what speed setting (fast, medium, or slow), as well as the firing ships' facing and which ships fired. Torpedoes complete reloading (begun earlier) and may be used in this phase.

5.3 Initiative determination phase: the side with the commander who has the more negative number has the initiative. This will determine who begins movement (see Movement). If all commanders are dead or there are no commanders, then initiative is determined in the following order. The Germans have the highest and then go down from there.
Germany
United States
United Kingdom
Italy
France
Russia

5.4 Movement execution phase: The side without initiative moves ½ his/her MF's (round up fractions) that are to be expended that turn. Then the side with initiative takes its entire move up to its maximum MF rate. The side without initiative then expends its remaining MF's. Finally, the player with initiative makes any allowable facing changes (up to 60 degrees) desired. Torpedo Hit markers are placed.

5.5 Gunnery execution phase: all gunfire factors on both sides are allocated to sighted targets. All guns are then fired simultaneously. Mark all hits in the appropriate sections of the ship's log.

5.6 Torpedo effect phase: all torpedo hits from the movement phase are evaluated and the appropriate damage is recorded on the ship's log.

5.7 Final Phase: all fires are rolled for on the appropriate table and the results are applied. The game turn indicator is moved forward and the turn is completed. When a scenario is finished (no more turns), total up all victory points and declare a winner per the scenario information.

6.0 INITIATIVE

Look at the scenario you are playing and note which side has the commanding officer of the ship(s) present with the greatest negative number. For example, if British Rear Admiral Vian is in command (with an initiative/leadership number of -3) and the enemy commander chosen has a -2 for an initiative number, then the British would have the initiative. This will affect who moves first as outlined in the movement section of the rules. Initiative may change if the flagship is sunk or the commander is killed.

If one side lacks a leader due to death or the lack of an effective leader, then your basic number is zero for that side when deciding on initiative.

Leaders killed count as victory points in all scenarios. Therefore, if Vian is killed, the enemy player receives 3 points. The leadership number equals the V.P. number.

For a leader to exert his influence, he must be within visible range of at least 50% of his ships present. If not, then use the table under 5.3 for that side, as his influence is cancelled.

7.0 MOVEMENT

7.1 Mechanics of Movement

The side without initiative will move first, expending half of the MF's desired.

7.11 The first decision to make is how many MF's are available and how many will be expended that turn.

7.12 The highest speed of an undamaged ship, as expressed in MF's will be found at the bow of each ship counter and on the ship's log.

7.13 Each hex a ship's bow enters costs one MF of its allowance. Once a ship has used all of its factors in a turn, it must stop. Naturally, it may not "save" any unused factors for the following game turn.

7.14 The top speed of a ship may vary from turn to turn. Each ship has three speed numbers. Each number is the maximum number of MF's that can be expended in one turn and they are used in ORDER. For example: The Kelvin is a 6-5-5 ship. On the first turn of the game, it could expend a maximum of 6 MF's, on turn 2, 5 MF's, and on turn 3, a total of 5 MF's. These numbers simply rotate in cycles of three turns each. Any reinforcing ship simply uses its MF number for that turn in the cycle, that is, it falls into the same cycle of the ships already on the game board. Example: If the Kelvin was a reinforcing ship on game turn 2, then it could use a total of 5 MF's maximum for that turn.

7.15 Because of a ship's water envelope as well as the inability to rapidly increase or decrease a ship's speed, ships must expend MF's in relationship to their speed on the previous turn. A ship may increase its MF expenditure by two factors per turn or decrease its expenditure by five factors per turn from its speed on the previous turn during night scenarios.

In daylight scenarios a ship may decrease or increase its speed by any amount up to its maximum speed for that speed cycle, but must move at *least* 1 MF if it moves 4 MF's or more the previous turn.

Night Scenario Example: On turn 3, the Kelvin was steaming at 3 MFs. On turn 4, the Kelvin could expend any number of MFs up to 5 MFs. It could not go its normal maximum speed for that turn of 6 MFs as it may only increase its speed by a maximum of 2 MFs per turn at night.

7.16 If a ship is losing speed involuntarily due to damage it will lose 5 MFs per turn until it reaches its new speed at night, but during daylight actions will simply proceed to the hex it is pointing to and stop. In *all* events, the ship will advance to the hex its bow is pointing to before becoming dead-in-the-water. This take place in the regular movement phase of the following turn.

7.17 A ship in day or night actions may make one of three types of turns in a hex. At the beginning of any turn, the first MF expended must be used to enter the hex towards which the bow is pointing. After the first MF, it may change bow facing with a 60 degree turn to port (left) or starboard (right) with no cost of MF's. The same ship may expend 1 MF and execute a turn of 120 degrees, or 2 hex sides, to the port or starboard. If that ship is expending 5 or more MF's that turn, then it must move 2 hexes directly ahead before beginning the execution of any turn. That is, if the ship wanted to turn to the port while expending 6 MF's, she would have to proceed 2 hexes forward before making the turn. Also note that after making a turn of either 60 or 120 degrees, a ship must move one additional hex before turning again and if moving at 5 MF's or more that turn, then she must move 2 hexes straight before executing an additional turn. Therefore, no ship may turn three hexsides in one hex, only one or two hexsides. (Exception: see 7.18)

EXAMPLE:
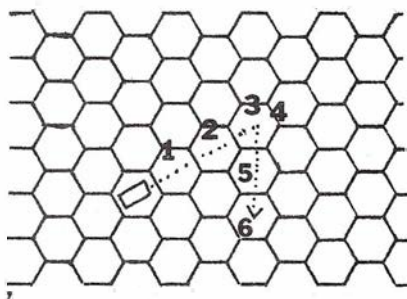
In the example shown above, the Kelvin expends 6 MF's. She expends MF 3 and 4 to move into the hex and to make a 120 degree turn.

NOTE: The final act in a movement sequence may be a turn, if it does not violate 7.17. The first act in a movement sequence *must* be moving to the hex the bow is pointing to.

7.18 A ship, in daylight actions *only* may make a 180 degree turn in a hex by expending 1 additional MF. This will allow it to move in its opposite direction (at the end of this manuever the bow would be where the stern was).

7.19 Battleships and battlecruisers may *not* make a 120 degree turn in night actions. They may *not* make a 180 degree turn in daylight actions (but may make a 120 degree turn in day actions).

7.191 If the scenario allows for it, and a ship moves off the mapboard, then displace it and all other ships, torpedoes, and any land formations down an equal amount of hexes so ships may remain on the mapboard.

7.2 MOVEMENT SEQUENCE

7.21 First, the side that does not have initiative moves half of the MF's it wishes to expend, rounding up fractions. Then the side with initiative moves its entire movement. The side without initiative then moves its remaining movement. The side with initiative may now make any 60 degree turn desired as long as it does not violate 7.17.

7.3 COLLISIONS

7.31 If two or more ships find themselves in the same hex at the same time or in a hex with a wreck marker, a collision may result. It must be remembered the ship counters represent not

just a ship but also the maneuver room normally maintained by ships while underway. Therefore, the rules below reflect the effect of ships in dangerous proximity to each other and the possibility of a collision.

7.32 If, during your movement, you enter the hex with another ship or a wreck marker, roll one die. If a "6" is thrown in day or a "5" or "6" at night, there is a collision, while all else is a miss. Complete the movement of any ships involved. It is possible to have several rolls in a turn; however, once a ship has a collision, it may not have more than one in a turn. Regardless of the outcome, *once a collision has occurred*, it may not collide again in that turn (the moving ship). It may be involved in collisions on later turns. Use a six sided die.

7.33 Once a collision takes place one must evaluate the damage done, if any. Proceed to the Torpedo Hit Damage Table. Take the ship's flotation value and match it with the columns on that table. If two ships in the same category collide roll dice and subtract "3" from the dice sum. That will give you the damage incurred. The only modifications are for ship types. There are three ship type categories. All BB and BC are category I; CAA, AMC, AS, CA and CL are II; while all others are category III. If a ship from category I collides with a ship from category II then category I subtracts 4 from the dice sum roll on the Torpedo Hit Damage Table and the category II ship subtracts only 2. Therefore, for example if a I hits a III, the I subtracts 5 while the III type ship subtracts only 1 from the dice sum. This is to represent the size difference and weight/mass ratios. Roll once for each ship.

7.34 After ships have collided, they will still complete their movement for that turn. They may even end the movement phase in a hex with another ship or wreck. Ships which have collided will begin the next turn dead in the water with maximum ability of going 0 to 2 MF's, if capable of that speed.

7.35 If you collide with a wreck counter, all ships roll with a -5 modifier (size of wreck has no effect — ignore ship type categories). Your speed is 2 MF's at the start of the next turn (modifies 7.34).

8.0 DAY/NIGHT SCALE AND STACKING

Because of the radical scale difference between day and night actions in *RN*, special rules are employed.

8.1 Stacking (the placing of more than 1 ship counter in a hex without the danger of collision) is allowed in daylight actions only.

8.11 Since each hex in day combat is 1500 yard, two ships of the same side may come together, and if they travel at least one hex together in the same direction, need not worry about a collision. They may end or begin a turn in the same hex as well. The lead or front ship is defined as the one on top of the stack, while the 2nd ship in the line is the one below (players will note that the scenarios have the lead ship named *first* when two ships begin the game in the same hex together).

8.12 If a friendly *or* enemy ship enters or passes through the hex your ships are in, then there is a risk of collision as per 7.3. Only *one* ship can be collided with, however, so roll 1 die and on a 1 — 3 it is the lead ship, while on a 4 — 6 it is the 2nd ship that a collision could occur with.

NOTE: If a friendly ship enters your hex and turns in the same direction as your bow is pointing and ends the turn, there is no risk of collision since on the following turn you will fulfill 8.11 by moving together into the same hex. If 3 ships are present in a hex, at any time, roll for collision.

8.2 Gun ranges are used only for day actions as most night actions are close to moderate range affairs. If you become involved in a long range night duel, multiply the gunnery ranges

(given in hexes) by 2.5 and round down fractions. (also see 9.11 for exception)

8.3   Torpedo ranges are affected as well. Consult the Torpedo Characteristics Chart and use the appropriate set of figures that appear under the day or night section. (See also 9.334).

8.4   Also note that the Gunnery Hit Table and the Armor Penetration Charts have *two* rows of hex numbers. One is for daylight actions and the other is for night actions. Use the appropriate one for your scenario. See also 9.25 and 9.251.

8.5   Several modifiers will be affected as well and are explained in the combat section. Note especially the changes between day and night actions on the "Range & Target Aspect Modifications to Dice Roll" on the Gunnery Hit Table.

8.6   The most important difference between night and day actions is that in a day action you fire all your guns *twice* in the gunnery phase while at night you fire but *once*.

9.0   COMBAT

Combat will vary from scenario to scenario, sometimes being at night with limited visibility and sometimes during daylight when gun range is limited only by the stability of the firing platform and the range of a gun. First, gunnery combat will be discussed, followed by torpedo combat. Gunnery combat is executed as a phase while torpedo combat has firing taking place during movement execution, and the results are applied *after* the gunnery phase.

9.1   GUNNERY COMBAT

9.11   After all movement is completed, establish which enemy ships are visible and what guns bear on visible enemy ships. Gun ranges for daylight actions are given in hex ranges in the Scenario Ship Information Sheet. Some small guns will have maximum ranges for *night* battles. They may not fire beyond the number of hexes listed below:

Germany (WWI 4.1")		22 hexes
Great Britain (WWI 6")	X Daylight	
Great Britain (WWI 4")	By 2.5	
Great Britain (WWI 3")		
France 3.9"		27 hexes
United States 5"		29 hexes
Italy 3.9"		22 hexes

Usually a gun could be fired at much longer ranges than it could be effectively used.

A target is visible if it is (a) within visibility range as given in the scenario information, or (b) if it is a night action and the target is on fire or illuminated. If the enemy ship is visible and the guns bear, one may fire on such a target. Two targets may be attacked by one ship, though both gunfire attacks suffer a +10 on the Gunnery Hit Tables. ALL gunfire is considered to be simultaneous; no damage is marked until gunfire is completed.

9.12   After establishing which guns will fire, check for any ships or land blocking your field of fire. If any ship lies partly or completely between the firing ship and the target ship, then the field of fire may be blocked. At *night*, if the potentially blocking ship is in the same hex, 1, or 2 hexes away from either target ship or the firing ship, the field of fire is blocked. If a *daylight* action the blocking ship must be within 1 hex of either the target ship or the firing ship. You may still fire, and if you score any hits, you must roll one additional six sided die. If you roll a 5 or 6, then those hits are scored on the blocking ship rather than the original target. On a roll of 1 — 4 the hits are scored on the target ship. If 2

or more ships are in the same hex, and are *enemies,* roll as above to see if non-target ship is hit.

9.121   To decide which hexes with ships are blocking fire, take a straight edge and run it from the center of firing hex to the center of the target hex. Any hex that the straight edge runs through or touches is a blocking hex if occupied by a ship. Wrecks do not block gunfire. Land blocks ALL fire and you may not fire on a target blocked by land.

9.13   All, none, or some of your guns may fire at your discretion, as long as they are not disabled. Each ship and each type of gun (primary, secondary, and tertiary) fires *separately*.

9.2   GUNFIRE PROCEDURE

9.21   Count the number of hexes to the target by the shortest possible route. Do not count the hex the firing ship is in, but do count the hex the target ship is in. That is the range in hexes. If the target and the firing ship are in the same hex, that is point blank or a range of "0" hexes, (PB).

9.22   When using the gunnery or other game tables, the player must be sure to read the die or dice results correctly. Next to each game table, in parenthesis ( ), is the dice type identification. The three methods of identification are:

9.221   (Die roll) which is defined as rolling one six sided die and getting a 1 — 6 result.

9.222   (Dice sum) which is defined as rolling two six sided dice and obtaining a number between 2 — 12.

9.223   (Decimal roll) which is rolling the two ten sided dice and obtaining a 00 — 99 result. The colored die is the first digit, while the second, white die is the second digit. Therefore, if the blue die is a 6, and the white decimal die is a 7, the number generated is a 67. 00 is considered to be 100.

9.224   Modifying any of these numbers is quite simple. If the table in use is a dice sum table and there is a minus 3 modifier on a roll of a "4", then count backwards 3. If the table does not go below "2" then the result remains a "2". If the Decimal roll is in use it is also just a simple addition or subtraction problem. If the roll is a "67" with a +5 to the roll, the 67 becomes a "72".

9.23   Now calculate the number of combat factors firing from your ship at a specific target. Each ship fires separately and each ship may fire upon no more than two enemy targets. Each *gun type* (primary, secondary, or tertiary) fires *SEPARATELY*. No gunnery combat factor may be split into fractions within a gun position, but different gun positions may be used against different targets. (see 9.11)

9.24   All shells are considered to be optimal for the target. However, on the Gunnery Hit Results Table you will note some results (i.e. "41") refer to HE. HE is a type of shell that German 5" and 4.1" and all 3.9" and 4" shells in *World War II* used exclusively. If those guns hit a target they will never penetrate armor plate as their fuses are instantaneous. All such hits are misses. Certain rolls give an HE result and a fire will be placed on board the target.

9.25   After calculating the total gunfire factors firing at a target, proceed to the Gunnery Hit Table (Decimal dice). Study the modifications to the dice roll. Range modifications are for the range from the firing ship to the target ship — the closer you are the more likely you are of hitting. Therefore a ship target at a range of 4 hexes has a modifier of -20 to the decimal dice roll (i.e. a roll of 48 becomes a 28).

PB results due to being in the same hex are Point Blank results. This is a 01 result or multiple thereof.

Bow/stern modifications concern the firing ship's relationship with the target. If the firing ship lies in the bow or stern bearing arc of the target ship then that benefit to the dice roll is gained, *as well as any range modifications*. This would be somewhat similar to a "rake" benefit in older days as shells tend to be on line with

target, but they will be either over or short in most instances. If the target is bow or stern instead of broadside facing, then there is the likelihood of more hits occurring at many, but not all ranges. Target speed modifications are obvious. There are also modifications if the MFC (Main Fire Control) of the firing ship was knocked out on a previous turn. If the target is on fire, then the fire modification is used if the combat is at night and within gun range.

9.251 Next, study the Nationality Dice Roll Modifier Table. Proceed to the nationality that you are playing and the time period (World War I or World War II). Then move across to the day or night action column and that is the modifier that you will employ for all your ships in that particular scenario.
Example: If you had the Goeben in the Trilogy at day, you would have a +2 modifier. Note that these nationality modifiers are reflective of doctrine, technology, as well as training and culture.

9.252 All modifiers are cumulative.
Example: HMAS Sydney fires 12 6" gunfire factors in a daylight action. There is a national modifier of −3 (Empire WWII), and the range is 10 hexes with the target bow on to the Sydney for a −0 (range modifier) and -5 (bow on aspect). The Sydney has lost her MFC on the previous turn (+10) while the target is moving at a speed of 1 MF this turn (−30) for a total modified result of −28 to the decimal dice roll. The Empire player rolls a "36" and subtracting 28 from that gives 8. Cross indexing the 8 for the dice roll with the 12 factors firing on the Gunnery Hit Table gives 2 hits. Since this is a daylight action, the Sydney will roll a second time using the same modifiers. Any resulting hits will be added to those of the first roll.

9.26 Now, proceed to the Gunnery Hit Results Table. Roll the decimal dice once for each hit and check the table with the listed type of damage.

9.261 The effects of Shell Hits

9.2611 A miss is just that — no effect.

9.2612 A hull hit is recorded by simply crossing off a hull box. When the last hull box is crossed off, the ship will sink. When a ship sinks, it will remain on the gameboard until the following turn movement phase when it will move forward 1 hex and is then replaced by a wreck marker. Ships may collide with wrecks. Note: if a ship is dead in the water at the start of the turn it was sunk, then it does not move forward 1 hex on the following turn. (Exception to 7.16)

9.2613 On a result that has the Captain/Admiral killed if there is a leader counter on board that vessel it is removed. See 6.0 for complete affects.

9.2614 A hit on the MFC (Main Fire Control) will have the MFC box crossed out and it will affect your gunfire with a +10 modifier. It will also knock out all radar and your search-lights. Additional hits will count as misses instead.

9.2615 A torpedo mount hit will be applied against a torpedo mount on the target's side facing the firing ship. If there are two or more possible mounts that could be hit, roll a die and randomly assign the numbers, i.e. 1 — 3 are forward mount hits, 4 — 6 are aft, etc. A second hit on an already destroyed mount is considered a miss. Reloads at a destroyed mount, as well as any unfired torpedoes are destroyed and may not be fired.

9.2616 A hit on the primary is applied left to right on the bow and right to left on the stern. A primary hit to a gun that is already knocked out is applied to the hull section instead though must still penetrate the armor to count if @ appears on Gunnery Hit Table. If one is firing at a target from the bow facing or arc and you get a hit on the stern primary then count it as a bow primary hit instead; do the reverse for a stern facing and hitting @ bow turret. If a midship primary is hit and there is none, then roll a random die to make it a bow or stern primary hit. If hit

from bow/stern facing then apply to primary of that facing.

A hit on the secondary guns is always applied left to right. As each secondary gun box is crossed off, that amount of gunfire factors is lost for the following and all others turns. If the port side of the target is hit then only a port secondary may be affected. If the target's bow or stern is directly facing the firing ship then randomly roll to determine which secondary is affected. After all secondary gun positions are knocked out, then additional secondary hits are hull hits.

Some large ships have tertiary batteries located in the secondary areas. Players may wish to randomly roll a die to determine which box is hit, however I suggest that one simply work across, left to right, making the tertiary battery the last to be wiped out. Note: Ships *without* secondary/tertiary battery positions *ignore* secondary gun hits, e.g. they are misses. Also note that some ships have a secondary position marked with a "0" gunfire number. This means they are such a large target that they can be hit more often than a smaller target, but they do not actually carry secondary batteries.

9.2617 Special Damage! If you roll this result then proceed to the Special Damage Table and roll again.

9.26171 A Fire result requires you to place a fire counter on board. Fires are cumulative and you may have several on board at the same time. Fires on board BEFORE the gunnery phase will modify gunfire at night only. At the end of each turn, fires are rolled for, on the Fire Table once for each counter, to see if they inflict further damage, go out, or have no effect but continue to burn. Appropriate damage is applied. For result #17-27, if a plane is *not* on board, ignore the hit (treat as a miss). Note, too, that additional damage may be inflicted such as with #13 where 1 MF is lost as well. Fires may also occur as a Gunnery Hit Result.

9.26172 A torpedo mount hit will destroy the torpedo mount and no more torpedoes may be fired from that particular mount. If more than one mount is possible, roll randomly to decide which one is hit.

9.26173 A rudder or Bridge hit are fairly self explanatory. Bridge armor may need to be penetrated for affect to take place (see 9.2618). If a ship is requried to turn, randomly roll to see which direction the ship will turn in, making a 60 degree turn as it enters each succeeding hex. Speed must be the speed from the previous turn or the highest speed possible, if the ship has suffered damage which will slow it from the previous turn's speed. Many times the results will be 1 turn if it is a daylight action or 2 — 3 turns if a night action. A rudder hit takes precedence over a bridge hit for its affect.

9.26174 #56-00 require the armor to be penetrated listed directly after the number. If penetrated, then cross-reference target's flotation number with the numbered result, and that damage results. Damage listed under "Additional Damage" also results.
Example: A "74" is rolled on the Special Damage Table. If it penetrates the Primary turret's armor, a ship with a flotation factor of E or F would suffer 2 hull boxes of damage as well as 1 primary turret being destroyed. The turret would be determined by a random die roll.

9.26175 (If WWI, ship sinks) is to represent the poor flash protection and the attending danger to a ship's magazine in World War I. A WWI ship would be destroyed in lieu of the other Special Damage Result. A WWI ship would be for any ship fighting in a 1914 — 1916 game.

9.2618 On many of these hits there will appear the letter "@" which means that for the hit to do the damage indicated it must penetrate the armor on that position (if any). Therefore, a midship primary followed by @ means the primary armor on the ship must be penetrated at the range fired at for the

primary gun position to be knocked out, or a hull followed by an @ needs the belt to be penetrated. Where there may be uncertainty about which armor needs to be penetrated there will be a position named (belt, primary, etc.) that needs to be penetrated. If a ship has no armor there, or if the armor is penetrated, then the shell hit counts and does the indicated damage. If it does not penetrate, consider it a miss.

9.26181 Also note that on both the Gunnery Hit Results Table and the Special Damage Table, some of the results are followed by "B's" and "D's" (such as in Gunnery Hit result "80") while on the Special Damage Table the results are prefaced by a DK+8, etc. This is to represent the angle of the fall of shot, that is at long ranges a shell is more apt to hit the deck armor due to its plunging angle, while at short ranges shots are more likely to hit the target's belt. To represent this the ranges are divided into 4 sections. They are as follow:

		Day Range
0 – 6,000 yards	-1st	0 – 4 Hexes
6,001 – 12,000 yds.	-2nd	5 – 8 Hexes
12,001 – 18,000 yds	-3rd	9 – 12 Hexes
18,001 yds +	-4th	13 +Hexes

Notice the sequence on the "B's" and "D's". In Example #80 it is B/B/D/D. This means that the shell must penetrate the Belt armor at 0 — 12,000 yards, while from 12,001 to the horizon the shell must penetrate the Deck armor. I assume all hits in night actions are against the belt and not the deck and recommend that to the players. The Special Damage Table on results 85-93, and 86 require a ship to have its deck armor penetrated at the number of daylight hexes indicated or over that number.

Example: On a roll of 88 on the Special Damage Table, a shell would need to penetrate the deck armor in a daylight action at 10 hexes or a longer range.

9.3 TORPEDO COMBAT

9.31 Torpedo combat in the basic game works on the principle of naming a target ship that is within range of your torpedoes and expending torpedo factors on it. Torpedo movement takes place until they reach their target, (if they can), and then rolling on the torpedo hit table once for each torpedo factor. Torpedo combat is a form of combat that relies heavily on surprise, attacking cripples, and correct attack positions.

9.32 Each ship is assigned a certain number of torpedo factors. Once these factors are fired, the ship may no longer fire torpedoes unless it carries reloads. A ship may fire its factors on

either broadside if it has a mount like this: ⬚

or it may fire to one broadside or the other if it appears like this   ⬚   . The slash marks in the mounts are the factors

available. All or part may be fired in any one turn. If you want to reload torpedoes after firing them, then note on what turn your tubes will be reloaded and available for firing again. At night, a cruiser in World War I will take 3 complete turns to reload, while in World War II it will take 2 complete turns. In daylight it is 2 turns in World War I and 1 turn in World War II. Reloads are noted by the slash marks next to the torpedo mount. Begin counting the turns to reload on the following turn, after firing. Example: A CL firing at night in WWI on turn 1 could reload and fire on turn 5.

9.33 The actual torpedo firing procedure is as follows:

9.331 Torpedoes are fired during the Torpedo launching phase.

9.332 The first decision is to choose your target ship. Note the name of your target ship or ships. You must expend at least one torpedo factor for each target. If launching on the same turn from the same broadside at two different targets, the targets must be within 4 hexes of each other, at the moment of launching. Otherwise, the targets may be anywhere. No other ships may be lying anywhere between the firing ship and the target ship as per gunnery blocking (9.12) rules at the time of firing.

9.333 Having chosen a target(s), write it down secretly on the Log Sheet. Next, note the hex you are firing from (the hex your ship is in), the factors expended and the direction in which you are heading. Also note the speed you have set the torpedoes. If not noted, the speed is assumed to be FAST.

9.334 Torpedo speeds are handled as follows: turn to the Torpedo Characteristics Chart. Find your nationality and the type of torpedo you carry on board the firing ship. Some will have a choice in speed settings, while others will have a fixed speed setting. The torpedo speed is much like a ship's speed number, except that the first number is always used for the first turn of the torpedo movement; the second, or middle speed number is used for the second turn of movement, etc.

EXAMPLE: A German Destroyer wants to fire a 21" torpedo which will travel 7 MF's per turn for a total of 14 hexes. Once a torpedo has traveled its full number of hexes, it will be removed from play. A torpedo may not be used to attack a ship in the same hex from which the torpedo was fired (the torpedo will not arm). Rule 10.144 will explain why some torpedoes have a high speed and short range. Note that the torpedo speeds are given for both night actions and day actions.

9.335 Torpedo movement is secret and torpedo markers are not placed on the game board. Simply proceed to ship movement phase and move ships. If at the end of movement the target ship is in the firing ship's ORIGINAL position broadside, and is within the movement factor of the torpedo, a potential for a hit is achieved.

EXAMPLE: The German 21" torpedo fired at the Pinafore could hit if the Pinafore is between 1 — 7 hexes of the hex fired from at the end of movement and within the broadside facing of the firing ship. On the next turn, the Pinafore could be hit if the Pinafore is within 8 — 14 hexes of the hex the firing ship fired form and is WITHIN THE BROADSIDE facing of the firing ship when it ORIGINALLY fired. If the target ship was 8 hexes away at the end of her movement and on the next turn moved forward (so as to be 7 hexes away form the original firing hex), the firing ship would get a roll at 8 hexes away for a possible torpedo hit. If there are any questions as to which hex the target ship is in when a torpedo would potentially hit, always choose the furthest hex away. Generally, hex distance from firing ship is determined by where the target is at the *end* of a movement phase. Note day versus night modifiers when firing torpedoes.

9.336 If you have a potential hit, determine the facing of the target to the hex the torpedo was fired from at the time the target and torpedo would come together. Turn to the Torpedo Hit Table. If the majority of the turn was spent on a bow/stern facing with the hex the torpedo was fired from, then roll with the bow/stern hit modifier; if at least half of the turn or more was spent on the broadside facing, then roll on the broadside table. Make any other modifications to the dice roll as indicated on that table (range, speed of target, etc.) They are cumulative. Roll once for each torpedo fired.

9.337 If you miss, there is a possibility of hitting other ships within one hex of the target ship. Roll for each ship within one hex of the target ship. Apply a -1 modifier for possible hits on each ship. If you hit, the torpedo factor is expended.

9.338 Let us assume a torpedo hit is scored. Place a torpedo hit marker on the ship and proceed to the gunnery phase. The torpedoed ship will still make normal gunnery

attacks in its gunnery phase. In the torpedo effects phase, you will make a dice sum roll on the Torpedo Hit Damage Table for each hit. The only modification to this dice sum roll is listed on the modifications to torpedo hit damage table which is with the Torpedo Characteristics Section under "Torpedo Hit Modifier". Small torpedoes will be modified with a -1, -2, etc. You can never go less than "2" or more than "12" on the Torpedo Hit Damage Table.

Example: An Italian 17.7" torpedo hits the New Jersey, a type H flotation ship. Go to the "H" row on the Torpedo Hit Damage Table. Roll two dice, an "8" is rolled and 1 is subtracted due to the small warhead in the 17.7" torpedo making a "7". Cross-indexing the two gives a result of 3 hull and 1 MF. Apply the results. If the current speed of the New Jersey was 6-5-5, it would become a 5-5-5.

9.339 Some torpedo hits will require you to roll on the speed loss table to find out how much speed (MFs) are lost. Some additional results will require you to roll on the Special Damage table — ignore armor requirements and apply results.

9.4 Players may not keep running written tallies on damage inflicted on enemy ships.

9.5 Night combat, or situations where visibility is poor, are difficult to portray in a game. If players have an umpire, they may elect to have that umpire place and/or remove ships from play from time to time when they are no longer visible to view to enemy vessels. Also, if you lack an umpire, players may wish to leave ships not visible upside down and/or end a scenario if at any point no ship sees an enemy ship due to visibility.

10.0   OPTIONAL RULES

The rules below, while not vital to the play of the game, may change the game substantially, and will add realism to the game. The rules may be introduced at the discretion of the players.

10.1 Movement is simultaneous. The movement of each ship must be written secretly on a separate piece of paper before any ship is moved, except due to leadership.

10.11 Initiative is determined between each player, but now the *difference* between the commanding officers is determined. Example: Italian Admiral da Zara (-2) is engaged in combat against British Capt. Hardy (-1). The difference is a -1, in favor of the Italians.

10.12 The inferior side now reveals the first part of his/her movement in full view of other players. The number of movement points he/she must reveal is related to the difference in leadership. In the example above, the British would reveal the first two movement factors of all their ships that they wish to move that turn since the difference in leadership was -1. Any facing changes would be noted, too.

If the difference was -2, then the inferior side would reveal the first 3 MF's in speed for this following turn, a difference of -3 would have 4 MF's in speed revealed. For the actual play of the game, players would reveal what their course will be, but would not actually move their ships until the movement phase. Example: Using the above example, the British player would announce what all their ships would be doing for their first 2 MF's, including a 60 degree turn at the end of the expenditure of 2 MF's. If at night, the British could continue turning an additional 60 degrees for a total of 120 degrees, since that would require the expenditure of a 3rd MF, or 180 degrees if daylight.

10.13   Log Notations

10.131 All notations of movement are written on the log sheet. List the names of all your ships.

10.132 The number of hexes a ship is to move that turn is written as a number.

10.133 A 60 degree turn is to be written as a P for port turn, while a S is for a starboard turn. A 120 degree turn, costing 1 MF, (at night), is to be written as a PP or SS for a starboard turn. If moving forward, write this as a number. A PPP or SSS would be a 180° turn.

Example: In the case of the Pinafore at night, she could give an order as 2PP2. That would translate into moving two hexes straight ahead, a 120 degree (two hexsides) turn to the left (port) and then two more hexes straight forward from that new direction, expending a total of 5 MF's (2 plus 1 for turning 120 degrees plus 2).

Remember: The first MF expended in any game turn is directly ahead.

10.134 Notations must be specific and in the same order as that in which the ship is to be moved.

10.135 After completion of all movement orders, movement orders must be opened for inspection by the other player(s). ONLY the ship movement part is shown.

10.136 Orders must be written for each ship. If a player does not wish to move a ship, a notation of 0 should be made.

10.137 If a log sheet is incorrectly filled out and/or indicates an illegal move for a ship, then that ship will proceed straight ahead at the same speed used on the previous turn, or to the closest speed attainable if damaged since the previous turn.

10.138 Ships which are to enter the game board on a particular turn have their movement noted in the appropriate part of the movement section. The first hex entered counts against their movement allowance.

10.14   Movement Execution

10.141 All players move their ships simultaneously on the game board.

10.142 Ships which are scheduled to enter the game, enter and move.

10.143 Collisions are modified as follows: If you think two ships passed through the same hex at the same time, retrace their respective movements. If two ships are found to be in the same hex at the same time in their MF expenditure or a ship is found to be with a wreck, roll one die. A 5 or 6 results in collision.

10.1431 When ships are travelling at high speed and they collide, damage will usually be more severe than if they were steaming slower. Therefore, in a collision players may wish to use the following optional modifiers. If the combined speed ordered for that turn for both ships is 11 MF's or greater, then an *additional* +1 is employed. If the combined speed is 5, 6, or 7 MF's, then an additional -1 to the standard -3 (equals -4) is used. Four or less MF's employ a -2.

Jamaica (Ginderen)

10.144 The real hardcore player may object to the fact that MF's are all expended one after another, which means a ship moving 1 MF versus a torpedo moving 8 MF's may intercept each other unrealistically. Players are welcome to use the table below, suggested by Greg Courter, for added realism (and complication!). Movement is broken into 8 segments and depending upon your ship/torpedoes' speed, that will determine what hex you are in at any particular point.

MOVEMENT SEGMENT

		1	2	3	4	5	6	7	8
	0	S	S	S	S	S	S	S	S
	1	S	S	S	S	1	1	1	1
	2	S	S	1	1	1	2	2	2
S	3	S	S	1	1	2	2	3	3
H	4	S	1	1	2	2	3	3	4
I									
P	5	1	2	2	3	3	4	4	5
M	6	1	2	2	3	4	4	5	6
F	7	1	2	3	4	4	5	6	7
'S	8	1	2	3	4	5	6	7	8

S — Starting Hex
\# — MF's Expended

10.2 Torpedoes are treated somewhat like small ships that actually move on the game board much as they are treated in IRONBOTTOM SOUND treatment. One picks the speed setting as in the basic game, and they are fired from the broadside as well. Now, however, one does not fire at a specific target, but fires the torpedo in a particular direction.

10.21 During the movement notation phase of any turn torpedoes may be launched.

10.22 The first decision to be made is in which of the four patterns on EACH broadside you will launch torpedo factors. Below is a diagram showing the four possible rows of hexes down which you may launch each torpedo broadside. Therefore, there are a possible eight rows of attack (four on either broadside). Note: Each *Broadside* has patterns A, B, X, and Y on the port or starboard side.
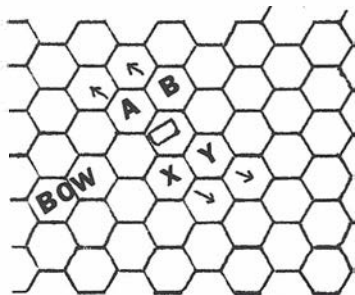
10.23 You must also note the hex from which you are firing. This will always be the hex in which you begin a turn (unless you use 10.27), the side from which you are firing (port or starboard), the direction in which you are heading (direction 1 through 6).

10.24 Torpedoes are like small ships which must be placed on the game board by the player who is launching torpedoes. The speed of the torpedo must also be noted as Fast, Medium, or Slow. Look at the Torpedo Characteristics Table. You will find torpedo characteristics listed by type of torpedo and nationality, as well as year. Let us look at the World War II British 21" Torpedo. If fired in the night at a fast speed, it will travel 6-6-5 MF's for a total of 17 hexes. If fired at a slow speed in the daylight, it will travel at a speed of 5-5 for 9 hexes. It should be noted that the speed setting is included for those using the table under 10.144. Torpedoes travel, unlike ships, at the speed of the first number on turn 1 of torpedo launch, second speed number on the second turn of launch, etc. Once a torpedo has traveled its full number of hexes, it is removed from play. A torpedo may not be used to attack a ship in the same hex as the firing ship.
Example: To fire a torpedo, the Penelope will note 1 TF (torpedo factor) P (port) Fast, X (for row fired down), from hex W17, 2 (ship heading).

10.25 Unless the optional torpedo rule 10.28 is used, the firing player places torpedo counters on the mapboard. This is done after all movement is noted but before any movement is executed. A torpedo will move 1 hex for every MF a ship expends. In other words, it will move just like a ship. If a ship and torpedo end up at any point in a turn in the same hex, you are then allowed one roll on the Torpedo Hit Table per torpedo factor. If more than one ship is in the target hex, roll for each ship. A high die roll is the ship hit. A torpedo will abort if it enters a wreck hex.

10.26 A target facing is determined at the moment when a torpedo is in the same hex as a ship. If, at that point, a ship is in a bow/stern facing from the original firing hex (W17 in the example above), roll with the -2 modifier for bow/stern facing on the Torpedo Hit Table. If on the broadside facing, then roll as for a broadside facing on the table.

10.27 (optional) Torpedoes may be notated as being fired during a turn. That is, they may be fired at any point during movement. They will move the number of hexes they normally would minus the MF expended at the point of firing by the ship firing. In the example above of noting when a torpedo is fired, one would list also the firing hex, instead of the starting hex of the firing ship.
Example: The Penelope want to fire a 21" after expending 2 MF's of its own. The torpedo is set for Fast. Since the 21" travels 6 hexes normally, one would subtract 2 MF's for the MF's expended by the Penelope. Thus the torpedo would travel 4 MF's from its firing hex on the turn it is launched and 6 MF's on its second turn.

10.28 (optional) Players may wish to keep torpedoes off the board and have them move secretly, especially for long range torpedo attacks. Simply note as per game rules torpedo information for firing. Then, when you believe torpedoes are near the target, reveal their presence after ship movement orders have been written. Once revealed, torpedoes are plotted normally. If, after ships have moved, a torpedo factor not placed on the game board looks as if it might have entered a hex at the same time with a ship, retrace the courses of the torpedo and ship to see if a hit does result.

10.3 SPECIAL NIGHT COMBAT MODIFIERS

10.31 Radar allows a ship with it to fire on any target within range with a straight -10 modifier, if 0 to 16 hexes away; -4 if 17 hexes or more away, along with any range modifiers. Radar can only be used for the nearest enemy target. However, if there are two equally distant targets, the firing player may choose which one to fire at. Nationality and +3 for additional ships on the same target modifiers are ignored. The only blocking terrain is any

land mass or any ship within two hexes of a land mass as designated by the scenario. If radar is used, you may remove from the game board all unseen counters except those seen by radar, which are kept inverted until within visible range. In all 1942 or pre-1942 scenarios, a ship must be visible to be fired on; while in all post-1942 scenarios a ship may fire on a target, though only radar "sees" it. Note: If the MFC is destroyed, so is radar.

10.32 Players may want to include here the ability to fire at gun flashes. A ship that announces its intention to fire at night and is out of visible range may be fired on with a +10 modifier in addition to any other modifiers. A degree of give and take is involved here and if players wish, they may secretly write down that they will fire at gun flashes if visible.

10.33 Searchlights are used only at night. In World War I, all searchlights have a range of 5 hexes (Germans only are 6 hexes); while in World War II, the range is 9 hexes for all nationalities. All ships may use them. The procedure is as follows: any ship that is sighted and is within searchlight range may be illuminated. Any gunfire directed at the ship illuminated or the ship illuminating receives a -12 benefit at night only. If you are illuminated and fire at the ship illuminating you, you receive a +10, instead, as your gun crews are blinded by the direct light, but you may fire on other targets without employing the +10 modifier. If you counter-illuminate the same ship, both receive a +10 while other ships still receive the -12 benefit. It is suggested, as this can become like a shell game, that players secretly note who they are illuminating before gunfire is declared. Use of searchlights is declared before gunfire, however, searchlights are destroyed if the MFC is knocked out.

10.34 STARSHELL. The Germans have it in 1916 and everyone else does after 1916. All ships may use it. If being used, all the ship's batteries use it that turn, and may not fire in the gunfire phase. The procedure is as follows: pick two hexes on the game board you want to illuminate with starshell. On the following turn, after all movement but before gunfire is allocated, place two starshell markers on these two hexes. All hexes within one hex of that hex are illuminated, and any ships not seen or removed from the game board are placed on the board and may be fired upon. Starshell is removed after gunfire is executed. There is no limit to the number of turns it may be employed. *Each* ship may lay 2 starshells.

10.35 If a ship is on fire at night, not only does it receive the gunfire modifier of -8 for being on fire, but it may silhouette other targets. If a ship is on fire, any ship between it and an enemy ship is silhouetted and must be placed on the game board and may be fired upon. To ascertain if it is between the ship on fire and enemy ships, use the same method for deciding if it blocks any ship's gunfire to the burning ship (though it may be further than two hexes away from the ships in question to still be revealed — that is, a ship so silhouetted must lie between the ship on fire and the firing ship and that is all). If you are silhouetted, then any ship within range may fire upon it. Fires ALWAYS illuminate any other ships in the same hex or a ship within one hex, and they may be fired upon.

10.4 Players may wish to employ this rule for added realism. When, in the course of moving, ships find that they are in the bow/stern aspect as well as broadside aspect vis-a-vis their target ship, they get to fire a full broadside if ½ or over ½ of their movement was spent on the broadside facing towards the ship they wish to fire upon in the combat phase. If this condition is not fulfilled, then they only get to fire their forward or aft guns. Example: A ship expends 5 MF's, 3 on the broadside, and 2 on the bow facing, (approaching the enemy target ship). Therefore it may fire its full broadside at the enemy ship even if it *ended* the turn in the *bow aspect* towards the target ship. Note: This only

affects the guns you are firing, so in the example above, if the target ship *was firing back*, it would get the benefit of the bow/stern aspect!

10.5 Smokescreens may be laid by any ship capable of movement. It will block any ships from firing at each other if a smokescreen lies between them, unless the firing ship is using radar. Players may wish to remove ships from the game board that cannot be seen and secretly note their movement. Smokescreens last for only two turns at night, 1 turn at daylight. They are deployed as follows: the laying ship announces it is laying a smokescreen after all orders are written. It then places a smoke marker on the hex in which it wishes to begin the screen. It then moves and when it wants to stop placing the screen, it so announces and places a second smoke marker. Place smoke markers for any bends or turns as well. These marked hexes and the space between are considered smoke-filled and blocked. The laying ship itself, unless it turned behind the screen, may be fired on and is exposed to fire, even if the screen ends in the same hex as the laying ship. To avoid this, the laying ship must make a 120 degree turn in that hex away from enemy ships or else have curled the screen in such a way as to be blocked from enemy fire, according to the blocking rules.

10.6 Gunnery doctrine in World War II called for certain guns to be used only in an AA roll, somewhat similar to why the British army would not use the 3.7 AA gun in an anti-tank role, like the Germans did do with their 88 AA gun. To represent this, in all naval actions in World War II, before and including 1941, the British may not use the 4" or 4.5" guns, and no one else may use the 3.5", 3.9", 4", or 4.1" gun in surface gunnery combat if it is a *secondary* or *tertiary gun*.

10.7 All damage is rolled for secretly, and kept secret and any Critical Hits and Fire Results are kept secret, though any additional fires must be placed on board. This is ideal in an umpired game where the umpire controls the information (special thanks to Jim Silverwood).

10.8 Anytime on the Gunnery Hit Tables that a "natural" (i.e. unmodified) 00 or 99 is rolled, the firing player proceeds to the Breakdown Table. Roll two dice for sum and apply the appropriate results to the *firing* ship.

10.9 The additional modifiers that may be employed are for evasion, if you scored a hit last turn, or if you were under fire.
10.91 If players note on their movement section that they are taking evasion, then in the gunnery portion of the turn, all gunfire directed against them receives a +15 and their fire on anyone also receives that modifer. They must expend 1 MF for evasion and expend 5 MF's or more in the movement phase to employ this. To notate this, simply write 1E and circle your movement orders.
10.92 If a ship was fired upon during the previous turn, it must fire with a +5 modifier as traditionally a firing ship under fire performed worse than one that was not under fire.
10.93 If you hit a target last turn and *fire at the same target*, you receive a -15 to your roll on the Gunnery Hit Table.
10.94 If you fired at a ship but did not hit it last turn, you receive a -7 modifier, if you fire at the same target.

11.0 SCENARIOS

Each of the 13 scenarios will state the starting position of ships, visibility, presence of any land, north direction, headings,

and speeds of all ships, and turn of entry of any reinforcements. Victory conditions usually involve sinking enemy ships and will be given (see 6.0 for leader points). Players are encouraged to make up their own scenarios and will find ships listed that are not employed in any of the scenarios.

BY THE WAY...

Quarterdeck Games is always looking for quality game designs, especially on WWII or modern topics. Many of these games end up being published first in Japan and Qdeck's terms are some of the best in the industry. Write with your ideas first.

There are certain magazines we recommend as well, especially for PBM play. PBM is easy and extremely fun for a naval game, as one has an umpire which usually introduces a "hidden" element in play, and with so few units on the board, it is easy to pick-up the game after each turn. If you are interested, please contact:

Richard Snitzer, THE BROADSIDE, 527 East Double St.
Carson, California 90745

or

Lu Henry, TACKY, 6056 Waverly
Dearborn Heights, Michigan, 48127

The Broadside is for the naval gamer and carries Quarterdeck stuff on a regular basis.

STILL AVAILABLE

DESTROYER CAPTAIN is a tactical game, somewhat similar to RN, with 15 scenarios from World War I and II. Fast paced and priced at $18.95. "A shade more advanced than IRON-BOTTOM SOUND; DC is one of the best naval games out there. *Overall:* Good game; a must for tactical naval enthusiasts."
...S & T #94

GRANT MOVES SOUTH is a strategic game of the Fort Donelson-Shiloh campaign. Using some simple but unique fog-of-war rules, the game captures the flavor of the war and is quite playable. Nominated for a Charles Roberts award for best Pre-20th Century Wargame. Priced at $18.95. "This is a must for the Civil War buff."
...The Grenadier #20.

NORWAY – 1940: The Kriegsmarine Strikes is a strategic Air-Sea game of the opening of that invasion. Similar to AH's MIDWAY but more accurate, it allows you as the German player to try to outsmart a stronger Allied player while on the offensive. Priced at $11.95
"....he has provided us with a great game that is fun to play! NORWAY – 1940 deserves a place on any naval boardgamer's shelf."
...F & M #28.

There are still a very few copies of IRONBOTTOM SOUND left at $17.95. Winner of Charles Roberts award at Origins '82 for best initial release. We also have extra DC 33" x 22" Ocean Blue mapsheets for $1.00 each. (Minimum order is $2.00)

Any of the above games may be purchased post paid ($1 to Canada and $2 for overseas extra postage) by sending a check or money order to QUARTERDECK GAMES
P.O. Box 658
Cambria, California 93428

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27. *Destroyers!*, M. Whitley
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29. WARSHIP & WARSHIP INTERNATIONAL magazines

The above sources are only a partial listing, but the main sources for THE ROYAL NAVY.

DESIGNER NOTES

RN is an outgrowth of IRONBOTTOM SOUND. I wanted to design a game which would accurately portray tactical ship combat in the 20th century, remain playable and fun, and also sneak in some World War I battles! With IRONBOTTOM'S success and acceptance, I knew I had the vehicle, but it needed many changes.

RN, I think, is a better game as it has evolved over several years, been tinkered with (for example the armor penetration tables have been toned down some), and with fewer ships in each scenario, makes for a more enjoyable action. If you make up your own battle, I would suggest not using more than six ships on each side, or else make it multi-player.

I left out silhouettes, i.e. the largest target versus the small target, as it is factored in by the inclusion of secondary gun positions that count as misses on small ships. I toyed with a sunrise/sunset rule whereby you are dazzled by the sun directly in your eyes (and a modification for your gunnery), but once the sun sets (or before it rises) the target is visible while the firing ship is still enveloped in darkness. Both of these rules are easy enough to make up, if you want to play with more detail — personally, I like a good game which allows one to work with the main ingredients and not get bogged down in small details of play.

There are several scenarios that are historical and hypothetical where the ships are supplied but the scenario information is not.
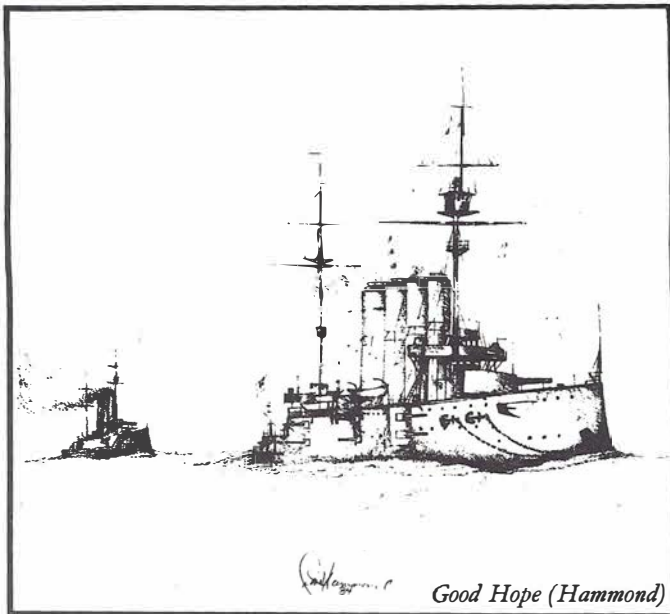
Good Hope (Hammond)

These scenarios are: The Battle of the Barents Sea, Action off of Kerkenah Banks (where the Mohawk was sunk), the minor brush between the Scharnhorst and the Gneisenau with the Ramillies, and a hypothetical World War I battle off of Apia, Samoa, between the HMAS Australia and the German armored cruisers Scharnhorst and Gneisenau.

One point that I think is important that players should remember, especially the critical ones(!), I try to make my games very realistic and well researched, otherwise one has a fantasy game. My ship speeds are usually always modified downward from their Trial speeds. This will be especially noted with the Italian and British destroyers. The Germans with their DD's had a great deal of trouble with their engines, but in actual battle they gave little trouble — it was that they had to get overhauled often. My game can not reflect that, though a campaign game would have to, to be accurate.

Gunfire factors are a function of weight of shell times rate-of-fire. The latter is a tricky figure to play with. Also, weight of shell is not a true figure as 10 pounds of explosive does not do double the amount of damage that 5 pounds would do, but I compensate for that in the Gunnery Hit Table.

Torpedoes are very interesting in RN. Using the advanced game system, players will find that a few players will use torpedoes with deadly affect while your average player will not! I rely on the massive salvo of torpedoes to get my hits, but I do play with two local guys who make great snipers!

As suggested by Eric and Jane Lawson, and Greg Porter, players may wish to add detail to their games by firing one gunnery round in daylight actions ½ way through movement. They may also wish to fire one round, implement damage, and then fire the second round of gunfire.

The requirement to move 1 hex directly forward at the beginning of a turn is an artificial constraint for ease of play. If players mutually agree, they may wish to drop that rule and just have movement from one turn to another conform to the general rules concerning movement, i.e. no turn at night in one hex greater than two hexsides, etc.

Comments, questions, or ideas are always welcome and so feel free to write!

ERRATA #1

When cutting out the land areas, note that the small island goes with the entire spit of land and is not a 1 hex island of land by itself.

Owners of IBS may want to include commanders for the various scenarios. They are rated as follows:

Scenario #1	Yonai -3	Scenario #6	Hara -2
	Sweaton -2		Benevedo -2
Scenario #	Goto -1	Scenario #7	Tanaka -3
	Scott -2		Wright -1
Scenario #3	Kondo -1	Scenario #8	Yamamoto -2
	Lee -3		Phillips -1
Scenario #4	Henmi -1	Scenario #9	Hiraga -2
	Meeteren -1		Queman -2
Scenario #5	Callaghan -2	Scenario #10	Mikawa -2
	Abe -1		Crutchley -1

Use the same torpedo modifiers from IBS, but if you use a nationality modification number for the Japanese, then reduce all destroyer gunnery factors (unless armed with 3.9") by 3. Also reduce all Japanese CA's armed with 5" guns or 4.7" guns by 1 for *each* secondary gun position. The Kongo class BC (1942) has a tertiary gun position made up for a 4 factor or 5" gun on each broadside. The Yamato has 6 factor 5" tertiary gun positions in lieu fo intrinsic starshell capability (Kongo's and Scheer also lose this ability). The Japanese modifiers are as follows:

DAY	NIGHT	
-2	-6	1942
+3	-1	1928

IMPORTANT — for two extra RN scenarios (1st Battle of Narvik and Alive with Torpedoes) send name, address, and $1 to Quarterdeck Games.

L & L Van Ginderen has ship photographs, many modern, available for purchase. He can be contacted at Korte Dijkstraat nr. 3.2008, Antwerpen, Belguim.

CREDITS

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp	gun ranges
Z40	DL	5.9"	—	—	6-6-5	B	21"	6	43	5	15
Z29, Z30, Z31	DD	5.9"	—	—	6-6-6	A	21"	4	40	4	1 2
Hans Lody, Friedrich Eckoldt Richard Beitzen Theodor Riedel Bernd von Arnim, Georg Thiele, Wolfgang Zenker, Erich Koellner, Erich Giese	DD	5"	—	—	6-6-6	A	21"	4	35	3	12
T22, T23, T25, T27, T26	TB	4.1"	—	—	6-5-5	A	21"	3	41	2	1 0

Players may wish to have a +5 to all fire from the Z29, Z30, and Z31 due to the poor stability of the 5.9" gun in any sort of rough sea.

Forward PRI on Z29, Z30, Z31, and on all PRI on Z40 have 1" armor

INSTRUCTIONS FOR USE OF THE SHIP INFORMATION SHEETS:

At the top of each sheet is listed the column heading for much of the information required for filling out the ship logs. Most of it is self explanatory. For example, the Sikh has 4 hull boxes and is worth 3 Victory Points. Flot refers to flotation. All the way on the extreme righthand are the gun ranges. The ranges are in order of Primary, Secondary, and then Tertiary ranges.

If a gun position points fore or aft (like this: ⊨) then it may fire to either broadside. If it is secondary or tertiary gun position, then it will point to the starboard. Those positions are *duplicated* on the port side of the ship log. Midship primary gun positions are located directly behind the MFC box and will face forward. Note that some primary gun positions fact to a particular broadside (i.e. Warrior or class AC). They may only fire on the broadside facing they are pointing to.

Torpedo mounts are treated in the same matter. If they face towards the aft (like this: ⟨▯⟩) they may fire to either broadside.

If they face to one broadside or the other, they may only fire to that broadside. This arrangement is most common on cruisers.

All the information is here to fill out a logsheet. Gun types and ranges are listed separately. Hull means that the particular ship class has that many hull boxes. Era is for the year launched (i.e. 42 means 1942, etc). If you make up your own scenarios it is suggested that you use a particular year to limit the ships to. Also, when making up your own scenarios, it is suggested that you use the number of VP's (Victory Points) for choosing ships. For example, both players take 50 points worth of ships with no younger than 1937 (era) would be the basis for a scenario. I would recommend that you spot the Axis or Soviet side with 2 points extra for every 25 VP points to be chosen for even sides.

The Rodney and the French Jean Bart & Strasbourg classes have secondary guns capable of aft fire as well as broadside. Rear secondary may fire to either side as well as aft and treat as a primary gun position.

The Scharnhorst class AC broadside only Primary guns have a range of 9.

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp					gun ranges
Bedouin, Mohawk, Nubian, Sikh, Zulu	DD	4.7"	—	—	6-5-5	A	21"	4	37	3	→5	M	1	5→	11
Janus, Kingston, Kelly, Kipling, Jervis,	DD	4.7"	—	—	6-5-5	A	21"	3	38	2	→4	M	10	3→	11
Marne, Matchless	DD	4.7"	—	—	5-5-5	A	21"	4	40	2	→4	M	10	3→	14
Lively, Legion	DD	4"	—	—	6-5-5	A	21"	4	40	2	→4	M	10	3→	14
Orwell, Obedient, Obdurate	DD	4"	—	—	6-5-5	A	21"	3	41	2	→2	M	10	1→	14
Havock, Hero, Onslow Hasty, Hyperion, Griffin, Echo, Achates, Electra	DD	4.7"	—	—	6-5-5	A	21"	3	29	2	→3	M	10	2→	12
Grenville	DD	4.7"	—	—	6-6-5	A	21"	3	35	2	→3	M	10	2→	12
Hardy	DL	4.7"	—	—	6-5-5	A	21"	3	36	3	→3	M	1→	10 2→	12
Icarus, Ilex	DD	4.7"	—	—	6-5-5	A	21"	3	36	2	→3	M	10	2→	12
Rocket, Ituriel	DD	4.7"	—	—	5-5-5	A	21"	3	41	2	→3	M	10	2→	12
Partridge	DD	4"	—	—	6-5-5	A	21"	3	41	2	→2	M	10	1→	14
Kujawiak, Blankney, Middleton, Badsworth	DE	4"	—	—	4-4-4	A	—	3	40	2	→2	M	1→		14
Wensleydale, Limbourne	DE	4"	—	—	4-4-4	A	21"	3	41	2	→2	M	1	1→	14
Stevenstone, Talybont	DE	4"	—	—	4-4-3	A	21"	3	41	2	→2	M	1	1→	14
Velox, Vidette,	DD	4"	—	—	5-5-5	A	21"	3	17	2	→2	M	10	2→	10
Beagle, Bulldog	DD	4/ WWI	3"	—	5-4-4	A	18"	2	10	1	→1	M	1	1→	6 6

The Beagle's aft gun is the 3" gun.

The Rocket's 4.7" has a range of 14.
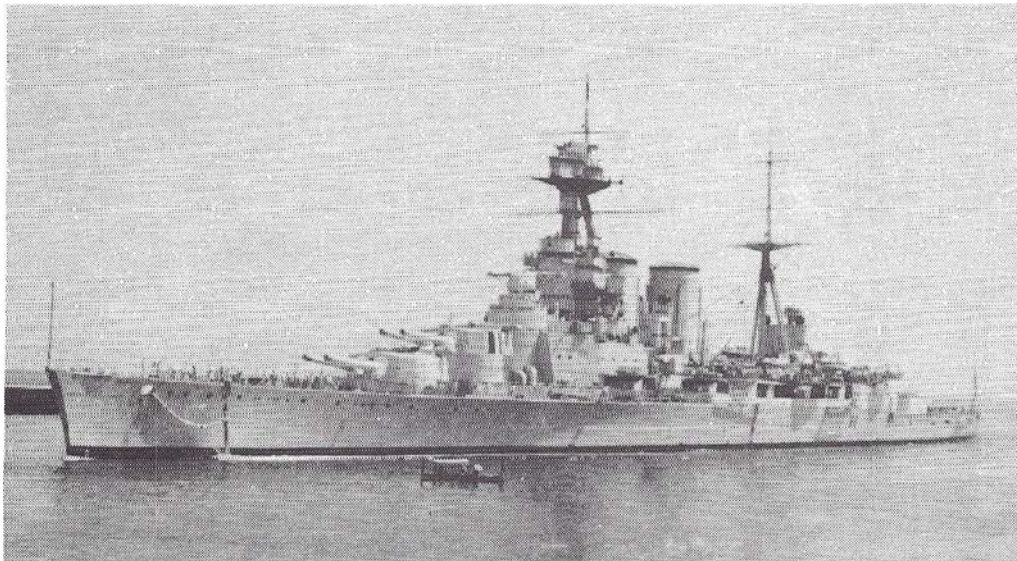
Hood (Glinderen)

ROYAL NAVY Counter Sheet No. 1

CAA 5-5-4 CAIRO	DD 6-5-5 BEDOUIN	DD 5-5-5 ITURIEL	DD 6-5-5 PARTRIDGE	DD 5-5-5 MARNE	DD 5-5-5 MATCHLESS	Captain HARDY -1
DE 4-4-4 BLANKNEY	DE 4-4-4 MIDDLETON	DE 4-4-4 BAOSWORTH	DD 6-5-5 ILEX	DD 6-6-5 HAVOCK	DD 6-5-5 HYPERION	Rear Adm VIAN -3
CL 6-5-5 CLEOPATRA	CL 6-5-5 EURYALUS	CL 6-5-5 DIDO	CL 6-5-5 PENELOPE	DD 6-6-5 HERO	DD 6-5-5 HASTY	Commander NICHOLSON -2
DD 6-5-5 KINGSTON	DD 6-5-5 KELVIN	DD 6-5-5 KIPLING	DD 6-5-5 JERVIS	DD 6-6-5 SIKH	DD 6-5-5 ZULU	Captain SMITH -2
DD 6-5-5 LEGION	DD 6-5-5 LIVELY	CL 6-5-5 GLASGOW (II)	BB 5-4-4 PR OF WALES	BC 5-5-4 HOOD	BC 4-4-4 INDOMITABLE	Captain KENNEDY -1
BC 5-4-4 INDEFATIGABLE	AC 4-4-3 DEFENCE	AC 4-4-3 WARRIOR	AC 4-4-3 D OF EDINBGH	AC 4-4-3 BLACK PRINCE	CL 4-4-4 DUBLIN	Rear Adm TROUBRIDGE -1
DD 5-4-4 BULLDOG	DD 5-4-4 BEAGLE	CL 4-4-4 SOUTHAMPTON	CL 4-4-4 NOTTINGHAM	CL 4-4-4 BIRMINGHAM	CA 5-5-5 EXETER	Captain KELLY -2
CL 6-5-5 AJAX	AC 4-4-3 GOOD HOPE	AC 4-4-3 MONMOUTH	CL 4-4-4 GLASGOW (I)	AMC 3-3-2 OTRANTO	BB 3-3-2 CANOPUS	Commander GOODNOUGH -3

Great Britain

DD 6-5-5 OBOURATE	DD 6-5-5 ORWELL	DD 6-5-5 OBEDIENT	DD 6-5-5 ELECTRA	CA 5-5-5 SUFFOLK	BC 5-5-4 RENOWN	Commander HARWOOD -3
DD 6-5-5 ACHATES	DD 6-5-5 ONSLOW	CL 6-5-5 SHEFFIELD	DD 6-5-5 ECHO	CA 5-5-5 NORFOLK	DD 6-5-5 GRIFFIN	Rear Adm CRADDOCK -1
CL 5-5-5 JAMAICA	BB 4-4-3 ROONEY	DD 6-5-5 MOHAWK	BB 4-4-4 WARSPITE	DD 6-5-5 ICARUS	DD 5-5-5 VELOX	Vice Adm SOMERVILLE -2
BB 5-5-5 LION	DD 6-5-5 JANUS	DD 6-5-5 NUBIAN	BB 4-3-3 RAMILLIES	BB 5-4-4 K GEORGE V	DD 5-5-5 VIDETTE	Vice Adm HOLLAND -1

Commonwealth and Polish / France

DE 4-4-4 KUJAWIAK	DL 7-6-6 MOGADOR	CL 6-6-5 G LEYGUES	CL 6-6-5 GLOIRE	CL 6-6-5 MONTCALM	Rear Adm BOURRAGUE -1
CL 6-5-5 SYDNEY	DD 6-5-5 FORBIN	DD 7-7-6 LE MALIN	DD 7-7-6 L AUDACIEUX	DD 7-7-6 LE FANTASQUE	Rear Adm DE GRASSE -3
CL 6-5-5 ACHILLES	DD 6-5-5 L'ADROIT	CA 5-5-5 SUFFREN	BC 5-5-4 DUNKERQUE	BB 5-5-5 JEAN BART	Captain MEIER -2
BC 5-4-4 AUSTRALIA	TB 6-5-5 LE CORSE	CA 5-5-5 ALGERIE	BC 5-5-4 STRASBOURG	BB 5-5-5 RICHELIEU	Captain JUNOT -1

GAME TURN N

Commander MAY -1 · Captain MACK -3 · Captain SHRBROOKE -3 · Captain BURNETT -1

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ROYAL NAVY Counter Sheet No. 2 — Italy

BB 5-5-4 LITTORIO	CA 6-5-5 GORIZIA	CA 6-5-5 TRENTO	CL 6-6-6 BANDE NERE	DD 6-6-6 ASCARI	DD 6-6-6 AVIERE	Vice Adm IACHINO -1
DD 6-6-6 ALPINO	DD 6-6-6 BERSAGLIERE	DD 6-6-6 FUCILIERE	DD 6-6-6 LANCIERE	DD 6-6-6 ORIANI	CL 6-6-6 COLLEONI	Rear Adm DA ZARA -2
CL 6-6-6 DI SAVOIA	CL 6-6-5 MONTECUCCOLI	DD 6-6-5 PREMUDA	DD 6-6-6 MALOCELLO	DD 6-6-6 VIVALDI	DD 6-6-6 LAMPO	Rear Adm CASARDI -1
BB 5-5-4 V VENETO	BB 5-4-4 ANDREA DORIA	BB 5-4-4 G CESARE	CA 6-5-5 BOLZANO	DD 6-6-6 BALENO	DD 6-6-6 TARIGO	Captain CRISTOFARO -2
BC 6-5-5 KRONSTAOT	DL 7-6-6 TASHKENT	DD 6-6-5 C BARONI	CL 7-7-7 A REGOLO	CA 6-6-5 POLA		Vice Adm ACERBI -2
BB 5-5-5 S SOYUZ	DD 6-6-6 SEROITY	DD 6-6-5 C FONTANA	CL 7-7-7 S AFRICANE	CA 6-5-5 ZARA		Rear Adm MASSIGNANI -3
CA 6-6-5 KIROV	DD 6-6-5 SKORY	TB 5-5-5 SPICA	DD 6-6-6 GENIERE	CL 6-5-5 G GARIBALDI		Captain INGELLIS -1
CL 6-6-5 FRUNZE	DD 6-6-6 SUROVY	DE 4-4-4 CICLONE	DD 6-6-6 FOLGORE	CL 6-5-5 L ABRUZZI		Captain LOMBARDO -3

Russia

AS 5-4-4 ADM SCHEER	AS 5-4-4 GRAF SPEE	BB 5-4-4 BISMARCK	CA 6-5-5 PRINZ EUGEN	BC 5-5-4 GOEBEN	CL 5-4-4 BRESLAU	Rear Adm SOUCHON -3
CL 4-4-4 STETTIN	CL 4-4-4 STUTTGART	CL 4-4-3 MUNCHEN	CL 4-3-3 FRAUENLOB	CL 4-4-3 HAMBURG	CL 5-4-4 ELBING	Commander VON REUTER -3
AC 4-4-3 SCHARNHORST	AC 4-4-3 GNEISENAU	CL 4-4-4 NURNBERG (I)	CL 4-4-4 DRESDEN	CL 4-4-3 LEIPZIG	CA 6-5-5 HIPPER	Captain KRANCKE -3
DD 6-6-6 F ECKOLDT	DD 6-6-6 R BEITZEN	DD 6-6-6 T RIEDEL	DD 6-6-6 Z-29	DD 6-6-6 Z-30	AS 5-4-4 LUTZOW	Captain LANGSDORFF -1

United States / Germany

BB 5-5-4 MONTANA	CL 6-5-5 BROOKLYN	DD 6-6-5 Z-40	BC 6-5-5 "O"	DD 6-6-6 Z-31	Vice Adm VON SPEE -2
BB 6-5-5 NEW JERSEY	CA 6-5-5 AUGUSTA	TB 5-5-5 T-22	CL 6-5-5 NURNBERG (II)	BB 5-5-5 F DER GROSSE	Vice Adm LUTJENS -2
BB 5-4-4 ALABAMA	BB 6-5-5 MISSOURI	TB 5-5-5 T-23	CL 6-5-5 KOLN	BC 5-5-5 SCHARNHORST	Vice Adm KU MNETZ -1
BB 5-4-4 SOUTH DAKOTA	BC 6-5-5 ALASKA	AMC 3-3-3 KORMORAN	CL 6-6-5 M	BC 5-5-5 GNEISENAU	Commander DETMERS -2
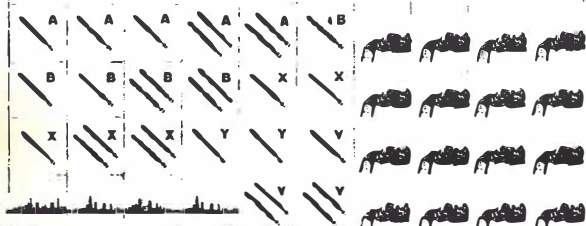
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Errata 1.1 The French/British 6" gun follows the red line on the gunnery chart. Players with IRONBOTTOM SOUND may wish to note that most US CA's have 5 - 6" of armor on their CT's. Also, increase all US ships armed with 5" guns by a factor of 1 per ship/ship side.

Note that some of the ship counters have speed numbers slightly different from the Ship Information section — the counters are correct!

All German and British WWI BC's, and CL's roll for which turret is hit on all turret hits. Players may wish to limit the traverse of the middle primary turrets of the Goeben, and Australia class. this requires that one wing turret fires regularly to one broadside, but only 90 degrees on the opposite broadside (same traverse of broadside guns in WOODEN SHIPS & IRON MEN (AH)). Establish which turret is limited to which broadside before play begins.

Ignore references to arrows on gun positions and use the SSI information instead.

SHIPS' LOG

FLOT — Type _____ Ship Name _____

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Target Hit	Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT Turn Speed	Launch Laun.	Hex & Heading	Target Ship	OPTIONAL TT Pattern

Pri. ___ Sec. ___ Ter. ___ Belt ___ Pri. ___ Bridge ___ Sec. ___ Deck ___ V.P. ___

Speed ___

Notes

A FLOT — Ship Name _____ Pri. ___ ( ) ___ TT ___ VP. ___ Speed

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Target Hit	Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT Turn Speed	Launch Laun.	Hex & Heading	Target Ship	OPTIONAL TT Pattern

Notes

A FLOT — Ship Name _____ Pri. ___ ( ) ___ TT ___ VP. ___ Speed

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Target Hit	Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT Turn Speed	Launch Laun.	Hex & Heading	Target Ship	OPTIONAL TT Pattern

Notes

A FLOT — Ship Name _____ Pri. ___ ( ) ___ TT ___ VP. ___ Speed

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Target Hit	Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT Turn Speed	Launch Laun.	Hex & Heading	Target Ship	OPTIONAL TT Pattern

Notes

SHIPS' LOG

PLOT

Type _____ Ship Name _____ TT _____ Speed _____

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Movement Orders	Notes
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

TORPEDOES

TT	Turn Speed Laun.	Launch Hex & Heading	Target Ship	OPTIONAL TT Pat-tern

6 5 4 3 2 1

Pri _____ ( )
Sec _____ ( )
Ter _____ ( )
Belt _____
Pri. _____
Bridge _____
Sec. _____ "
Deck _____ "
V.P. _____

Notes

Type _____ Ship Name _____ TT _____ Speed _____

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	Target Hit	OPTIONAL Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT	Turn Speed Laun.	Launch Hex & Heading	Target Ship	OPTIONAL TT Pat-tern

6 5 4 3 2 1

Pri _____ ( )
Sec _____ ( )
Ter _____ ( )
Belt _____
Pri. _____
Bridge _____
Sec. _____ "
Deck _____ "
V.P. _____

Notes

PLOT

Type _____ Ship Name _____ TT _____ Speed _____

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	OPTIONAL Movement Orders	Notes
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

TORPEDOES

TT	Turn Speed Laun.	Launch Hex & Heading	Target Ship	OPTIONAL TT Pat-tern

6 5 4 3 2 1

Pri _____ ( )
Sec _____ ( )
Ter _____ ( )
Belt _____
Pri. _____
Bridge _____
Sec. _____ "
Deck _____ "
V.P. _____

Notes

Type _____ Ship Name _____ TT _____ Speed _____

MOVEMENT & GUNFIRE

TURN	MF's Exp.	Target Ship/Hex	Target Hit	OPTIONAL Movement Orders	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

TORPEDOES

TT	Turn Speed Laun.	Launch Hex & Heading	Target Ship	OPTIONAL TT Pat-tern

6 5 4 3 2 1

Pri _____ ( )
Sec _____ ( )
Ter _____ ( )
Belt _____
Pri. _____
Bridge _____
Sec. _____ "
Deck _____ "
V.P. _____

Notes

BRITISH EMPIRE

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp	gun ranges
Lion	BB	16"/II	5.25"	—	5-5-5	G	—	23	42	34	
Prince of Wales, King George V	BB	14"	5.25"	—	5-4-4	F	—	20	39	32	
Hood	BC	15"	4"	—	5-5-4	F	—	21	18	31	
Rodney	BB	16"/I	6"	4.7"	4-4-3	E	24.5"	19	25	30	
Warspite	BB	15	6"/WWI	4"	4-4-4	E	—	18	13	25	
Ramillies	BB	15	6"/WWI	4"	4-4-3	E	—	15	14	24	
Renown	BC	15"	4.5"	—	5-5-4	E	21"	15	16	25	
Indomitable	BC	12"	4"	—	4-4-4	D	21"	11	09	18	
Indefatigable Australia	BC	12" old	4"	—	3-3-2	D	21"	11	07	17	
Canopus	BB	12"	4"	—	4-4-3	C	18"	9	97	8	
Defence	AC	9.2"/7.5"	3"	4-4-3	C	18"	10	06	10		
Warrior	AC	9.2"/50 7.5"	3"	4-4-3	C	18"	9	05	9		
Duke of Edinburgh Black Prince	AC	9.2"/50	3"	4-4-3	C	18"	10	04	9		
Good Hope	AC	9.2"/45	6"/WWI	3"	4-4-3	B	18"	10	00	9	
Monmouth	AC	6"/WWI	3"	—	4-4-3	A	18"	8	01	7	
Norfolk Suffolk	CA	8"	4"	—	5-5-5	C	21"	9	27	9	
Exeter	CA	8"	4"	—	5-5-5	C	21"	8	28	8	
Cairo	CAA	4"	—	—	5-5-4	B	—	5	38	5	

FRANCE

name	type	pri	sec	ter	speed flot	tt	hull	era	vp
Jean Bart, Richelieu	BB	15"	6"	3.9"	5-5-5 G	—	21	39	36
Strasbourg, Dunkerque	BC	13"	5.1"	—	5-5-4 E	—	16	32	29
Algerie	CA	8"	3.9"	—	5-5-5 C	21.7"	9	32	10
Suffren	CA	8"	3.5"	—	5-5-5 C	21.7"	9	27	9
Gloire, Montcalm, George Leygues	CL	6"	3.5"	—	6-6-5 B	21.7"	8	33	8
Mogador	DL	5.5"	—	—	7-6-6 A	21.7"	4	36	4
L'audacieux, Le Malin, Le Fantasque	DD	5.5"	—	—	7-7-6 A	21.7"	3	33	3
L'Adroit	DD	5.1"	—	—	6-5-5 A	21.7"	3	27	3
Le Corse	TB	3.9"	—	—	6-5-5 A	21.7"	3	40	2

USA

name	type	pri	sec	ter	speed flot	tt	hull	era	vp
Montana	BB	16/50	5"	6	5-5-4 I	—	27	43	38
Missouri, New Jersey	BB	16/50	5"	—	6-5-5 H	—	24	42	36
Alabama, South Dakota	BB	16/45	5"	—	5-4-4 G	—	21	41	34
Alaska	BC	12"	5"	6	6-5-5 F	—	19	43	27
Augusta	CA	8"	5"	—	6-5-5 C	—	9	29	10
Brooklyn	CL	6"	5"	—	6-5-5 C	—	10	36	10

gun ranges

South Dakota's secondaries are 4-3-3 instead of 5-5-4.

Montana fires with a -3 from her primaries if all 4 positions are undisabled.

GERMAN

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp	gun ranges
Friedrich der Grosse	BB	16"	5.9"	4.1"	5-5-5	I	21"	28	42	40	18 16 10
Bismarck	BB	15"	5.9"	4.1"	5-5-4	H	—	23	39	37	18 16 10
Scharnhorst, Gneisenau	BB	11"	5.9"	4.1"	5-5-5	G	—	20	36	31	18 16 10
"O"	BC	15"	5.9"	4.1"	6-5-5	G	21"	21	42	32	18 16 10
Goeben	BC	11" old	5.9"	3.5"	5-5-4	F	20"	16	26	26	13 10 8
Graf von Spee, Lutzow, Admiral Scheer	AS	11/28	5.9"	4.1"	5-4-4	D	21"	11	31	14	18 16 10
Scharnhorst Gneisenau	AC	8.2"	5.9/	3.5"	4-4-3	C	17.7"	10	06	11	18 10 8
Hipper, Prinz Eugen	CA	8"	4.1"	—	6-5-5	D	21"	12	37	13	18 10
"M"	CL	5.9"	4.1"	—	6-6-5	C	21"	10	42	9	18 16 10
Nurnberg (II)	CL	5.9"	3.5"	—	6-5-5	B	21"	7	34	7	18 16 10
Koln	CL	5.9"	3.5"	—	6-5-5	B	21"	7	27	7	18 10
Elbing	CL	5.9"	3.5"	—	5-4-4	B	20"	5	14	6	11 10 8
Breslau	CL	4.1"	—	—	5-4-4	B	20"	5	11	5	9
Stettin, Dresden, Stuttgart, Nurnberg (I)	CL	4.1"	—	—	4-4-4	A	17.7"	5	06	5	9
Leipzig, Munchen, Hamburg	CL	4.1"	—	—	4-4-3	A	17.7"	4	03	4	9
Frauenlob	CL	4.1"	—	—	4-3-3	B	21"	4	99	3	9
Kormoran	AMC	5.9"	—	—	3-3-3	B	21"	8	41	7	16

ITALY

Ship	Type					Class	Torp.				gun ranges
Vittorio Veneto, Littorio	BB	15"	6/29	3.5"	5-5-4	F	—	20	37	36	18 18 9
Andrea Doria	BB	12.6"	5.3"	3.5"	5-4-4	E	—	15	37	27	18 14 9
Giulio Cesare	BB	12.6"	4.7"	3.9"	5-4-4	E	—	15	34	27	18 13 11
Trento	CA	8/24	3.9"	—	6-5-5	C	21"	9	26	9	18 11
Bolzano	CA	8/27	3.9"	—	6-5-5	C	21"	10	32	10	18 11
Zara, Gorizia, Pola	CA	8/27	3.9"	—	6-5-5	C	—	10	32	10	18 11
Raimondo Montecuccoli	CL	6/29	3.9"	—	6-6-5	B	21"	8	34	8	16 11
Bande Nere, Bartolomeo Colleoni	CL	6/24	3.9"	—	6-6-6	B	21"	7	30	7	16 11
Eugenio di Savoia	CL	6/29	3.9"	—	6-5-5	C	21"	9	34	9	16 11
Duca Degli Abruzzi, Giuseppe Garibaldi	CL	6/29	3.9"	—	6-5-5	C	21"	10	36	10	18 11
Attilio Regolo	CL	5.3"	—	—	7-7-7	A	21"	5	40	5	14
Scipio Africane	CL	5.3"	—	—		A	21"				14
Lanzerotto Malocello, Ugolino Vivaldi	DD	4.7"	—	—	6-6-6	A	21"	4	28	3	13
Premuda	DD	5.5"	—	—	6-6-5	A	21"	4	30	3	14
Comandante Baroni, Comandante Fontana	DD	5.3"	—	—	6-6-5	A	21"	4	43	3	14
Geniere, Fuciliere, Ascari, Aviere, Bersagliere, Lanciere, Alpino, Alfredo Oriani, Baleno, Lampo, Luca Tarigo, Folgore	DD	4.7"	—	—	6-6-6	A	21"	3	31	3	13
Ciclone	DE	3.9"	—	—	5-4-4	A	17.7"	2	42	2	11
Spica	TB	3.9"	—	—	5-5-5	A	17.7"	2	36	2	11

Armor values (Belt / Pri. / Bridge · Sec. / Deck):

- Vittorio Veneto, Littorio: Belt 14, Pri. 14, Bridge 10 · Sec. 6, Deck 16
- Andrea Doria: Belt 10, Pri. 11, Bridge 10 · Sec. 5, Deck 10
- Giulio Cesare: Belt 10, Pri. 11, Bridge 10 · Sec. 5, Deck 10
- Trento: Belt 3, Pri. 4, Bridge 4 · Sec. 0, Deck 4
- Bolzano: Belt 4, Pri. 4, Bridge 5 · Sec. 0, Deck 5
- Zara, Gorizia, Pola: Belt 6, Pri. 6, Bridge 6 · Sec. 0, Deck 5
- Raimondo Montecuccoli: Belt 3, Pri. 3, Bridge 4 · Sec. 2, Deck 2
- Bande Nere, Bartolomeo Colleoni: Belt 3, Pri. 3, Bridge 4 · Sec. 3, Deck 3
- Eugenio di Savoia: Belt 4, Pri. 3, Bridge 5 · Sec. 2, Deck 2
- Duca Degli Abruzzi, Giuseppe Garibaldi: Belt 5, Pri. 5, Bridge 6 · Sec. 3, Deck 3
- Attilio Regolo: Belt 0, Pri. 1, Bridge 4 · Sec. 0, Deck 0
- Scipio Africane: Sec. 0, Deck 0

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp
Sheffield, Glasgow (II)	CL	6"	4"	—	6-5-5	C	21"	9	36	9
Ajax, Achilles, Sydney	CL	6"	4"	—	6-5-5	B	21"	8	31	7
Penelope	CL	6"	4"	—	6-5-5	B	21"	7	34	6
Cleopatra, Dido, Euryalus	CL	5.25"	—	—	6-5-5	B	21"	7	39	7
Jamaica	CL	6"	4"	—	5-5-5	B	21"	7	39	8
Charybdis	CL	4.5"	—	—	6-5-5	C	21"	6	39	6
Birmingham, Nottingham	CL	6/WWI	—	—	4-4-4	B	21"	6	13	5
Southampton, Dublin	CL	6/WWI	—	—	4-4-4	B	21"	6	12	5
Glasgow (I)	CL	6/WWI	4/WWI	—	4-4-4	A	18"	5	10	4
Otranto	AMC old	4.7/	—	—	3-3-2	A	—	6	—	4

SOVIET

name	type	pri	sec	ter	speed	flot	tt	hull	era	vp
Sovietsky Soyuz	BB	16"	6"	3.9"	5-5-5	G	—	26	42	40
Kronstadt	BC	12"	6"	3.9"	6-5-5	E	—	20	43	31
Kirov	CL	7.1"	3.9"	—	6-6-5	B	21"	8	35	9
Frunze	CL	5.9"	3.9"	—	6-6-5	C	21"	11	40	11
Tashkent	DL	5.1"	—	—	7-6-6	A	21"	4	37	3
Skory, Surovy, Serdity	DD	5.1"	—	—	6-6-6	A	21"	3	39	3

gun ranges

Dido only is a 5-4 on her forward primaries, lacking the other 5.

5.9" Soviet is the same as the German/Du

Sovietsky Soyuz has 4" of armor on her Ter.