Dark Seas

1. <u>Introduction</u>. The Second World War saw many battles fought between opposing navies. A large number of these were surface actions fought at night. "Dark Seas" is a quick playing game that simulates these actions.

2. <u>Scale</u>. Each turn in the game represents 36 minutes of real time. Each hex represents an area 12,000 yards across. A movement allowance of 1 hex per turn equates to a speed of 10 knots.

3. <u>Playing Surface</u>. The game is played on a paper hexgrid. The hexes regulate movement and distance measurement.

4. <u>Blocks</u>. In this game, colored wooden blocks are used to represent individual ships and groups of ships called "task groups." One side of each block is blank. The other side carries a sticker identifying the ship or task group represented by the block.

    a. In general, players place their blocks on the playing area so that the stickers are hidden from the opposing player. When the rules refer to a player selecting a block "blindly," it means that the player selects the block without knowing its identity.

    b. Note that blocks representing task groups may be labeled a TG, Force, or Group, and identify the TG they represent by numbers or letters, depending on nationality. In each case, these rules refer to the groups of ships represented by such a block as a "task group" or "TG."

    c. Unless otherwise specified in scenario rules, each side in a scenario uses blocks of a single color unique to that side. By game convention, blue blocks represent United States Navy and Royal Netherlands Navy forces, red blocks the forces of the Royal Navy and Commonwealth Navies, orange the forces of the Imperial Japanese Navy, black the forces of the German Kriegsmarine, and gray the forces of the Royal Italian Navy.

    d. Blocks can be bought from Columbia Games, on the Web at http://www.columbiagames.com. Columbia Games is not affiliated with this game in any way.

5. <u>Ships</u>. Stickers affixed to wood blocks represent individual ships. Each ship sticker has a colored band indicating the ship's navy, a name, and a series of numbers. The top 1 or 2 sets of numbers show the attack values of the ship at

ranges of from 0 to 3 hexes. Each row of numbers represents a battery of weapons. Weapons may be B (battleship guns), C (cruiser guns), D (destroyer guns), or T (torpedoes). The bottom row of numbers show the ship's defense strength, radar (if any) and speed. Defense strengths may be B (battleship), C (cruiser), D (destroyer), M (merchantman) or A (aviation ship). A ship's "class" is based on its defense strength letter. Some stickers represent a number of ships (as, for example, merchantmen in a convoy). The battery, defense and speed numbers on these stickers apply to each ship in the group.

6. <u>Counters</u>. Counters are used to designate ships or TGs that are evading, moved 2 or 3 hexes in a turn, attacked in a turn, or were attacked in a turn. The use of these counters is further explained below.

7. <u>Scenarios</u>. The game rules are a framework for playing battles. Individual games are based on scenarios that describe the forces on each side, the starting positions of the forces, the length of the game, how the game is won, and any special rules that apply to the scenario.

8. <u>Rosters</u>. Each scenario will include a roster sheet of the ships involved. The roster sheet will show the names of the ships and their victory point value. After each ship name, the roster will have up to 4 boxes: one to check if the ship is damaged, one to check if it is sunk, one to check if it has fired torpedoes, and one to check if it has fired a second set of torpedoes. Circle the last box to indicate that a second set of torpedoes has been loaded.

9. <u>Training Levels</u>. Scenarios for the game assign each side a training level. A side's training level has an effect on how effectively the side spots, how large its TGs can be, its chances of accidentally engaging friendly targets, and its ability to focus its attacks on particular targets. The **Training Level Table** lists these capabilities for each training level.

10. <u>Task Groups</u>. Ships can be organized into "task groups," abbreviated in these rules as "TG." Scenario rules will typically place limits on the number of TGs that a player may form. Ships in a task group move and fight together. Ships can never be added to an existing TG during a game. Ships in a TG may leave it in at the end of the movement phase of any turn. Ships may leave a TG as single ships, or by forming 1 or more additional TGs. Ships in a TG are placed together in the box for that TG on the TG organization sheet. The TG organization sheet

is kept out of sight of the other player unless a scenario special rule says otherwise. A TG may consist of 1 ship.

11. Single ships. Single ships (not in a TG) incur the following penalties.

    a. Their movement allowances are reduced by 1.

    b. Their attack values are halved.

12. Rounding Convention. When the rules will call for attack strengths of ships to be reduced the adjustments are computed on the basis of total combined attack strengths, with all fractions considered in computing the odds of an attack.

13. Initiative. Each side's spotting die roll (made once per turn) also serves as its initiative roll. Add each side's roll to its training level. The side with the highest result has initiative. The side with the highest training level wins ties. If both sides have the same rolls and training levels, each player rolls again at the end of the combat phase to break the tie. The result of the initiative roll remains in effect through the end of the movement phase of the following turn. Roll at the start of a scenario to establish initiative for the first turn.

14. Turn sequence. The game is played in turns. Each turn consists of the following phases:

    a. Movement phase. Dummy TGs are placed. Each side moves its forces, in the following order: spotted ships and TGs of the side without initiative, spotted ships and TGs of the side with initiative, unspotted ships and TGs of the side without initiative, unspotted ships and TGs of the side with initiative. As ships and TGs are moved, mark them with "Moved 2" or Moved 3" markers, as appropriate. After all movement, spotted TGs and ships are returned to unspotted status and all "Evading" markers are removed.

    b. Spotting phase. Each side rolls 1D6 and used the result to determine which enemy ships are spotted by its own ships. The die rolls are also used to determine initiative for the remainder of the turn and the movement phase of the following turn. Each side removes spotting modification markers except as needed to record instances in modifiers have caused a ship or TG to be spotted by some enemy ships or TGs but not all enemy ships or TGs.

    c. Combat phase. The players conduct the following sub-phases.

    i. The player without initiative declares which of his or her ships are evading. The player with initiative then does the same. Players place "Evading" markers on evading TGs and ships.

    ii. The player without initiative declares which of his or her ships are attacking, how the attackers are combining their attack strengths, and which ships or TGs they are attacking. The player with initiative then does the same. All remaining spotting modifier counters are then removed.

    iii. Both players then resolve all declared attacks in any order convenient. Players place "Fired" and "Targeted" markers on ships and TGs that attack or are attacked.

  d. Combat results are applied at the end of the combat phase, simultaneously.

15. <u>Movement</u>. Ships move from hex to adjoining hex across the playing surface. All ships have a movement allowance. In any turn, a ship can move any number of hexes up to its movement allowance.

  a. Damaged ships have their movement allowance reduced by 1.

  b. Ships and TGs that evaded in the previous turn have their movement allowances reduced by 1.

  c. Movement allowance reductions for damage and evasion are cumulative.

  d. Ships may exit the playing surface only as specified in scenario special rules.

  e. Ships may not move into land hexes.

16. <u>Spotting</u>. Each turn, each player rolls 1D6 to determine the effect of spotting for its side.

  a. The player adds and subtracts the modifiers shown in the **Spotting Modifier Table** and then determines any opposing ships or TGs that are spotted. The spotting value must be greater than 6 for enemy ships there to be spotted.

  b. Flip TG blocks and single ship blocks on the map face-up if they are spotted by any enemy ship. For a TG block, first announce the number of ships in the TG, then announce the type of ships present based on the target discrimination capabilities for the spotting side's training level.

c. For example, at a training level of 1, announce only the total number of ships. At a training level of 6 and a spotting range of 0, announce the numbers of each class of ships. At a training level of 3 and a range of 0, announce the number of M class ships and the total number of other ships.

d. Spotting effects only last through the movement phase of the following turn. TGs and single ships are flipped back on their edges, hidden from the enemy player at the end of each movement phase.

e. Merchantmen (typically, ships of the M class) may not spot.

f. Radar spotting. Ships with radar may spot enemy ships at ranges beyond the visual sighting range for the scenario. A radar's maximum sighting range is equal to its radar rating. Radar spotting beyond a scenario's maximum visual range reveals only the presence of ships – not their type or number. Radar spotting beyond a scenario's visual range may never be used as the basis for an attack.

g. *Radar Spotting (Optional). If some ships in a TG spot enemy ships within maximum visual range due to their radar ratings but others cannot, only the ships that spot the enemy ships may attack them. However, if this rule is used all the ships in the TG may evade based on a radar-assisted sighting by 1 of the ships in the TG.*

h. Ships may not spot through a land hex. They may spot if their "line of sight" passes along a land hexside.

17. Evading. Ships that have spotted enemy ships in a turn may elect to evade. The owning player declares this at the start of the combat phase, before any attacks are announced. The player without initiative declares first. If any ship in a TG evades, all that are capable of evading must do so. Evading has the following effects.

a. Evading ships have their B, C, and D attack factors halved.

b. T factors attacking evading ships are reduced by 3/4.

c. B, C and D factors attacking evading ships are reduced by 1/3. Cumulatively, an evading ship attacking an evading ship with B, C, or D factors has its factors reduced by 2/3.

d. Merchantmen (typically, ships of the M class) may not evade. Other ships in their TG may evade.

e. Players may wish to use blank counters or coins to mark evading ships or TGs, or to turn the blocks of evading ships or TGs at a distinctive angle to the blocks of ships and TGs that are not evading.

f. To evade, the TG or ships must have spotted enemy ships in that turn. They may not rely on spotting by other ships or TGs.

18. Combat. While the non-initiative player declares and executes attacks before the player having initiative, all results of attacks take place at the end of the combat phase.

a. Any ship within range and spotting distance of an enemy ship may attack that ship. An attacking ship must be able to spot its target. It cannot rely on spotting by another TG.

b. Ships may not fire weapons through a land hex. They may fire if their "line of sight" passes along a land hexside.

c. *Optional. Because spotting modifiers (such as radar) may apply to some spotting ships and not others, some ships in a hex may be able to attack a particular enemy ship that other ships in the same hex may not be able to attack.*

d. Each ship may attack only once per battery per turn.

e. Ships in the same TG may combine attack strengths. All B, C, and D class weapons may combine their attack strengths, after appropriate adjustments. T factors may be combined, but always attack separately from B, C, and D factors.

f. For each attack, adjust attacking weapons strengths as provided on the **Weapons Effect Table** page. Compute the odds for each attack by dividing the total adjusted strengths of the attacking weapons by the defensive strength of the target, rounding down to the nearest one-half. Roll D12 for each attack. A die roll equal to twice the odds or less damages the target. A die roll equal to the odds or less sinks the target. The **Weapons Effect Table** page provides exceptions to these general rules.

g. Training levels affect the ability of ships to attack a particular target ship.

h. Where training levels do not permit a ship (or ships) to attack a designated target, the ships select their targets blindly from the pool of eligible targets in the hex. The target ship player presents the blocks of

the potential target ships face to the firing player. The firing player then selects the target ship from the blocks presented. Optionally, players may dice for targets if in a particular case they agree that dicing is easier than picking from a pool.

i. When there are both friendly ships and enemy ships in a target hex, both may be subject to attack. A single ship attacking into a such a hex risks attacking all other friendly ships in the hex. A ship attacking into such a hex risks attacking other friendly ships not in that ship's TG.

    i. Consult the firing side's training level and the **Training Level Table** to determine the number of friendly ships potentially subject to attack. When multiplying the applicable percentage times the number of friendly ships present, round up any fractions of ½ or more.

    ii. Add that number of blank blocks (of the same color as the enemy) to the pool of target ship blocks.

    iii. If a blank block is drawn, the opposing player blindly selects a target ships from the attacking player's ships eligible to be attacked.

j. The same process applies when the line of sight for an attack passes through a hex occupied by friendly ships. It does not apply if the attack merely passed along the edge of a hex occupied by friendly ships.

    i. Note that if a friendly ship is attacked in this circumstance, it is attacked at the values applicable to an attack at the range to the friendly ship.

    ii. The process does not apply to friendly ships in the same hex as the attacking ships, unless the enemy ships being attacked are also in the same hex.

k. <u>Torpedoes</u>. T batteries are torpedoes, and are subject to the following special rules.

    i. Unless otherwise indicated, ships may only use their torpedo batteries once in a game.

    ii. <u>Torpedo Reloads</u>. Some torpedo batteries (noted by an "R" after their torpedo factors) can be used twice. To reload for a second shot, the ships must spend a turn in which they do not attack and

are not attacked. Batteries marked with an R* fire their second shot at half strength.

    iii. T factors of unspotted ships are doubled.

    iv. Attacks by T factors are resolved separately from attacks by B, C, and D factors.

  l. <u>Smoke</u>. C and D class ships that evade are considered to have laid smoke in the final hex of their movement. TGs and ships may fire into and out of such a smoke hex, but not through it.

19. <u>Combat Results</u>. Compare adjusted attacking factors to defending factors to determine the odds of the attack. Attacking factors are adjusted as provided on the **Weapons Effect Table** page. Round down to the nearest half-odds. For example, a ship with a defense factor of 3 attacked by 11 points would be attacked at odds of 3.5:1. An attack by 10 points would mean odds of 3:1. Once the odds are computed, roll 1D12. A roll of twice the odds or less normally damages the target, while a roll of the odds or less normally sinks the target. If an attack had odds of 3.5:1, twice the odds would be 7 or less and a roll at the odds or less would of course be 3 or less. Exceptions to these general rules are noted on the **Weapons Effect Table** page.

20. <u>Damaged Ships</u>. Damaged ships have their movement allowance reduced by 1. They may not attack. They may spot. If they are damaged again, they are sunk (with one exception noted on the **Weapons Effect Table** page). Players may wish to flip the blocks of damaged ships on their sides to mark the fact that they are damaged.

21. <u>Combat Example</u>. *Granatiere*, an Italian destroyer, finds itself in a hex with 4 British ships and 6 Italian ships not in its TG. None of the ships are evading. It decides to attack the same target with both its T battery and its D battery. The Italian training level in the scenario is 1, so *Granatiere* cannot select its target. In addition, the 6 Italian ships could be the targets of its attack. The British player presents the Italian player with 10 blocks – the 4 red blocks for the British ships plus 6 blank red blocks. The Italian player chooses his target blindly and – luckily for him – selects the British cruiser *Aurora*. The *Granatiere* is attacking with 3 D factors and 5 T factors. The *Aurora* has a defensive factor of 2C. The odds for the D attack are 1.5:2, rounded to a 1:2. *Granatiere* needs a 1 (twice the odds) to damage *Aurora* with that attack. The odds of the T attack are 5:2 or 2.5:1. The

torpedo attack would damage *Aurora* on a 3 through 5 (twice odds or less) and sink her on a 1 or 2 (odds or less). The Italian player rolls a 2 for the torpedo attack, and *Aurora* is sunk. *Alpino* next tries its luck in similar circumstances, but the Italian player selects a blank red target block. The Italian player immediately produces all of the Italian ships in the hex, except for those in *Alpino's* TG. The British player selects one blindly – *Maestrale*, with a defense factor of 1D. *Alpino* attacks a 3:1 D attack and a 2.5:1 T attack. The T attack misses, but the Italian player rolls a 5 for the D attack, damaging *Maestrale*.

22. <u>Dummies</u>. A scenario may specify that a player may use dummy blocks. A dummy is a TG block that has no ships associated with it.

    a. Dummies move just like real TGs

    b. If a dummy is spotted, it is removed.

    c. If a dummy is in position where it is the only unit capable of spotting an enemy ship or TG, the owning player can either remove it or declare that the enemy ship or TG is not spotted. The owning player can also make this same declaration for single ships and real TGs, if desired.

    d. Once removed, the dummy can be returned to play at the beginning of the following turn in any hex containing a friendly dummy or an unspotted friendly TG or single ship. Of course, the opposing player should not see which block in the hex is the newly placed dummy.

    e. A dummies inherits the spotting modifiers of 1 of the TGs in the hex in which the dummy is placed. For example, if a dummy TG were placed in a hex containing a friendly TG that attacked enemy ships in the prior turn and one that did not, the dummy could adopt a spotting modifier of 0 or +1.

    f. An owning player may always remove a dummy voluntarily.

    g. The number of dummies that a side has in play may never exceed the total number of dummies that the side is permitted for the scenario.

23. <u>Daylight</u>. While the game is primarily meant to simulate combat at night or in very poor visibility, it can also portray engagements fought in better visibility conditions.

    a. <u>Modified turn sequence for daylight turns</u>.

        i. Movement phase. Each side moves its forces. Each side moves in three sub-phases, alternating movement in each sub-phase.

The order of movement in a sub-phased is based on initiative, with the player having initiative moving last. Ships moving 3 hexes per turn move in each sub-phase. Ships moving 2 hexes per turn move in the 1st and 3rd sub-phases. Ships moving 1 hex per turn move in the 2nd sub-phase. Each player declares which of his or her ships are evading at the start of the movement phase. Each player declares which of his or her ships are making smoke at the start of each sub-phase. Spotting is checked at the end of the movement phase.

    ii. Combat phase. Each player –

        1. Declares which of his ships are attacking, how the attackers are combining their attack strengths, and which ships they are attacking, and

        2. Resolves combat.

b.   <u>Modifications to Standard Rules for Daylight Scenarios</u>.

    i. Spotting is automatic.

    ii. Smoke is made in the movement phase rather than the combat phase. Ships making smoke are not necessarily evading. Each player declares whether a ship is making smoke when all of that player's ships have been moved. Smoke is made in the hex that a ship is entering, or in the hex occupied by the ship if it does not leave the hex. A ship may make smoke only in a sub-phase in which it is eligible to move. Dummies may be designated as making smoke, but must be removed if they would be spotted or their smoke would interfere with spotting.

    iii. Maximum visibility is 3 unless otherwise noted. Ships cannot spot or engage in combat through a hex in which any ship is making smoke. Ships cannot spot along hex sides of smoke hexes. Ships cannot spot out of smoke hexes created by enemy ships. They may fire out of smoke hexes created by friendly ships.

    iv. All B, C, and D factors firing into or out of a smoke hex are halved. This is in addition to any other modifications, but is not cumulative per smoke hex.

v. Increase the odds of all gunfire attacks by one odds step. For example, a 1:2 becomes a 1:1, and a 2.5:1 becomes a 3:1.

vi. Increase training level effects by 2, so that a force with level 1 training has level 3 training capabilities.

Spotting Modifier Table

Training Level	+ Training Level
R1 (to a range of 1)	+1
R2 (to a range of 2)	+2
R3 (to a range of 3)	+3
Single ship or TG containing a ship that was attacked last turn	+1
Single ship or TG containing a ship that attacked last turn	+1
Enemy ship moved 2 hexes	+1
Enemy ship moved 3 hexes	+2
Range (per hex)	-1

Add these numbers to the spotting die roll. A value of greater than 6 with respect to any enemy ship means that the ship is spotted. Radar may spot beyond scenario maximum visual spotting range, but reveals only existence of ships and cannot be used as a basis for attacks.

Training Level Table

Training Level	Friendly Fire	Maximum TG Size	Targeting
6	0%	9	D vs. C vs. B vs. M*
5	10%	8	D vs. B and C vs. M*
4	25%	7	D vs. B and C vs. M
3	50%	6	D, B, and C vs. M
2	75%	5	D, B, and C vs. M
1	100%	4	None

Multiply percentage for friendly fire times the number of friendly ships in the target hex of the type being targeted (except for the ships in the firer's TG) to determine the number of blank blocks to add to the target pool. An * in the targeting box means that the firing player had the option of not returning ships to the target pool after they are attacked. The firing player may exercise this option for attacks made by ships in the same TG. D, B and C vs. M means that the firing ships can only distinguish between D, B and C class ships on the one hand and M class ships on the other hand. D vs. C vs. B vs. M means that the firing ships can distinguish between each class of ship. At no training level may a ship target a specific enemy ship. Decrease the targeting capabilities of a force by 1 for each hex of range. For example, a force with a training level of 4 would have the targeting capabilities of a force with a training level of 2 when firing at a 2 hex range.

Weapons Effect Table

	D Weapon	C Weapon	B Weapon	T Weapon
D Target	X1	X1/2*	X1/4	X1/2
C Target	X1/2	X1	X1	X1
B Target	X1/4	X1/2	X1	X1/2
M Target	X1	X1	X1	X1
A Target	X1/2	X1	X1	X1

*means X1 at 0 range, due to secondary batteries

Multiply the attacking weapon factors by the modifiers shown in the table, based on the target type.

Other modifiers to weapons factors:

- Single ship not in a TG attacking: X1/2
- Unspotted ship attacking with T factors: X2
- T factors attacking an evading ship: X1/4
- B, C or D factors attacking an evading ship: X2/3
- Evading ship attacking with B, C or D factors: X1/2
- Cumulative effect of evading ships firing B, C, or D factors at evading ships: X1/3

D, C, and B weapon factors within the same TG may be combined, after adjusting the factors as provided above. T factors within the same TG may also be combined, but may not be combined with D, C, or B factors.

D targets damaged by T factor attacks are sunk instead.

B targets are never sunk by attacks that include D weapon factors. If the B targets are already damaged, an attack including D factors will have no effect.

Example: *Helena* lets fly at *Kako* at 1 hex range. She attacks with 6 D factors, but these are halved as they are D factors attacking a C class target. *Kako* has a defensive value of 2C, giving odds of 3 to 2, or 1.5:1. If *Kako* has been evading, the odds would have dropped to 1:1.