

Sea Wings

- I. **Introduction.** *Sea Wings* portrays World War II naval combat between ships and aircraft. Cardboard counters represent task forces while cards represent ships, aircraft formations and special events. Bases are placed and task forces maneuver on a playing surface measuring 4 feet by 6 feet. Six-sided dice are used to determine various events, such as bomb and torpedo hits and the results of damage control efforts. Players should also have paper and pencil to plot task force movement and record searches, strikes and sighting reports.
- II. **Game Turns.** Play proceeds by game turns. Each turn is equivalent to 4 hours of elapsed time and consists of the following phases:
 - A. **Air Operations.** Players allocate aircraft factors to strike enemy bases and enemy task forces, to search, and to CAP, placing them in the appropriate boxes for their air formations. Players move aircraft that flew strike missions in the last turn to the "Returning from Strike" boxes. One aircraft factor represents 6 aircraft.
 - B. **Strike.** Air strikes are resolved.
 - C. **Damage Control.** Ships sustaining damage roll dice to determine if the damage is removed or made permanent.
 - D. **Task Force Movement Plotting.** Players plot movement for their task forces, specifying direction and distance moved.
 - E. **Task Force Movement.** Each player moves his task forces.
 - F. **Search.** Players determine whether searches sight enemy forces. Forces that have not been successfully sighted that turn become unsighted.
 - G. **Gunfire Combat.** Opposing task forces within 1 inch of each other roll to determine if they engage in surface combat. Surface combat engagements are resolved using the *In Harm's Way* or *Surface Action* rules.
 - H. **Card Draw.** Each player draws one or more cards from his or her card deck.
 - I. **Turn Record.** The players record the passage of a turn.
 - J. **Day and Night Turns.** Turns begin at 0400, 0800, 1200 (noon), 1600, 2000 and 2400 (midnight) local time. Usually, the 2000 and 2400 turns are night turns and all others are day turns. Air formations launched on an anti-shipping strike on the last day turn before a night turn are subject to attrition after their strike if they struck a target more than 5 inches distant from their carrier or base. Roll 1 die for each factor -- it is lost on a roll of 1.
 - K. An aircraft factor searching or acting as CAP cannot strike in the same game turn, and an air factor striking or returning from a strike cannot search or mount CAP.
- III. **Playing Surface.** The playing surface is any flat 4 by 6 foot surface, such as a tabletop. Covering the surface with blue felt adds atmosphere and helps to keep the game pieces in place. Players secretly allocate ships to task forces by stacking the ship cards under a square task force number counter. They then place the rectangular task force markers bearing the same numbers on the surface to show the location of the task forces. Some of the markers may be dummies, containing no ships. Markers are inverted on the table (with the number side down) until they are spotted. One inch on the playing surface equals 24 nautical miles.
- IV. **Air Formation Status Cards.** Each air formation in the game has a card with boxes used to denote the status of the aircraft factor in the formation. Planes may be "In Hanger" (for carriers) or "Dispersed"(for land bases), "On Strike", "CAP", "Search", or "Return from Strike".
- V. **Search.** In each air operations phase, each player secretly indicates the ranges and arcs that his or her forces will search by recording the searches with paper and pencil. A search record must record the number and type of factors searching and the base or task force from which the search begins. *Example: A typical record might be: ES: 2 B-17E (300-360) → 25, signifying 2 factors of B-17Es searching from Espiritu Santo in an arc of 300 to 360 degrees to a distance of 25 inches.*
 - A. Alternatively, the players may use the search record sheets to record searches.
 - B. Players must secretly allocate and record all of their searches before any are resolved.
 - C. Air factors of different types of aircraft cannot be combined in the same search.
 - D. The Air Search Arc table shows the arcs that an air factor can search at various ranges.
 - E. To resolve searches, each player in turn determines whether his searches searched any areas containing enemy task forces. The player places a marker on each task force being searched. More than 1 marker can be placed on a task force if more than 1 search passed over the task force. Players each resolve searches without the other player looking on, so that the other player does not see the origin or extent of the searches.
 1. Once all markers are placed, roll 1D6 for each marker.
 2. If a 6 is rolled, the search report is not received and the task force is not spotted by that search.
 3. If a 1 is rolled, the player whose task force is being searched can secretly elect to treat a dummy task force being searched as the real thing.
4. On any other result, a real task force is spotted and a dummy task force is removed.
5. On rolls of 1 through 5, proceed to roll on the Air Search Information table to determine the details reported by the search. Note that multiple searches, either in the same phase or over time, permit the searching player to roll on the Air Search Information table multiple times.
- F. Once spotted, a task force remains spotted until the following Search Phase. At that time, it may automatically be respotted as long as at least 1 searching air factor is allocated to search the area it occupies. If a spotted task force splits, the resulting task forces are spotted on the same basis as the original task force.
- G. Aircraft may not conduct searches unless they have search missions specified as part of their capabilities.
- H. Unless specially designated, aircraft may not search during night turns.
 - I. **Air Search Attrition.** Aircraft searching risk attrition. Consult the Search Attrition Table at the end of the Search Phase.
 - J. **Search Phase Combat.** Aircraft that search a task force with CAP are subject to attack by that CAP. The CAP rating is halved unless the searching aircraft opt to attack the task force ships. No more than 1 searching factor per search attacks a task force spotted by the search in any 1 turn; no more than 1 searching factor per task force spotted by the search is attacked. If the searchers attack, the normal CAP procedure is used, and each search factor attacks in the Search Phase as a separate strike. CAP can elect to engage searching aircraft either before or after those aircraft roll on the Search Table. If the aircraft are engaged, the CAP player is told the type of aircraft that the CAP is engaging. *Optional: A search results in only "ships present" information on a die roll of 4-6 on the Search Table if the CAP shoots down the searching air factor. The searching player is told that CAP shot down the searcher over that task force and that ships are present, but receives no further information.*
 - K. **Task Forces Searching.** Task forces search each enemy task force within 1 inch of their position.
 - L. **Dummies.** Players may place dummy task forces containing no ships on the playing surface at the start of the game and during its course. Scenario rules will place a limit on the total number of dummies to be deployed. Once successfully searched, a dummy is removed. Dummies may be placed back on the playing surface in any turn after they are removed. They are placed in the task force movement phase, and are placed on other task force markers (real or

dummy) on the playing surface. A player may freely switch task force numbers when dummy task forces are placed.

VI. Combat Air Patrol.

A. Players may allocate fighter aircraft to combat air patrol over their task forces. They do this by placing the air formations providing CAP in the CAP box for their base or carrier.

B. A base or carrier task force can provide CAP for other bases or task forces within 2 inches. Such CAP has a CAP rating of half the CAP rating of the other task force or 1, whichever is less. Each air factor can provide CAP to only 1 base or task force in a turn, unless they both have radar.

C. Emergency CAP. Players can retain fighters on board a carrier or at a base in ready status to act as emergency CAP. Any fighter air formation on a carrier or base in ready status can fly as emergency CAP if the carrier task force or base is attacked. Emergency CAP has its CAP rating halved when making its first attack.

VII. Strikes.

A. In the Strike phase, players determine the order of air strikes and then resolve them. A carrier can usually carry more air factors than it can launch in 1 operation. Carriers may make 2 successive launches in any 1 Strike Phase – but an air factor can only strike once in a phase. Strikes can only be launched against bases and sighted task forces.

B. Optional: At times, combined search and strike missions were used in carrier combat. A search and strike mission can be launched against an unsighted task force. If the task force contains ships, the strike will contact and attack them a die roll equal to or less than 3. The die roll is subject to a +1 modifier for every 5 inches between the striking unit and the target. The same rule is used if a strike wishes to change targets after it is launched.

C. Strike Surprise. If the target of an airstrike has itself launched a strike in the same turn, it is possible that the strike on the target will arrive before its strike is launched. Roll 2 dice and subtract any applicable modifiers from the Strike Modifier Table. If a 2 or less results, the strike has surprised the target with readied aircraft poised to launch.

1. Strikes cannot surprise one another. If two ships or bases are exchanging strikes and both strikes roll for surprise, the strike from the target with the least total die roll modifiers surprises the other. If the modifiers are equal, roll 1 die. If the roll is even, the Allied strike achieves surprise. Otherwise, the Japanese strike achieves surprise.

2. For a ship or base with no radar, the target's strike planes are subject to attack on the ship or base.

3. For a ship or base with radar, the target's strike aircraft may be flown off before the strike arrives – but any strikes

made by those planes must be made as separate strikes, formation by formation.

4. *Example: Zuikaku and Hornet exchange strikes. Hornet has another strike on "Return from Strike" that turn, and Zuikaku elect to launch two waves at Hornet. The Japanese player rolls 2 dice for a total of 4, while the American player – not to be outdone – rolls 2 dice for a total of 3. Because the Japanese strikes receive greater modifiers, they surprise the Hornet. Had the Japanese player rolled higher than a 4, the American strike would have surprised the Hornet.*

D. For Allied carriers, a "strike" normally consists of all aircraft formations launched in one launch by one carrier or base against a single target. For Japanese carriers a "strike" is all aircraft formations launched in one launch by one task force or base against a single target. The Japanese player may also combine 2 launches into 1 strike.

E. Players should note the composition and target of each of their strikes with paper and pencil. This is important to separate first and second strikes from the same base or task force. *Example: A player launches 2 strikes from Hornet, both directed at Japanese Task Force 3. He might record "H1→TF3: 2F, 2B(500), 2B(1000); H2→TF3: 2F, 2T," by which he would mean that the first strike consisted of 2 fighter air factors, 2 dive bomber factors with 500 lb. bombs, and 2 factors with 1000 lb. bombs, while the second strike comprised 2 fighter factors and 2 torpedo bomber factors.*

F. Alternatively, the players may use the strike record sheets to record strikes.

G. Striking aircraft cannot be used for air operations in the following turn. They are placed in the "Returning from Strike" box in that turn.

H. A player can launch strikes at no target just to clear aircraft off a base or carrier.

I. In general, strike combat requires a series of successive die rolls, with all dice falling at or below a specified number being rolled again until the sequence is completed.

J. Strike Resolution Sequence (done strike by strike):

1. Resolve CAP combat with the incoming strike.
2. Resolve anti-aircraft fire and attacks against ships by each air formation, recording hits scored on ships and bases.
3. Resolve CAP combat with withdrawing strike.
4. Resolve damage inflicted by the strike.

K. CAP Combat.

1. The owning player rolls one die for each CAP factor against the CAP value of the factor's ship or

base to determine the number of factors in a position to intercept the strike. The CAP factor is doubled for attacks against a withdrawing strike.

2. If the target of the strike has radar, the striking player tells the owning player the total number of air factors in the strike.

3. The CAP player allocates CAP factors to attack either strike aircraft or escorts.

4. If the wave has no escorts, the CAP player and the strike player resolve simultaneous combat between the CAP and the strike aircraft.

5. If the wave has escorts, the CAP player may allocate CAP factors to attack the escorts. Each allocated CAP factor can engage up to 2 escorts.

Combat then occurs in this order:

a) Engaged CAP and escorts resolve combat simultaneously.

b) Unengaged escorts attack CAP factors allocated to attack strike aircraft. These CAP factors do not fire back or roll against their defensive values.

c) Surviving CAP not engaging the escorts resolve combat with the strike aircraft simultaneously. If the strike is attacking a task force in which a carrier has radar or a radar-equipped base, the CAP player is entitled to know the total number of factors in each strike aircraft formation. Once CAP factors are allocated, the strike player reveals the identity of each striking air formation.

6. When attacking, a player rolls 1 die per attacking air factor against that factor's attack value. The next roll is made against the target's defense rating and the third against the target's armor rating plus the attacker's gun rating. A successful roll results in an attacked factor being lost. Record aircraft losses on the air group cards. See the Air Combat Special Rules table for special modifications to these ratings.

7. Air combat between formations is simultaneous.

8. Strike aircraft have 2 attack values. The first is used if they are not carrying ordnance and the second is used if they are loaded.

9. The same process is followed for withdrawing waves, but with the CAP's CAP factor doubled.

10. *Example: 4 factors of A6M2s intercept a wave of 3 SBD-3 factors and 4 F4F-3 factors. The CAP player elects to have 1 A6M2 factor engage the F4Fs and 3 engage the SBDs.*

a) *First, the escort-CAP attack is resolved. The A6M2 rolls 1 die against its attack rating of 5 and comes up with a 4, so the attack continues. 1 roll is made against the*

F4Fs' defensive ratings of 2. A 1 is rolled. The final die is rolled against a 3 (the F4F-3 armor rating of 1 plus the A6M2 gun rating of 2). A 2 is rolled, resulting in the loss of 1 F4F factor. Two F4F factors attack the A6M2 factor but miss it.

b) Next, the 2 unengaged F4Fs attack the 3 unengaged A6M2s. They roll successfully against their attack rating of 4, but 1 rolls higher than required for the gun-armor roll so that only 1 A6M2 factor is eliminated.

c) The remaining 2 A6M2 factors then engage in combat with the SBDs.

d) The process is repeated, with adjustments, after the SBDs deliver their bombs.

L. Air Attacks and Anti-aircraft Fire.

1. If strike aircraft survive the initial round of CAP combat and their target is a task force, the CAP player now informs the striking player of the ships in that task force.

2. Air attacks and AA fire are resolved air formation by air formation. The player directing the strike allocates the strike factors of a strike formation to the ships in the task force. The player owning the task force then allocates AA fire among the attacking groups. AA fire is resolved and losses taken, then the striking air factors attack their targets.

3. AA fire resolution requires 3 die rolls: first against the firer's fire control value, next against the total AA value divided by 3 (with results of more than 6 entitling the firing player to an additional roll for the excess) and finally against the gun value for the AA (1, unless otherwise specified) plus the target's armor. Roll for each air factor being attacked.

4. Example: 4 B5N torpedo bomber factors attack the Enterprise. She is steaming in company with a screen that can generate 30 heavy AA points, and she has 4 light and 4 heavy AA factors. The screen contributes 15 AA points to the mix and the Big E throws up 8, for a total of 23. Divided by 3, this rounds to 8 points. The US player rolls 4 dice, noting that his fire control value against torpedo bombers is 3. He rolls a 1,3,4,6. Because of the 6 AA factors he knows that he will be rolling at least 2 dice against the B5Ns' armor to see if he shot down any B5Ns. He also rolls against the remaining 2 AA factors for additional potential hits, rolling 2 dice and looking for 1s or 2s. He rolls 1 and 4. He now rolls 3 dice (2 for the 6 AA factors and 1 for the last successful die roll) against a 3 (the B5Ns' armor factor of 2 plus 1 for the AA gun value). He rolls a 1, 3, and 5, and 2

factors of B5Ns either splash or sheer off before their attack is made.

5. AA Formations. Task forces steam in AA formation. This consists of a circular ring of up to 12 ships with up to 12 ships at the center. The player of a task force being attacked lays out the ships in his or her formation when it is first attacked. A center ship may only fire at aircraft attacking it. A ship in the ring may fire its heavy AA at full strength at aircraft attacking it, at 1/2 strength at aircraft attacking ships in the center of the formation (1/4 strength for Japanese formations), or at 1/4 strength at aircraft attacking other ships in the ring. A ship's light AA may only fire at aircraft attacking the ship itself. Record aircraft losses on the aircraft formation cards.

6. Aircraft ordnance hit resolution requires 3 die rolls, but operates in a slightly different way than air-to-air or anti-aircraft combat. One die is rolled for each attacking air factor in the formation; the hit chart for the attacking formation is then consulted to determine the number of potential hits. Next, roll dice equal to the number of potential hits against the target size of the defender to determine actual hits. Finally, roll dice against the defender's defense rating plus the attacking ordnance's penetration value. The owning player keeps track of the number of hits scored against each ship or base.

7. Example: Continuing the previous example, the 2 surviving B5N factors resolve their attack against the Enterprise with a "3" to hit value. The Japanese player rolls 2 dice for a 1 and a 3 and consults the Strike Aircraft to Hit table, using the "3" to hit column. He sees that he has scored 5 potential hits. Next, he rolls 5 dice against the Enterprise's size factor of 5. He rolls one 6, leaving 4 potential hits. He finally rolls 4 dice, looking for 2 or less (the torpedoes' penetration of 3 less the Enterprise's armor factor of -1). Rolling a 1, 4, 4, and 6, he informs the American player that the Enterprise has taken 1 torpedo hit.

M. Damage Resolution.

1. The owning player secretly rolls 1 die for each effective hit scored during the strike and then consults the appropriate table to determine the effects of the hit. The effects are recorded.

N. Fractions of 1/2 or greater are rounded up.

O. Combat die roll values are never reduced below 1, except for certain air combat values that are treated as noted in the Air Combat Special Rules table.

VIII. Damage Control. The owning player rolls 1 die for each hit

scored on a ship or base to determine if the hit is removed or (for ships) becomes permanent. Each player makes these rolls secretly.

A. Ships with a damage control rating of 1 remove a hit on a die roll of 1-3. Ships with a damage control rating of 2 remove a hit on a roll of 1-4.

B. Fire (F) Hits. F hits are a special case because they may continue to cause damage until they are removed.

1. Always roll to remove F hits first. Roll for each F hit and consult the Fire Damage table.

2. This process is repeated until all fires are extinguished or the ship is abandoned or sunk. Note that additional P, M, S and T hits caused by a fire are automatically permanent. Roll for them on the appropriate bomb/gunfire damage table for the ship, with all of the usual consequences, except for additional fires.

C. 3 P hits or 5 F hits will eliminate a ship at the instant the last such hit occurs, regardless of damage control attempts.

D. Bases. Hits on bases never become permanent. Each turn, the owning player rolls to see if 1 hit is removed. A hit is removed on a 1-3.

IX. Movement. Ships move across the playing surface. Each inch on the playing surface equals 24 nautical miles. Each player moves his or her ships in the following manner.

A. Players roll for initiative. Each player rolls one die and adds the number of currently spotted enemy task forces. The player with the lower roll moves his task forces first. Reroll in the event of a tie.

B. Each player moves his task forces out of sight of the other player. He move his real task forces (those containing ships) as he has plotted. He moves his dummy task forces in any way he pleases.

C. Task forces may move no faster than the speed of the slowest ship that they contain, and never faster than 6 inches.

D. Speed and Fuel. Optional: At higher speeds, ships burned enormous quantities of fuel. To simulate this, any task force that moves at a speed of greater than 5 inches must roll 1 die that turn. On a 1, all of the ships in that task force are limited to a speed of no more than 4 inches for all future turns.

E. Ships may enter and exit the playing surface from their friendly edge. Once exited, ships may not re-enter the grid.

F. Task Forces. All ships are organized into task forces at the start of the game. A task force can contain from 1 to 18 ships. Players use matching task force counters to keep track of the composition of each task force. Place the ships in the task force under the appropriate numbered task force counter. Task forces can divide into smaller task forces at the end of any Damage Control phase.

- G. Ship Speeds and Air Operations. Carriers engaging in air operations in a turn have their speed reduced by 1 inch. Air operations include providing search or CAP aircraft or launching a strike.
- H. Duration of Spotting. Once spotted, a task force remains spotted until the following search phase. This is so even if CAP for the task force shoots down a searcher.
- I. Towing. If a ship in a task force sustains 2 permanent P hits, it must be towed to be moved. A ship may be towed by another ship if the other ship has no P hits and is no smaller than the ship being towed. For this purpose, CVs are considered to be large ships and CVLs, CVEs and merchantmen are considered to be small ships. Ships are towed at a speed of 1 inch per turn.
- X. Surface Combat. Surface combat may be played out using the *Surface Action* surface warfare rules, or by the quick resolution method set out below. Two opposing task forces within 1 inch of each other may engage in surface combat.
- A. The engagement is automatic if each task force is spotted and both players wish it.
- B. If only 1 player wants to engage, the engagement will take place on a die roll of 1-3.
- C. Die roll modifiers are +1 during a night turn, +1 if the force seeking to engage has any ship with a P hit, -1 if the force seeking to avoid the engagement has any ship with a P hit.
- D. Day visibility range is always 36,000 yards. Night visibility range is rolled for on 1 die. On a 1 or 2, the range is 6,000 yards, on a 3 or 4 it is 12,000 yards, and on a 5 or 6 it is 18,000 yards.
- E. For *Surface Action*, ships are placed on the playing surface at the maximum sighting distance, steaming toward the center on opposing courses.
- F. Quick Resolution Surface Combat. The following rules apply to the quick resolution of surface combat.
1. Surface Combat Values. Ships have the following values assigned:
 - a) Primary gun strength – the strength of the ship's main gun battery,
 - b) Primary gun type – the type of main battery guns carried (BB, CA, CL, DD),
 - c) Secondary gun strength – the strength of the ship's secondary gun battery, if any,
 - d) Secondary gun type – the type of the secondary battery guns carried (CL or DD),
 - e) Torpedo strength – the strength of the ship's torpedoes, if any,
 - f) Defensive strength – the ship's ability to resist enemy weapons, and
 - g) Type – the type of ship (B, C, D, or M).
2. Basic Concept. The system is odds-based; that is, combat results are determined based on the odds achieved by comparing each side's offensive strengths to the opposing side's defensive strengths. When computing odds, results are rounded in favor of the defender. In each round, each side must try to attack the maximum number of enemy ships at 1:2 odds in a combat round. No ship can be attacked at more than 1:2 odds until all ships are attacked at least 1:2 odds. A single ship's offensive factor cannot be divided between two or more defending ships.
3. Combat Rounds. In daylight, combat is fought in three rounds.
- a) First, all BB, CA, and CL offensive gun factors are used to attack defending ships, and combat results are resolved.
 - b) Next, all DD factors are used, and combat results are resolved.
 - c) Finally, torpedo factors are used at the option of the owning player, and combat results are resolved. A ship can use its torpedo factors only once in a scenario (barring reloads, which will be specified for individual ships), and the owning player can always elect not to have a ship use its torpedo factors in the torpedo combat round.
 - d) When the action is fought at night with 18,000 yards visibility, the first two rounds are combined.
 - e) In all other conditions, all three rounds are combined.
 - f) Each side resolves a round simultaneously, unless it succeeds in surprising the other side.
 - g) Note: Specially designated LL Japanese torpedoes can be used in the DD factor phase, but at ½ strength.
4. Factor modifications. Ship defensive factors are multiplied based on the weapon type attacking them, as shown on the Factor Modification table.
5. Combat resolution. Once the odds are determined for a particular ship target or targets, consult the Damage Point table to determine the damage point for the ships being attacked:
- a) The "damage point" is the number that each attacked ship must exceed in a roll of 1 die to avoid being damaged or sunk.
 - b) If a ship fails to roll above its damage point, it immediately rolls against its quick combat damage control value. This is equal to the ship's normal *Sea Wings* damage control value plus 1. If the roll exceeds the ship's damage number, the ship is damaged; otherwise, it is sunk. Damaged ships roll 3 dice for damage on the Quick Surface Combat Damage table. All hits received on this table are permanent.
- c) Note that a ship rolling for damage can also sink by accumulating 3 P hits.
- d) Sunk ships are not available in subsequent rounds of combat.
- e) For odds of 3:1 or greater, subtract 3 from the odds and roll twice for each attacked ship – once at 2.5:1 and once at odds equal to the higher number minus 3. *Example, with odds of 4.5:1, roll once for 2.5:1 odds (with a damage point of 5) and once at 1.5:1 odds (with a damage point of 3).*
6. Initiative. Each player rolls 1 die to determine which side has initiative before each combat round, whether combat is fought or not. The player with the higher roll has initiative. Use the modifiers designated by scenario rule for each side and its leaders. The side with initiative can designate which of its ships will fight in that combat round. If no ships are designated to fight, the engagement concludes. The side breaking off the engagement in this way must, in the following movement phase, move away from the scene of the engagement at its maximum task force speed.
7. Surprise. For each round of combat in reduced visibility, roll for surprise. One side succeeds in surprising the other if it exceeds the other's initiative roll by 3 or more. Otherwise, neither side surprises the other and play proceeds normally. A side surprising the other can either elect to attack first in a combat round, having the damage that it inflicts take effect before the other side can respond, or move to the next combat round (if there is one) without combat.
8. *Example: The cruiser San Francisco, in company with the destroyer Aaron Ward, stumbles across three Japanese destroyers: the Naganami, Makinami and Takinami. The U.S. cruiser has a primary battery of 8CA, a secondary battery of 4DD and a defensive rating of 9C. The Aaron Ward has a primary rating of 5DD, a torpedo rating of 5, and a defensive rating of 5D. The Japanese ships each rate 6DD, 12LL (signifying Long Lance torpedoes) and 5D. The engagement is in daylight. The Japanese player wins the initiative roll and elects to engage with all ships. The action begins with San Francisco firing at the Japanese destroyers. Consulting the Factor Modification table, the U.S. player sees that the cruiser's CA gun factor is halved when firing at a destroyer. This means that the cruiser will*

attack 1 destroyer at 1:2 odds (4:5 rounded down). The U.S. player attacks Makinami and rolls a 1, causing the Japanese player to roll to see if Makinami sinks. The Japanese player rolls a 4, and Makinami disappears beneath the waves. The U.S. player wins the next initiative round and, emboldened by his success, elects to continue to the next round with both ships. He has San Francisco engage one destroyer at 1:2 and the Aaron Ward engage the other at a 1:1. The Japanese player decides to launch his Long Lances at long range. He must allocate 1 destroyer's torpedoes to the U.S. destroyer and the other to the cruiser. The attack against the destroyer will be at 1:2 odds (12 divided by 2 for range and 2 again for a D target, compared to the Aaron Ward's defensive strength of 5D). The torpedo attack against the cruiser is also at 1:2 odds. The Japanese player will also attack the cruiser with gunfire at 1:2 odds (10 factors divided by 2 versus a defensive strength of 9C). Note that the Japanese could not use his guns to attack the Aaron Ward at better than 1:2 odds without attacking the cruiser at 1:2 odds – he does not have enough gunpower to attack both. The U.S. player rolls a 4 and a 5, completely missing the Japanese destroyers. The Japanese player rolls a 4 for his gun attack for no result and a 3 for his torpedo attack against the Aaron Ward, but he rolls a 1 for his torpedo attack against the San Francisco. The U.S. player rolls a 3 for damage control, so the Frisco does not sink outright. He then makes three damage rolls on the Surface Combat table, rolling a 1, 2 and 5. San Francisco is dead in the water with 2 P hits and 1 S hit. The Japanese player wins initiative on the next turn and elects to disengage. He has lost a destroyer, but crippled a heavy cruiser.

- XI. Card Decks. At the start of a scenario, players form card decks and card hands in accordance with the scenario instructions.
- A. The scenario rules tell the players how many event cards and dummy cards should be in their decks.
 - B. The scenario rules may also provide for the players may start with "random" cards in their hands. "Random" cards should be drawn randomly from the scenario deck.
 - C. The scenario instructions will specify the number of cards that the players should draw each turn from their scenario decks.
- XII. Event Cards. As players draw cards from their scenario decks, they may draw event cards that can subsequently be played on ships or air formations. The effects of these cards and the timing of their play are explained on the cards themselves.

- XIII. Convoys. Some *Sea Wings* scenarios feature convoys. Convoys cannot fire. Every effective hit on a convoy sinks one of the ships in the convoy. Convoys can only be placed at the center of anti-aircraft ship formations. Players should keep track of ships sunk from a convoy on a separate sheet of paper or by number counters on the convoy card.
- XIV. Scenarios. A game of *Sea Wings* involves the play of a scenario. Each scenario specifies the content of each player's card deck, the identity and placement of any task forces beginning on the play grid, the size and content of each player's starting card hand, victory conditions and any special rules. A scenario ends when one side's ships are all either sunk or off the playing grid or the time limit for the scenario expires.
- XV. Victory Conditions. The standard victory points for *Sea Wings* scenarios are shown below. The player with the most points at the end of the scenario wins, subject to scenario conditions. These conditions may apply by scenario special rule.

Victory Points Table

	BB/BC/CV	CA/CVL	CL/CVE	DD/TB
Sunk	24	12	6	3
2P Hits	16	8	4	2
P Hit	8	4	2	1

The table shows the points received for ships in the condition shown either when the scenario ends or when the ship is withdrawn from the playing grid. 2 points for every carrier air factor lost; 1 point for every other air factor lost.

Ship Hit Effects – Bombs or Gunfire

Ship Type	BB/BC	CA	CL	DD/TB	CV	CVL	CVE
1	P	P	2P	Sunk	P	2P	2P
2	M	P	P	2P	P	P	PA
3	S	M	M	TP	A	A	A
4	NE	S	S	P	A	A	A
5	NE	T	T	M	S	A	A
6	NE	NE	NE	T	S	S	S

Ship Hit Effects -- Torpedoes

Ship Type	BB/BC	CA	CL	DD/TB	CV	CVL	CVE
1	2P	2P,S	Sunk	Sunk	2P	2P,S	Sunk
2	P	2P	2P,S	Sunk	P	2P	2P,S
3	P	P	2P	2P,T	P	P	2P
4	M	P	PM	2P	A	P	PA
5	M	M	P	2P	A	A	P
6	NE	M	M	PM	NE	A	A

Base Hit Effects – Bombs or Gunfire

Base Type:	Large Land	Small Land	Seaplane
1	A	A	A
2	S	A	A
3	S	S	S
4	NE	NE	NE
5	NE	NE	NE
6	NE	NE	NE

If the final Pen number is less than 1 for bombs or gunfire, only fires and secondary hits count.

P = Propulsion - lose 1/2 original speed, 1/2 launch capacity

M = Main Guns - lose 1/2 original main guns

S = Secondary Guns - lose 1/2 original secondary guns, AA and radar

T = Torpedoes - lose 1/2 original torpedoes (if present)

A = Air Operations - lose air launch capacity and 1/2 of all air factors on ship or base (1/4 factors for dispersed aircraft)

NE = No effect

A ship with 2 P hits cannot operate weapons or aircraft. A ship with 3 P hits sinks. A ship with 5 fires is abandoned. A natural 6 (5 or 6 for carriers) on either table starts a fire. For carriers with readied aircraft, a 2, 3 or 4 starts 1 fire, a 5 starts 2 and a 6 starts 3.

BB/BC means battleship or battlecruiser. CA means heavy cruiser (including German panzerschiffe). CL means light cruiser. DD/TB means destroyer or torpedo boat. CV means fleet carrier. CVL means light carrier. CVE means escort carrier.

Base armor is always considered 0. Base repair number is 1. Bases never have fires or permanent hits.

Fire Damage

Damage Control Number	1	2
To Extinguish F Hit	1-3	1-3
Add Permanent Hit	4-6	6
Add F Hit (non-carriers)	6	--
Add F Hit (carriers)	5-6	6

Strike Aircraft To Hit:

Hit Number:	Die Roll:					
	1	2	3	4	5	6
0	1	0	0	0	0	0
1	1	1	1	0	0	0
2	2	2	1	1	0	0
3	3	2	2	1	1	0
4	3	3	2	2	1	1
5	3	3	3	3	2	1

For attacking strike aircraft only, determine possible hits by rolling 1 die per attacking factor against the aircraft hit number and cross-indexing the result for the number of hits.

Air Search Arc

One air factor can search the arc shown at the indicated range.

Range:	5"	7.5"	10"	12.5"	15"	20"	25"	30"	35"
Arc:	180°	120°	90°	75°	60°	45°	35°	30°	25°

Air Search Attrition:

Searching factor lost if:

Search at:	First Roll	Second Roll
Normal range	1	1
Extended range	1	1-3

A search is at extended range if it is at more than 80% of the searching aircraft's maximum search range.

Air Search Information. Information available from searching based on a die roll.

Die Roll	Information
1	Ships present
2,3	Ships present, half to double actual numbers
4	Ship types present (carrier, large ship, small ship, merchantman), half to double aggregate numbers
5	Ship types present, half to double numbers of each type
6	Ship types and precise numbers present

Large ship = battleships, battlecruisers and cruisers; small ship = destroyers and torpedo boats

Air Strike Order Modifiers

Modifier	Condition
-1	Land-based searcher and land based strike or vice versa
-1	Target launched two strikes
-2	Strike aircraft returning to target, per strike

Air Combat Special Rules Table

Modifier:	Condition:
CAP rating X2	Attack against withdrawing wave
CAP rating X1/2	Attack against search aircraft not attacking
CAP rating X1/2	Emergency CAP's first attack
Attacker's attack factor X2	Attack against loaded torpedo bombers
Attacker's attack factor X1/2	Attacker's gun factor minus target's armor is 0
Attacker's attack factor X1/4	Attacker's gun factor minus target's armor is -1
Use second attack factor	Loaded strike aircraft
AA fire control factor +1	Against torpedo bombers attacking
No CAP defense roll	Unengaged escort vs CAP

Quick Surface Combat Factor Modification Table

Weapon Type→	BB	CA	CL	DD	T
B Target	1 x	2 x	4 x	4 x	2 x
C Target	2 x	1 x	2 x	2 x	1 x
D Target	4 x	2 x	1 x	1 x	2 x
M Target	2 x	1 x	1 x	1 x	1 x

Players consult this table to determine how ship defensive ratings are modified based on the types of weapons attacking them. In addition, the defensive value of a ship with 2 P hits attacked by torpedoes is halved.

Quick Surface Combat Damage Point Table

Odds:	1:2	1:1	1.5:1	2:1	2.5:1+
Damage Point:	1	2	3	4	5

After computing odds, players roll 1 die for each ship being attacked and consult this table. If the number rolled is less than or equal to the number shown on this table for the relevant odds, the ship has suffered a combat result. The player then rolls 1 die against the ship's *Sea Wings* damage control value plus 1 to determine if the ship has sunk outright.

Quick Surface Combat Damage Table

Die Roll:	1	2	3	4	5	6
Damage:	P	P and A	M or A	M or A	S or T or M	T or S or M

If a ship is not sunk by a combat result, the owning player rolls 3 dice and consults this table to determine the damage that the ship has received. For alternative results, the ship takes damage in the first weapons category listed that it possesses. Die roll modifier of -1 for attacks by torpedoes, with 0 counting as 1.