

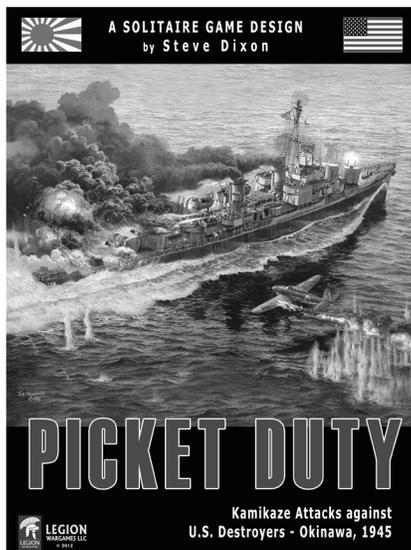
RULES OF PLAY



PICKET DUTY



Kamikaze Attacks Against U.S. Destroyers - Okinawa, 1945



The US Navy first faced Kamikaze attacks in October 1944, near the Philippines. By the time of the invasion of Okinawa in April 1945, the US Navy devised a plan to help ward off the expected kamikaze attacks during the battle for the island. In order to provide an early warning system for impending kamikaze attacks, the US Navy established 16 radar picket stations around the island. Destroyers manning these stations – in most cases – had a Fighter Direction Team to coordinate and call fighters to a station to combat incoming kamikazes. Despite these efforts, the kamikazes still managed to get through and inflict horrific damage to US ships.

The entire air-sea battle off Okinawa lasted until August, 1945. At least 21 ships were sunk (8 of them Fletcher class destroyers), and 194 ships suffered damaged ranging from minor to severe. Crew casualty figures range from 9,700 to 12,000 killed and wounded.

Picket Duty is a solitaire game where you -- as the captain of a Fletcher Class destroyer -- must protect the fleet and fend off kamikaze attacks while performing picket duty off Okinawa. The game covers the time period from late March 1945 to late June 1945. To win you must survive. Needless to say your task will not be easy.

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Ω - Advanced Rule not used in the Basic Game.

Section 1.0

GAME COMPONENTS

The following items are included in the game:

- Tactical Map
- Counters – 5 sheets (160 x 1.2” and 240 x .6”)
- Rule Book
- Charts & Scenario Book
- Player Aids – 4 charts (Ship’s Log, Time Sheet, Firing Reference Tables, Secondary Compartment Sheet Ω)
- One 10-sided (d10) die and two 6-sided (d6) dice.

1.1 The Map

The upper half of the map contains tracks and boxes to indicate or track the following:

- Station Assignment & Surface Fire Support.
- Air Fire Support and FDT availability.
- Ship and Land based radar levels.
- Ship morale level.
- Current status of compartments & equipment.
- Levels of various ships wares and damage.
- Time of day and Weather.
- Gun Director Damage.
- Damage Control Team assignments.
- Flooding and List & Trim.
- Japanese Waves and Special Attack aircraft.

For repair purposes the Forward Section is known as Repair One, Midship Section as Repair Two, and Aft Section as Repair Three.

The lower half of the tactical map depicts a top down view of a Fletcher Class destroyer. The destroyer’s armament consists of five 5” turrets, five 40mm gun tubs and seven 20mm gun mounts. From the bow, the five main 5” guns are numbered 1 -5 and they have a corresponding magazines shown above the destroyer – also numbered. The 40mm and 20mm guns also have magazines assigned to them.

Surrounding the destroyer are eight bearing areas depicting angles from 0 to 315 degrees. Japanese planes are placed here when called for during Japanese attack sub-phases.

1.1.1 Compartments & Equipment

A. There are two types of compartments & equipment – Primary (located on the map) and Secondary (located on a separate sheet -- See Rule 1.6).

B. The Primary compartments are located in three sections of the ship, labeled as:

- Repair Section 1 – Forward
- Repair Section 2 – Midship
- Repair Section 3 - Aft

C. The compartments & equipment on the map have other boxes in them to indicate hits, and if the compartment is destroyed.

Note: A blue background in the compartment name indicates it may be flooded due to damage.

1.2 Map Tracks & Boxes

1.2.1 Tracks

There are six (6) tracks on the map that are used to record the level of damage to the destroyer, the expenditure of ships stores and its ability to maneuver.

1. **Ammo Supply** – this track records the amount of ammunition remaining. When the track reaches “0” you are out of ammo and must return to anchorage for refit.
2. **Hull Integrity** – this track records the damage your hull takes during the game. When it reaches zero your ship may sink.
3. **Maneuvering** – this track records the ship’s ability to maneuver. As the ship takes damage in certain areas, it loses the ability to maneuver.
4. **Fuel Supply** – this track records the amount of fuel remaining. When it reaches “0” you are out of fuel and must return to anchorage for refit.
5. **List & Trim Ω** – as the ship takes damage and compartments are flooded, the ship will begin to list and/or lose trim. The track records listing to port and starboard, and bow and stern trim (See Rule 6.9).
6. **Flooding Track** – this track records the amount of flooding your ship has incurred.

1.2.2 Boxes

Assignment Station –indicates the radar picket station your ship has been assigned to. Also holds any Surface Fire Support markers available.

Time of Day Box - indicates the time of day for each phase of a game turn: morning (0400 – 1200); midday (1200 – 2000); evening/night (2000 – 0400).

Weather Box – indicates weather status for the current phase. (See Rule 6.2)

Air Fire Support – holds the FDT status modifier chit (See Rule 5.1), and the Carrier Based and/or Land Based Air Support markers available (See Rule 6.5).

Ship Morale Box - records the current morale level on the ship. (See Rule 8.1)

Land Radar Activation Level - records the current level of land based radar stations (See Rule 5.3)

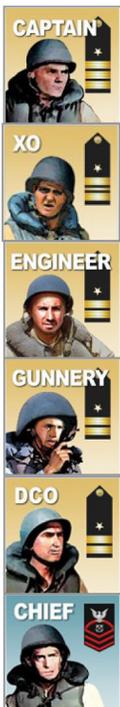
Ship Radar Level - records the current level of ship based radar (See Rule 6.4).

1.2 Crew Counters

1.2.1 Officers and Petty Officers

A. There are five officers and one Chief Petty Officer. For game purposes, all are considered Key Officers.

B. Key Officers use their value (determined at the start of the scenario - See Rule 2.A), to assist with designated functions during the course of the game.



Captain – his value is used to modify a morale check at the end of each turn and when performing evasive maneuvers.

Executive Officer – his value is used to modify damage repair attempts in one compartment only.

Engineering Officer – his value is used when attempting evasive maneuvers, and for repair attempts in certain compartments.

Gunnery Officer - his value is used when determining hits on Japanese planes during the defensive fire phase.

Damage Control Officer – Applies his value to all repair attempts in one section only.

Chief Petty Officer – his value is used for a morale check at the end of each turn.

1.2.2 Damage Control Teams

A. Damage Control Teams consist of three Repair Chiefs and their corresponding team. Each team consists of a fixed number of men.

- Repair One - 14 crew counters
- Repair Two - 10 crew counters
- Repair Three - 13 crew counters

B. Repair Chiefs 1, 2, and 3 are the respective leaders of their section – represented by the number on the marker. Their value is used when attempting repairs in their respective sections (See Rule 2.A).

1.3 Markers and Chits



Damage Markers: There are five types of damage markers represented: Hit (ship and kamikaze), Fire, Flood, and Destroyed.



Track Markers: The five track markers are used to indicate ammo supply, fuel supply, hull integrity, maneuver capability of the ship and flooding.



Target Markers: Each weapon on the ship has a specific target marker. 5” guns have additional markers for the Mk 37 Controller used in the Advanced Game.



Time of Day and Weather Markers: Used to track time and weather for each phase.



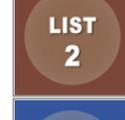
Deck Fire Marker: Used to indicate the level of deck fires present in each section.



FDT Present Marker: Indicates if you have a Fighter Direction Team assigned to your ship.



Land Radar Active Marker: Used to indicate when Land Radar Stations are activated.



Ω List & Trim Markers: Indicates severity of list & trim. Values are interchangeable; example - a 5 marker can replace a 2, 2 & 1.



Morale Marker: Used to indicate the state of the crew’s morale.



Ship Radar Value Marker: Indicates value of ship radar.



Station Marker: Used to indicate the radar picket station your ship has been assigned to man.



Value Chit: Drawn to determine the value of certain functions of the ship and crew ranging from -2 to +2.



Kamikaze Marker: Used to denote kamikaze attacks.

Note: The red circle, with a bomb, torpedo, or Ohka, denotes a Special Attack aircraft (See Rule 6.6.D).

Spray Fire Marker: Used only in Special Attacks (See Rule 6.10.C).

Air Fire Support Marker: Air Air Fire Support markers are Land Based or Carrier Based, and can be used during day and night phases

Surface Fire Support Marker: Used to indicate availability of surface support at your assigned Picket Station.

Section 2.0 GAME SET UP

A. Lay out the map and counters on a large table. Place the Value Chits numbered -2 to +2 in an opaque cup. Mix the Value Chits well and draw a Value Chit and record the value of each on the Ship Log Sheet in the space provided for each of the Key Officers: Captain (CO), Executive Officer (XO), Engineering Officer, Gunnery Officer, Damage Control Officer, Chief Petty Officer and each of the Repair Chiefs. Return the chits to the cup once the values have been noted.

B. Place the Officer Crew counters on their respective starting compartments. The Captain Counter is always considered on the bridge. At the start of the game, the Executive Officer starts the game on the bridge. The Gunnery Officer and Damage Control Officer start the game in the CIC compartment. The Engineering Officer may start the game in either the Forward or Aft Engine Room.

C. The Chief Petty Officer may be placed in any Primary compartment at the start of the game.

D. Once the game commences, all officers (except the captain) may move to other compartments as needed for repair purposes. This is done before repair attempts are made.

E. Place all kamikaze Counters in a large opaque container. There are 35 different types of Japanese planes represented. Exception: Place 1 Sally, 1 Betty, 1 Peggy, 1 Jill, 1 Grace, 1 Judy, 1 Kate, 1 Myrt, 1 Val and 1 Zeke -- all with a special attack symbol (indicated by a red circle) -- to the side in the event a random attack is called for on Table 8.2.

F. Place the Hit, Fire, Deck Fire, Flood and Destroyed markers in separate piles nearby. You will be using these throughout the game to mark damage on your ship and kamikazes.

G. Place the Flood, Hull Integrity, Maneuver Capability, Fuel Supply and Ammo Supply markers on the “10” space of the appropriate track. The color coding is a quick visual cue for the player – green is optimum, yellow is caution and red is critical.

H. Ω Place List/Trim Counters in the Ship Angle box of the map. They will be used when your ship starts to list and/or loses trim.

I. Place the Morale Marker in the zero position on the morale track.

J. Each 5 in. gun turret, 40mm gun tub, and 20mm gun mount on the ship is either numbered or lettered. There is a corresponding Target Marker for each one. These markers are placed on kamikazes during the defensive fire phase of the destroyer.

1.4 Ship’s Log Sheet

The Ship Log Sheet is used to personalize your ship and crew, keep track of important damage to your ship, and to note Japanese planes shot down and from which side they hit the ship.

1.5 Time Record Sheet

The Time Record Sheet is used to keep track of each turn as the game progresses. It is also used to denote when Land Radar Stations become active (date in green) and when Kikusui attacks occur (date in red). Dates available to be played in Design-Your-Own scenarios but outside the regular game scenarios are marked in yellow.

1.6 Ω Secondary Compartment Sheet

The Secondary Compartment Sheet is used to keep track of damage to secondary compartments. There are two boxes shown on the secondary compartment sheet. The left box is checked when the compartment is “damaged” and the right box is checked when the compartment is “destroyed”.

Note: The Secondary Compartment Sheet is only used in the advanced game.

K. Using the Ship's Log Sheet, give your ship a name and name your officers. If you wish to use historical names of Fletcher Class destroyers that participated in the Okinawa campaign, a list has been provided following the rules section.

L. Decide whether you will play a scenario, mini-campaign or the full campaign (See Rule 12).

Section 3.0

SEQUENCE OF PLAY

A. A game turn is comprised of the following phases: morning (0400 – 1200); midday (1200 to 2000) and evening/night (2000 – 0400) and one end of turn maintenance phase. Once these phases have been played, mark off the corresponding day on the Time Record Sheet.

B. Each phase is further divided into sub-phases as follows:

- Determine Weather (See Rule 6.1 and 6.2)
- Determine Air Support (See Rule 6.5)
- Determine Japanese fighter placement (See Rule 6.6)
- Defensive fire (See Rule 6.8)
- Japanese Attacks (See Rule 7.1) Attacks will be comprised of one or more waves (See Rule 6.6.G)
- Special Attacks (See Rule 6.10)
- Damage Control Crew Placement and Control (See Rule 7.6)
- Damage Control Resolution (See Rule 7.7)
- C. End of turn additional phases:
 - Maintenance – morale, ammunition supply, fuel supply, determine victory (See Rule 8).
 - Replenishment or Repair – determine refit time if applicable (See Rule 10)
 - Proceed to next turn, or end of game (See Rule 9)

Section 4.0

START OF TURN – DUTY STATION



A. Prior to the execution of the first phase of the first game turn, your duty assignment is determined. You will remain at this station until sunk, forced to retire due to damage (See Rule 10) or reassigned.

B. If you are playing the basic game, consult Table 1-1 for station assignment. If playing the advanced game, consult Tables 2-2 through 2-4, depending on date.

Section 5.0

FIGHTER DIRECTION TEAM

5.1 Determining Fighter Direction Team



A. Consult Table 3-1 to determine if a Fighter Direction Team (FDT) is assigned to your ship. If a FDT is assigned, place the FDT counter on the space on the map.

B. If a FDT is assigned, shift one (1) column to the right when determining Japanese attacks on Table 8.1. If no team is present, shift one (1) column to the left. (See Rule 6.6.B)

C. If an FDT is lost during combat, it is not replaced until you are assigned to a new duty station or you are assigned a new ship due to losses.

5.2 Surface Fire Support (SFS)



A. Surface Fire Support availability is determined by using Table 4-1. Roll two d6 dice to determine the number of SFS markers you will have available during the Defensive Fire phase (See Rule 6.8).

B. If no SFS is available, then there is a two column shift to the left when determining if Japanese attack. For each SFS marker available to the player, there is a one column shift to the right on Table 8-1 (See Table 8-1 for all column shift modifiers).

C. SFS markers can be used during wave attacks (Rule 6.6) and special attacks (See Rule 6.10).

D. If SFS markers are used during special attacks, the markers are placed on the plane making a special attack, then resolved per Rule 6.10.

E. Once SFS availability is determined it will remain the same throughout your tour at the assigned duty station, unless SFS markers are lost due to combat (See Rule 5.2.G).

F. If a Japanese plane targeted by a SFS marker is shot down before the SFS marker is used, it is considered expended and may not target another plane until the next wave.

G. Should SFS markers be lost due to Japanese attacks, at the beginning of the next turn, not phase, after the marker was lost, draw a Value Chit. If the number is negative or 0, the marker is not replaced. If the number is positive, the marker is replaced. This procedure is done only once, it is not repeated in the following turns the ship remains on station, unless another SFS marker is lost.

H. If you are assigned to a new duty station or you continue combat with a new ship, then Surface Fire Support availability is determined again. In other words SFS is determined only when your picket duty station is determined.

5.3 Ω Land Based Radar

A. Land based radar is not used in the basic game, it is only used in the advanced game.

B. Activation is determined at the beginning of a turn and prior to weather determination.

C. Land based radar stations may become active on certain dates – as indicated by the green colored dates on the Time Record Sheet.

D. The station which may become active is noted on the time record sheet for the particular date.

E. A total of four land based stations can be activated during the course of the game.

F. If activated, a marker is placed on the appropriate box in the Land Based Radar Box on the map.

G. To determine if a land based radar station becomes active, consult Table 5-1.

H. If activated, land based radar stations will have the following effect when determining if Japanese planes attack: If one or two land-based stations are online, then a one column shift to the right is used when determining if Japanese planes attack on Table 8-1. If three or four are activated, then a two column shift to the right is used when determining if Japanese planes attack on Table 8-1. (See Table 8-1 for all column shift modifiers).

I. Should a land based radar station become inoperable due to a random event, then the column shift on Table 8.1 also changes when determining future Japanese attacks.

J. If the station is not activated, continue rolling on following turns until activated.

Section 6.0
THE PHASES
Morning – Midday - Evening/Night

6.1 Weather – Basic Game

A. In the basic game, the weather is always considered clear. Do not roll for weather.

6.2 Ω Weather – Advanced Game

A. In the advanced game, weather is always considered clear for the first phase of Turn 1. Weather is checked starting with the second phase of Turn 1.

B. Roll 2 d6 dice using Table 6-1 to determine the weather.

C. If the previous phase was a rain or storm result, subtract 1 from the current roll.

D. Place the weather marker on the matching space on the map.

E. If the result is clear, play proceeds to the next sub-phase – determining Air Support.

F. If the result is rain, roll 1 d6 die: If the result is 1 – 4, the Japanese do not attack and play proceeds to the next phase. If the result is 5 – 6, Japanese attack and play proceeds to the next sub-phase – determining air support. If the result is rain and Japanese do attack, a one (1) is added to the die roll when determining how many Japanese planes attack. It does not affect column determination.

6.3 Ω Weather – Advanced Game: Storm

A. If the weather result is storm, there is a possibility that your ship could be damaged or sunk. Continue rolling using Tables 6-2 through 6-5 to determine the fate of your ship.

B. The following results are possible when rolling for storm damage.

1. Mark off “X” days on calendar: for example – if the date is April 1 and a result of 1 is rolled on Table 6-3, 2 days are marked off the calendar. The player would mark off the dates of April 2 and 3 and resume play on April 4. This simulates the duration of the storm.

2. If the ship is damaged during the storm/typhoon, the player will continue to roll on tables 6-4 and 6-5. The ship could sink as a result of the storm or suffer damage to the hull.

3. If the ship sinks, the player would resume regular play on the next day with a new ship, crew, and duty station. In effect, go through the procedures as if starting a new game (See Rule 4).

4. If the ship returns to anchorage, roll on table 6-5 to determine the number of days to mark off on the calendar – the time it takes for repairs.

5. After repairs – a new duty station is determined, as well as air cover, surface support and replacing lost crew (See Rule 4).

6.4 Ship Radar

- A. At the start of the game your ship has two onboard radars – surface search and air search.
- B. When both radars are working, a one column shift to the right is used when determining if Japanese planes attack on Table 8-1.
- C. If one ship board radar is either damaged or destroyed, no modifier is used on Table 8-1.
- D. If both ship board radars are damaged or destroyed, then a one column shift to the left is used when determining if Japanese planes attack.
- E. Place the appropriate value marker of the ship radar strength in the box located on the map.
- F. If both ship board radars are destroyed, the ship must return to anchorage for repairs. (See Rule 10.G) The ship must head back for repairs at the end of the current phase.

6.5 Air Fire Support (AFS)



A. Tables 7-1 through 7-4 are used to determine Air Fire Support availability at the beginning of each phase. AFS is either carrier based or land based.

B. Based on the date, the player will roll on the appropriate table:

- March 24 – April 6: Table 7-1
- April 7 – April 15: Table 7-2
- April 16 – June 25: Table 7-3

C. For each type of AFS a player has (land and/or carrier based), pick a Value Chit and note the value. Return the chits to the cup once all values are noted.

D. Based on the Value Chit(s) drawn in 6.5.C, roll 2-d6 for each chit drawn on Table 7-4, cross referencing the result with the column based on the chit draw. The resulting number is the number of AFS markers of each type the player receives. These act as extra gun markers and work the same as SFS markers (See Rule 6.8.M), with the following exceptions.

E. Each AFS marker may be placed on any Japanese plane only once per Japanese attack in a phase; this includes Special Attacks. Keep in mind a Japanese attack can be comprised of 1 to 3 waves.

F. When placing AFS markers on Special Attacks, resolve these attacks per Rule 6.10.

G. If a Japanese plane is shot down before an AFS marker is used it may be assigned to another target if available.

Example: 2 AFS markers are assigned to attack a Zero at 6 Low. The first roll is a 6, shooting down the Zero. The second marker can now be reassigned to another Japanese plane if available.

H. If no air cover is available, then a two (2) column shift to the left is used when determining if Japanese attack on Table 8.1.

I. During Kikusui attacks only, the player rolls on Table 7-5 to determine the number of air support counters a player may receive.

J. A value chit drawn for each type of fighter support that is available (land, carrier), provides a column shift when determining if Japanese attack (see table 8.1). A positive number provides a shift to the right equal to the value of the chit and a negative number provides a shift to the left equal to the value of the chit.

6.6 Japanese Kamikaze Placement



A. The process to determining Japanese kamikaze attacks is done in two steps.

B. Sum the applicable modifiers listed below Table 8.1. Use this result to select the appropriate column on Table 8.1, and cross

reference the value with the die roll to determine which Attack Table is used. See notes under Table 8.1 for applicable column shift modifiers. Once the appropriate column is determined, roll 2d6.

C. The following modifiers are added or subtracted from the dice roll for Table 8.1: Rain adds +1 to the dice roll, and a player's assigned duty station may affect the die roll. See the notes under Table 8.1.

D. If a random result is obtained (RR) when rolling for Japanese attacks, roll on Table 8-2. Any Japanese attacks are considered special attacks (See Rule 6.10).

Example: As an example, let's assume clear weather, a FDT onboard (+1), all shipboard radar is working (+1) and AFS, land only, (value of +1). There is no SFS available so the value is (-2).

Adding all modifiers results in a 1, so we use the "1" column under Table 8-1. Rolling 2d6, we obtain a 6 and subtract 2 for picket station #1 giving us a 4.

Cross referencing the final result (4) under the "1" column reveals a letter. This letter refers to the Chart to use to place Japanese planes on the bearing positions. In our case it is the letter "D".

E. Next consult the appropriate lettered Chart and roll 2 d6 dice. No modifiers are used.

F. The number rolled will tell you how many planes attack, at what bearing position, and at what altitude (H – High, M – Medium, L – Low).

G. Depending on the number of planes, Japanese planes will attack in waves. Consult Table 8.3 to determine the number of waves and the number of planes in each wave. Place the designated number of planes for each wave – the first wave is placed on the map -- on the Japanese wave track located on the map.

H. When placing Japanese planes on the map, be sure there is a Japanese plane for each of the bearing positions determined as a result of Rule 6.6.F. Players may want to use a sheet of paper before each wave is placed on the map to note their clock position.

I. If a Japanese plane is picked with a special attack symbol, place the plane in the special attack box on the map (See Rule 6.10). Continue picking Japanese planes until the original number of Japanese planes as determined by Rule 6.6.F is fulfilled, and place them in the appropriate bearing positions as dictated by the lettered chart.

J. No more than two Japanese planes can be placed in the Special Attack box in this manner no matter how many waves attack. Any special attack planes drawn in excess of two (2) are ignored.

K. The special attack symbols (red circle) are an Ohka, torpedo and a bomb. The symbol is in the top left corner of the special attack plane counter. No symbol means the plane is not a special attack plane.

L. Planes in Special Attack boxes are fired at only after all Japanese planes in bearing positions for the current wave have been fired at, and damage determined. (See Rule 6.10).

M. If the phase is night, Japanese attacks diminish. When determining if Japanese attack during a night phase, roll one d6 die. If the roll is 5 or 6, Japanese attack as normal but with the number of planes reduced by 50%, round fractions down.

N. If a player picks an “Attack Ends” marker during the draw process, the draw of planes ends and all Japanese planes already drawn are returned to the container. Play proceeds without a Japanese attack.

O. The Attack Ends markers -- once drawn -- are not returned to the container until your ship, or your new ship, is assigned a new duty station or lost due to combat. At that time all Attack Ends markers are placed back into the container.

6.7 Ω Japanese Attacks – Kikusui

A. During the course of the Okinawa operation, the Japanese launched 10 Kikusui attacks against the US Navy. Dates which these attacks occurred are marked in red on the time record track.

B. Kikusui attacks only occur in the advanced game during a campaign or if stated on a scenario card. It is not used in the basic game.

C. When a Kikusui attack occurs, the placement of Japanese planes is determined in a different manner. Table 22 and 22-1 are used instead of Rule 6.6.

D. To determine the number of air support fire markers a player receives during a Kikusui attack, consult Table 7.5.

E. Roll two d6 dice using Table 22 as a reference. Cross reference the roll with the result column. The number in the result column determines how many planes attack your ship.

F. To determine the number of waves see Table 8.3.

G. Use Table 22-1 to determine bearing of planes.

H. If a plane is picked with a Special attack symbol, it is ignored and placed back into the container. Another plane is picked to replace it.

I. Once all Japanese planes have been placed, play proceeds in a normal manner for assigning guns and determining if Japanese planes hit the ship.

6.8 Defensive Fire



A. Once Japanese fighters for a wave have been placed in their appropriate bearing locations on the map the player can now assign his guns to fire at the attackers.

B. Defensive fire is repeated for each wave, with modifiers from damage sustained in previous waves applied.

C. In the basic game, any 5 in. gun may target any Japanese plane, as long it is able to fire in the designated clock position where the fighter is located.



1. Ω In the advanced game rule, all 5 in. guns are controlled by a single gun controller (the MK37). As such, all 5 in. guns may target only one (1) Japanese plane in a designated bearing position, providing the gun can fire into that bearing position. Place the target marker designated for the turret/s labeled with “MK 37” on the Japanese target. (Refer to the Firing Reference Chart).

Design note: the 5 in. guns were slaved to the target through the MK 37 and firing information fed to the plot room, which then fed the data to the turrets, and the turret then picked up the target and fired.

2. If any 5 in. gun is unable to fire at the target with the gun controller, it may target other planes manually. If it does so, the firing bonus for the gun is not used when determining if Japanese planes are shot down.

3. In the basic and advanced game, if the 5 in. gun controller becomes damaged or destroyed, the firing bonus for all 5 in. guns is lost. If the gun controller is damaged, it may be repaired and if successfully done, the firing bonus is immediately restored.

D. Each 40mm gun tub has its own gun controller. If the gun controller for a specific 40mm gun tub is damaged or destroyed, the firing bonus for that gun tub is lost. If the gun controller is damaged, it may be repaired and if successfully done, the firing bonus is immediately restored.

E. The 20mm guns were manually fired. They have no gun controllers, and no bonus.

F. Damage for gun controllers is tracked on the Gun Directors Area on the map.

G. Each gun can only fire into certain specified bearing positions. To see which gun can fire where, consult the Firing Reference Chart (FRC) located on the map. Exception: Surface Fire Support markers may be placed on any plane in any clock position. The Surface Fire Support marker may be used in each attacking wave and in a special attack if desired (See Rule 6.8.M). Air support markers may be placed on any one plane in any one wave or special attack (See Rule 6.5 E).

H. **Ω** Advanced game only: Guns are further restricted from firing if the ship reaches a certain list/trim angle. (See Rule 6.9).

I. A gun mount or turret can only fire at one plane in any one bearing position that it can fire into.

***Example:** 3 planes are attacking at bearing 0 high. Due to damage from previous attacks, only 5 in. turrets 1 and 2 are available to fire. Turret 1 is assigned to fire at one plane and turret 2 assigned to attack the second plane, the third plane will make it through untouched assuming no other 20mm or 40mm gun mounts are available to fire, and any surface support fire markers and any air support fire markers have already been used.*

J. A Japanese plane can be targeted more than once but the ship's defensive fire must come from different turrets or mounts and must be able to fire at the bearing the Japanese fighter is located in.

K. If a Japanese plane is shot down before all turrets/guns assigned to fire have had a chance to fire, those turrets/guns which have not fired are considered to have expended their shot. They cannot be reassigned to a different plane in that wave.

L. Place a Target Marker for the appropriate turret on the Japanese plane to be attacked. The number or letter in the top right corner of the marker identifies the turret or gun mount.

M. The player then places his air or surface support fire markers on an attacking Japanese plane, including special attacks; for each marker played, roll one d6 die. If a 6 is rolled, the Japanese plane is shot down. Any other result is a miss. (See Rule 6.10.E)

N. Once surface and air support fire has been resolved, the player rolls 2 d6 dice to determine the outcome, using Table 9-2 for each specific gun type.

O. A Japanese plane can take three hits before it is shot down. The first hit the plane continues normally and if it hits the ship, uses the undamaged column on Table 10. If it receives a second hit and hits the ship, use the damaged column of Table 10. When the plane receives a third hit, it is considered shot down. Use the shot down column to see if the Japanese plane strikes the ship.

P. Planes shot down by surface support and air support do not attack the ship. (*Exception, see 6.10*)

6.9 Ω Listing and Trim



A. List/Trim values are used in the advanced game only. They are ignored in the basic game.

B. Flooding of compartments is the primary cause of a ship listing or losing trim. If a ship is listing (port or starboard), or if it is out of trim (bow or stern), guns are further restricted from firing.

C. Consult the Firing Capability When Listing Chart to see if a gun can fire.

D. Each space on the List/Trim Angle Chart display on the map represents the direction of the list and or trim.

E. If listing in different directions, the total angle in a direction is determined by subtracting the smaller value of markers from the larger value.

Example: Subtracting a value of one in the stern trim box from a value of two in the bow trim box gives us a value of +1 to the bow (2-1=1); subtracting the port value of 0 from a value of two to starboard gives us a value of +2 to starboard. I would then check Firing Capability When Listing Chart to see which guns can fire under the resulting values. If the number of markers are equal in a given direction (bow and stern, or port and starboard, the ship is considered on an even keel for that angle for firing purposes.

F. Each time a primary compartment or secondary compartment is flooded due to damage, or is flooded voluntarily, move the flood marker one space toward zero on the Flood Track. When the marker reaches the sunk space, the ship may sink. See Rule 7.4.T.

G. See Rule 7.4.C through 7.4.U for details on flooding procedures.

6.10 Special Attacks

A. Planes designated for special attacks represent aircraft that have slipped through undetected, and as a result have surprised gun crews, with gun directors tied up with other targets.

B. To determine which section of the ship the plane may hit, roll 1 d6 die: 1-2, Forward Section; 3-4, Midship Section; 5-6, Aft Section.

C. Once the section to be attacked by the plane has been determined, the player may place the appropriately labeled spray fire marker for the section to be attacked on the plane. The player may fire at planes placed in Special Attack boxes *only after all wave combat is resolved*.

D. Defensive fire during special attacks is determined in the following order – Air Support, Surface Support, then Ship Spray Fire.

E. For each Air and Surface Support fire marker assigned to a special attack plane, roll one d6 die. If the result is a 6, the Japanese plane is shot down. For the ship's spray fire marker, a roll 2d6. If the roll is a 1-8, the plane is shot down. If the plane is shot down, the special weapon it is carrying is also destroyed.

F. If the ship fires at planes during Special Attacks during any phase in a turn, only one (1) ammo box is consumed for the turn. This extra ammo consumed is in addition to ammo used during wave attacks and lost through damage. No ammo boxes are removed for the surface or air support fire marker rolls.

G. Targeting planes making Special Attacks is always optional. A player is never required to do so.

H. **Ω** If defensive maneuvering is successful, apply the modifier when determining if special attacks hit the ship. (See Rule 7.0)

I. For each plane in the special attack box that survived the gunfire roll in (E) above, roll on Table 12. Consult the type of weapon it carries to determine which section of the Table to use. After determining which table; 12.1, 12.2, or 12.3 to use, roll 2d6 and apply the result, if any, to the destroyer.

J. It is possible that the plane launching the special weapon may also attempt to hit the destroyer. For each Japanese plane that survived, roll 1 d6 die. If the roll is a 6, it attacks the ship in the section determined in 6.10.B. It attacks the ship using the undamaged column on Table 10, after resolving the damage from its special attack weapon per Rule 6.10.I above.

K. Results of these special attacks are applied immediately.

L. Japanese planes used in special attacks are not placed back in the container. They are removed from the game until the scenario or campaign is completed.

M. If any officers, repair chiefs and repair crew members are in compartments hit by any attack, they are considered killed.

N. See Rule 7.5 on how officers, repair chiefs and repair crew members are replaced if they are killed.

6.11 Ω Emergency Maneuvers

A. Emergency maneuvers are not allowed during Special Attacks. Emergency maneuvers cannot be performed if any of the following has occurred:

- Rudder is damaged or destroyed
- Steering room is damaged or destroyed
- Both engine rooms are damaged or destroyed
- No fuel remaining on the fuel track
- No maneuver points remaining
- Both propeller shafts bent or destroyed
- Both stacks damaged or destroyed.

B. At the player's discretion, the ship may try to perform emergency maneuvers to throw off incoming Japanese planes only once per phase. If successful, the bonus the destroyer gains is effective for all wave attacks in the phase in which the attempt is made. Reduce fuel level on the Fuel Supply track by one (1) towards 0 for the attempt made during the phase.

C. Emergency maneuvers are performed after defensive fire is resolved but prior to determining if Japanese planes hit the ship.

D. To determine if an emergency maneuver is successful, perform the following: Add the values of the Captain (if alive) and the Engineering Officer (if alive). If both are dead, the value is 0. This number determines the column to use on the Emergency Maneuver Table (Table 19). Roll two d6 dice and cross reference the result with the appropriate column.

E. If the result is successful, rolls on Table 10 to determine if Japanese planes strike the ship will have 1 subtracted for all wave attacks in a phase.

F. Whether an emergency maneuver is successful or not, the fuel marker is moved one space towards zero. This is done each time emergency maneuvers are attempted.

Section 7.0

SHIP DAMAGE & REPAIRS

7.1 Japanese Attacks

A. Consult Table 10 to determine if Japanese planes strike your ship. Use the appropriate column depending on the status of the Japanese plane.

B. Roll 2 d6 dice and cross reference the result with the appropriate column in Table 10.

C. If a hit is obtained, consult Table 11 (Main Damage Table) to determine damage.

D. If a near miss is obtained, consult Table 11.1 (Near Miss Damage Table) to determine damage.

E. In all cases, once all Japanese wave attacks/damage results have been determined, place all planes (except special attack planes) back in the opaque container.

F. After all regular wave attacks are resolved, the player then resolves Special Attacks (See Rule 6.10).

G. The player may fire as long as he has ammunition boxes available in the Ammo Supply track.

H. If an emergency maneuver was successful, apply the modifier to the die roll on Table 10 when determining if Japanese planes hit the ship.

7.2 Determining Japanese Hits

A. If the result on Table 10 is a hit, roll 2 dice (1-d10 and 1-d6) to determine where damage has been inflicted using Table 11. The d10 die is used for the left-hand column and the d6 die is used for the top row.

B. In the basic game, roll both dice and cross reference the result. In the advanced game for each Japanese plane that hits your ship roll both dice twice on Table 11 to determine damage. This simulates an additional weapon the plane could have had on board, fuel spraying all over the ship on impact, and the debris of the plane impacting other areas. Place Hit Markers and a fire marker in the section/s determined to be hit.

C. If the Japanese plane hits the ship from the 315, 0, or 45 bearing, use the section in Table 11 titled "FORWARD SECTION"; if the plane struck the ship from bearing 270 or 90, use the section titled "MIDSHIP SECTION"; if the plane struck the ship from bearing 225, 180, or 135, use the section titled "AFT SECTION".

D. If a random result is obtained on Table 11, consult Table 15.

E. For both the basic and advanced game, all effects from damage are applied immediately.

F. Once all Japanese hits have been determined for a wave, place repair crews in compartments & equipment that have been hit. (See Rule 7.6, Rule 7.7). This is repeated for each wave if necessary.

7.3 Basic Game Damage Results

A. In the basic game, roll only once for each plane hitting the ship on Table 11.0 and apply the result. If necessary, place a hit marker in a "hit box" for the compartment noted and place a fire marker. Once all hit boxes within a primary compartment have a hit marker on them, it is considered destroyed.

B. Any secondary compartment hit is treated as a hull hit and the Hull integrity marker is moved one space towards 0 for each secondary hit.

C. In the basic game, repair crews are not assigned to secondary compartments. For the advanced game, see Rule 7.7.3

D. When the hull level reaches 0 – the ship could sink. Using Table 14, determine the result. This is done at the end of every turn, not phase.

E. Flooding and list/trim are not used in the basic game. Ignore these results.

7.4 Advanced Game Damage Results

A. If hits are obtained in a compartment/equipment, it is considered damaged. For each hit obtained in a compartment, place a hit marker in a "hit box" for that compartment.

B. A hit on the ship represents the break-up of the plane on impact, armament it may be carrying, engine penetration and the spread of aviation fuel wreaking havoc on various parts of the ship. Each successive hit may increase the severity of the damage.

When the following compartments are destroyed, the player must attempt to flood the compartment:

- Forward and Aft Fire Rooms
- Forward and Aft Engine Rooms
- Forward 5in Magazine 1 and 2
- Forward 20mm, 40mm Magazines
- Forward Fuel Tank
- Aft Fuel Tank
- 5in Magazine 3, 4 and 5
- 40mm Magazine Aft
- 20mm Magazine Aft.

If the name of the compartments is on a blue bar, it indicates it can be flooded (See Table 21).

C. A primary compartment named with a blue bar may also flood involuntarily from the damage inflicted as soon as the plane hits. If the compartment is hit, roll 1d6 die. If the result is a 6, the compartment floods, and move the flood marker one space towards zero on the flood track. Roll the die a second time – if the result for this second roll is a 6, the compartment is considered destroyed and results from Table 11 for that compartment are ignored until a new ship is used or the current ship is repaired at anchorage. If the compartment is not destroyed by flooding as a result of the second roll, crews in the compartment are considered to have stopped it and damage results from Table 11 will still apply.

D. When a primary compartment is flooded, it is considered destroyed, place a Flood and Destroyed Marker in that compartment.

E. If a compartment listed in 7.4.B receives a 4th hit it is considered destroyed. This may happen during a special attack or if a flooding attempt has failed but the ship has not exploded after a check. (See Rule 7.7.2.J)

F. Should a flooding attempt fail, the player rolls on Table 21-1 to see if an explosion occurs. This is a one-time roll. It is not repeated. Mark the compartment with a destroyed marker. All bonuses, if any, the compartment provides are lost.

G. Should a damage result indicate a compartment or equipment is destroyed even if it has less than is necessary to destroy it, it is considered destroyed. Place a destroyed marker in the compartment or equipment to indicate its status.

H. The flood marker is a visual cue only and is placed in a compartment to remind players of the extent of damage in a compartment.

I. Table 11.0 has several damage possibilities that may result in the destroyer sinking. Should this occur follow the additional instructions for the result.

(See Notes at the bottom of each table) If the ship does sink, the player would resume regular play the next day, with a new ship, crew and duty station. In effect, go through the procedures of starting a new game.

J. If a damage box is marked “Sec”, the damage is recorded on the Secondary Compartment Hit Sheet. The first box on the Secondary Hit Sheet is “damaged” and the second box is “Compartment Destroyed.” Some “secondary damage” boxes are color coded, which represents compartments below the water line and may be subject to flooding. If the secondary result is color coded, a player rolls one d6 die and if the result is a 6, the secondary compartment floods, and the flood marker on the flood track is moved on space towards zero. This roll is only done once, at the time both boxes have been marked. If the compartment does not flood, it is considered shored up, but the bonus a compartment may provide is lost (see the Secondary Compartment Hit sheet).

K. Note that flooding for primary compartments (Rule 7.4.C) and secondary compartments (Rule 7.4.J) are handled differently.

L. If flooding occurs, recall from which side the Japanese plane struck the ship: 0 degrees is the bow, 180 degrees is the stern, 45, 90, and 135 degrees is starboard, and 225, 270 and 315 degrees are considered port. List marker values are interchangeable when placing markers for list and trim.

M. Each time flooding occurs from the right side (starboard), then the ship lists to the right. Place one list marker valued at 1 for each compartment flooded on the Ship Angle section on the map labeled “Stbd List.”

N. Each time flooding occurs from the left side (port), then the ship lists to the left. Place one list marker valued at 1 for each compartment flooded on the Ship Angle Chart labeled “Port List.”

O. Each time flooding occurs from the bow (0 degrees), the ship loses bow trim. Place a trim marker valued at 1 for each hit on the Ship Angle Chart labeled “Bow Trim.”

P. Each time flooding occurs to the stern (180 degrees), the ship loses stern trim. Place a trim marker valued at 1 for each hit on the Ship Angle Chart labeled “Stern Trim.”

Q. If using the Listing and Trim rules, the ship begins the game at an “Even Keel.”

R. Hull integrity is checked after the end of each phase. Determine the number of planes that struck the ship (do not count near misses). Cross reference this number with the roll of two d6 dice. The result is the number of hull points lost. This is in addition to any hull points lost due to a damage result. Consult Table 14.1.

S. Each Primary compartment that ends up being flooded moves the maneuver chit on the Maneuver Track 1 box towards zero. The chit is not moved if secondary compartments are flooded.

T. When the flood marker on the Flood Track reaches “Ship Sunk,” there is a possibility that the ship could roll over and sink. Consult Table 16. If it does not sink, the player may keep the ship at its present station.

U. Checking for your ship sinking occurs at the end of every turn, not every phase.

V. If the damage result is a near miss – consult Table 11-1 (Near Miss Damage Table). If there is damage to your ship, place a hit marker in the affected compartment or note it on your Ship Log Sheet.

W. If damage results in an unspecified officer or crew killed, consult Table 13 to determine which officer is killed. (See Rule 7.5)

X. If the result is a random result, consult the Damage Random Result Table, Table 15.

Y. If the result is a miss or superficial damage on Table 11-1 “Near Miss Damage Table” – then the plane has missed the target, striking harmlessly in the water.

Z. Some primary equipment/compartments have a hit and destroyed result. On the first hit a hit marker is placed in the damage box, a second hit and it is destroyed. Place a destroyed marker on the destroyed box if it’s a primary compartment. Once destroyed, other hits to that section are ignored.

AA. A destroyed/flooded compartment/equipment cannot be repaired while the ship still occupies its assigned station and can only be repaired during the repair/replenishment phase.

BB. If a deck fire is obtained as a result on Table 11, place a fire marker on the deck fire track for the appropriate section. See Rule 7.7.1. Deck fires will be resolved during the damage control phase.

7.5 Officers, Crew Killed

A. In the event officers are killed or incapacitated, use the following procedure to replace their Value.

B. Depending on which officer is killed, his new rating will be the value of the officer directly below him in the chain of command. Change the values as noted on the Ship Log Sheet. Example: if the Captain is killed, then the rating for the XO is transferred to the captain, the rating for the engineer is transferred to the XO spot, etc. A chit is then drawn to replace the CPO rating and noted on the Ship Log Sheet. If a chit is drawn to replace the CPO, remove any one Repair Chief (see Rule 7.5.D.).

C. If more than one officer is killed, draw new chits and note the value for each officer on the Ship Log Sheet. Note that this procedure is different than 7.5.B.

D. If a repair chief is killed or removed due to a new value chit drawn for the CPO in 7.5.B, a new Value chit is drawn to determine his new rating and noted on the ship log sheet. Remove 1 repair crew counter from the chief’s section; he is considered to have been promoted into the repair chief’s position.

E. Place value chits drawn back into the cup once all values are noted.

7.6 Repair Crews



A. At the conclusion of Japanese attacks, damage control repair crews are assigned to primary compartments & equipment and secondary compartments after each wave and/or Special Attack to try and contain the damage.

B. Repair crews are restricted as to where they can be placed: Repair One crews can be placed in any compartment or equipment (ship radar, gun directors) in the forward section. Repair Two crews can be placed in any compartment or equipment in the midship section. Repair Three crews can be placed in any compartment or equipment in the aft section.

C. No more than 3 repair crewmen can be placed in any one primary compartment. Each repair crewman has a value of one. Only one repair crewman can be assigned to repair ship board radar or gun directors.

D. The following officers and chiefs are assigned to damage control as follows: (even if it is a negative rating) when determining repairs. Officers and repair chiefs are not used in secondary compartment repairs, thus they cannot be assigned to the Secondary Compartment Repair Box.

E. The XO must apply his rating in one compartment only. Place the XO Crew Marker in the assigned compartment. If he is killed before repairs are attempted, his rating will not apply to repairs for that compartment.

F. The Engineer must apply his rating in any one of the following compartments: forward or aft engine rooms, forward or aft fire (boiler) rooms or steering room. Place his Crew Marker in the assigned room. If he is killed before repairs are attempted, his rating will not apply to repairs in his assigned compartment.

G. The Damage Control Officer must apply his rating to all repairs in any one assigned section. Any repair attempts in any compartment in that section gain his modifier. Place his Crew Marker in the assigned section (Forward, Midship or Aft). If he is killed before repairs are attempted, his rating will not apply to repairs for that section.

H. Repair chiefs must apply their ratings to all repair attempts to their section. Place the Repair Chief Crew Marker in the appropriate section. If he is killed before repairs are attempted, his rating will not apply to repairs for that section.

I. Once damage crews and officers have been assigned, repair attempts are made. See Rule 7.7.

J. At some point during the game, damage may accumulate to a point where it will overwhelm the repair crews. When 50% or more of all compartments (primary and secondary) are either damaged or destroyed, the player may declare emergency repairs -- that means all hands are to fight the fires and damage. To see if the declaration is successful, roll on Table 17 taking into account the captain's value.

K. If the declaration is successful, the destroyer may no longer fire its guns. All hands means all hands! During damage control rolls, the player now may use a +2 modifier, in addition to all other modifiers.

L. If a declaration is unsuccessful, the player may either continue with normal repairs and play on, or abandon ship. If the ship is abandoned, the Japanese are considered the victors.

M. A player may call off the emergency at any time after the first enemy attack after the declaration or if repair rolls reduce the number of primary and or secondary compartments damaged to under 50%. A compartment is considered repaired when all hit markers are removed from a compartment. After the emergency is over, the +2 modifier for repairs is no longer used. The destroyer may also continue to use its guns.

7.7 Damage Control Repairs

For ease of play, damage control repairs are handled sequentially, even though the action is occurring simultaneously. Repairs are handled in the order listed below.

7.7.1 Deck Fires



A. Resolving deck fires are handled differently than repairs for equipment or compartments. All sailors were schooled in fire control, so available hands on deck are working to extinguish the fires. Placement of repair crews is not necessary. Deck fires are handled first before all other repair attempts are attempted for that particular wave or special attack.

B. To extinguish fires, roll 1d6 for each track that indicates a fire. If the result is a 1, 2, 3 or 4, all fire markers are removed for that specific track. If water lines are out, one is subtracted from the roll. Should deck fires be extinguished for each section, proceed to Rules Section 7.7.2.

C. If the fire is not extinguished, add another fire marker and roll again to attempt to extinguish the fire. If the fire is not extinguished on the second attempt add another fire marker. NOTE: No additional attempts to extinguish the fire are made in this wave and the player will continue on with the current wave's damage control attempts. (See Rule 7.7.2) If a subsequent Japanese attack wave or Special Attack is still to be resolved, attempt to extinguish deck fires as per Rule 7.7.1 A & B above, attempts will be made to extinguish the fires before other damage repairs are attempted for that wave. At the conclusion of all wave and special attacks players will attempt to extinguish any deck fires still burning, using the procedure in Rule 7.7.1 A & B above.

D. Once all fire spaces on a fire track are filled with fire markers, and the last roll failed to extinguish the fire, the fire is considered out of control and the ship is considered lost.

E. Repeat 7.7.1.B through E for each section (Forward, Midship and Aft) that has a deck fire. It only takes one section fire to go out of control to sink the ship.

7.7.2 Compartment, Radar and Gun Director Repairs

A. Each primary compartment has an inherent repair value of 1. This value, plus the number of repair men (not to exceed 3), and any ratings of officers and repair chiefs assigned, are used to give an initial value to determine repairs.

B. Subtracted from this is the value of hit markers present in the compartment. If one marker is present 2 is subtracted from the initial total; if two markers are present, 4 is subtracted; if three markers are present, 5 is subtracted from the total.

C. The final total determines which column to use when determining repairs on Table 20.

D. To reflect the role crew morale plays in accomplishing its mission, if the Morale level on the Morale Track is a negative, apply a -1 die roll modifier to Table 20. If Morale is positive, apply a +1 die roll modifier.

***Example:** Let's assume that the forward oil tanks have been hit, with a marker in two hit boxes. We have three (3) repair crewman assigned, plus the Repair One chief rating of +1. We are also assigning the DCO, also with a rating of +1 and the inherent value of 1. Our morale is at zero. The total rating is +6, However, since there are two damage markers present, 4 is subtracted from the total, yielding a +2. Roll 2d6 and cross reference the result under the +2 column of Table 20.*

E. Roll on Table 20 to determine if repair attempts are successful. If they are successful, roll 1d6 to see how many hit markers are removed: a roll of 1 or a 2 removes 1 hit marker; a roll of 3, 4 or 5 removes 2 hit markers, and a roll of 6 removes all hit markers. (See Note B on Table 20).

F. If a compartment or equipment has all its hit markers removed after successful repairs, repair crews may be put back in their holding boxes or moved to another compartment in the same section that has yet to have its repairs resolved for the current wave, not to exceed the limit for repair crew counters (no more than 3) in a compartment. Movement of repair crew may happen more than once in a wave. Officers can remain in the compartment or placed in another compartment.

G. If any hit markers remain in a compartment at the end of the last wave or Special Attack in a turn, all damage crews, chiefs and officers assigned to the compartment must remain to repair the damage in the next turn, and a +1 is added to the repair attempt roll. Any bonus the compartment may have provided is lost until it is repaired.

H. The following equipment items do not have an inherent value of 1 when it comes to damage control: ship-board radar and gun directors. Only one repair crewmen from the appropriate section may be assigned to try and repair the damage. Place the repair crewman in the appropriate repair box in Gun Directors Box or Ship-Board Radar box on the map. To repair them, roll

on Table 20 using the +1 column to determine the result. Officer ratings and repair chief ratings are not applied when attempting to repair gun directors or ship-board radar. If radar and gun directors are repaired, their modification values are reinstated.

I. If at the end of a phase the player finds both ship-board radars are destroyed, the ship must head back to port for replenishment or repairs.

J. If a primary compartment has all hit boxes covered by a marker, and if repairs were unsuccessful, the player may attempt to voluntarily flood the compartment. Compartments on the map capable of flooding are indicated by a blue bar under the name. (See 7.4.B)

K. Roll on Table 21 – Flooding Compartments and apply the results.

L. If flooding is successful, repair chiefs and repair crews are placed back in their holding boxes. Officers are moved to another compartment that has not been destroyed. The compartment is considered destroyed and any bonus it may have provided is no longer available until replenishment and repairs are performed. The marker on the Flood Track is moved on space towards the “sunk space.”

M. If Listing/trim rules are in effect should 7.7.2.L occur, the angle which the ships lists or trim is lost is determined by which side the Japanese plane entered the compartment (See Rule 7.4.L)

N. If flooding is unsuccessful, then a possible explosion could occur. Roll on Table 21-1 and apply the results. Ignore this rule for secondary compartments.

O. Depending on which compartment is flooded, damaged or destroyed, it will have an effect on other systems:

Magazines – if a magazine is flooded then the gun/s it supplies can no longer fire. Note that 40mm Gun Tubs and the 20mm guns have two magazines, one of which is shared. Both must be flooded/destroyed in order for guns not to fire.

Engine Rooms – for each engine room flooded, the maneuver chit is moved 5 spaces towards 0. When the maneuver track reaches 0 the ship becomes dead in the water and no maneuvers are possible.

Fire Rooms – if both Fire Rooms are flooded and out of operation, the ship loses all power and becomes dead in the water. All 40mm and 5 in. guns lose their firing bonus. The maneuver track is immediately set at 0.

Fuel Tanks – for each fuel tank flooded or out of operation, 5 is subtracted from the fuel track. When the fuel track reaches 0 the ship must return to anchorage at the end of the current phase. No emergency maneuvers are allowed.

Bridge, CIC and Radio – for each of these compartments destroyed, then a -1 modifier is used when determining if Japanese planes attack (See Table 8.1) for the remainder of the time the ship stays at its present duty station.

P. If both engine rooms are out of operation, or if both fire rooms are out of operation, or if both ship board radars are destroyed, then the ship at the end of the present phase is returned to anchorage due to damage.

Q. If, in subsequent waves, a compartment containing officers and repair crews is hit again, they are considered killed and removed from the game.

R. If your ship is sunk, and the player is playing a mini-campaign or the long campaign, he starts with a new ship and crew and goes through the procedures as stated in Rule Sections 2 and 3. Play is considered to start the day after your previous ship was sunk.

S. Ships sent to anchorage due to damage or replenishment roll on Tables 18 or 18-1 respectively.

7.7.3 Repairing Secondary Compartments Ω

A. Repairing secondary compartments is only used in the advanced game, and is handled differently than primary compartments.

B. Damage to secondary compartments is noted on the Secondary Compartment Damage Sheet (See Rule 1.6).

C. Unlike primary compartments, secondary compartments do not have an inherit value of one (1) when determining damage repairs.

D. The player may attempt to repair none, some or all of the secondary compartments that are damaged. For each secondary compartment damaged, the player may place one (1) unassigned repair crewman from the appropriate Repair section into the appropriate section box in the Secondary Compartment Repair Box located on the left side of the map.

Example: Let's say the Sail Locker, Crews Quarters 2 and the Crew Head in the aft section have been hit. I then take three (3) unassigned repair crewmen from Repair Section 3 and place each one in the Aft Section of the Secondary Compartment Repair Box.

E. If there are no available repair crewman, then repair attempts on secondary compartments cannot be made.

F. Roll one 1d6 for each secondary compartment repair attempt. On a roll of 1-4, the repairs are successful. If the repairs are successful, repair crewman are moved back to the Repair Section holding box. If unsuccessful, they remain in the holding box for the next repair attempt in the next phase.

G. If a secondary compartment in a section containing repair crewman is hit by Japanese planes during a wave or special attack, roll 1d6 for each assigned repair crewman in that section. If the roll is a six (6), the repair crewman is considered killed and removed from the game.

H. Repair crewmen are not placed in the Water Lines box in the Secondary Compartment Repair Box. Instead, a hit marker is placed in the box. See result “2” on Table 15. The hit marker is removed should the lines be repaired.

I. Secondary compartments may be flooded voluntarily to bring the ship to an even keel. For each secondary compartment flooded, place the list and trim markers in the space needed to right the ship, so that each list box or each trim box has an equal value. Example: Let's say a value of 4 is in the port list box, and 2 in the starboard list box from previous flooding. I decide to flood two secondary compartments to bring the ship to an even keel. I would then place two list points in the starboard list space, making it and the port list box equal in value.

**Section 8.0
END OF TURN MAINTENANCE**

At the end of the 3rd Phase (evening/night) of each turn, the player performs the end of turn maintenance functions.

8.1 Morale Check

A. Add the captain and CPO rating and use the result to consult the appropriate column on Table 23 – Morale Check. Move the morale marker left for negative results indicated, and right for positive results indicated.

B. If the result is zero (0), leave the Morale Marker at its current position. If the Morale Marker is at -2, ignore negative results. The Morale Marker cannot go past -2. If the Morale Marker is already at +2, ignore positive results. Morale Marker cannot go past +2.

8.2 Ammunition Supply

- A. If guns were fired during the course of a turn, roll on Table 24 – Ammo and Fuel.
- B. The result from that roll is the number of boxes used up for the turn. Move the marker towards zero equal to the total determined.
- C. These boxes are in addition to the boxes used during special attacks, and lost as a result of damage during any of the three phases.
- D. Should the ammo track be reduced to zero – the ship must return to anchorage for replenishment (See Rule 10).

8.3 Fuel Supply

- A. Roll on Table 24 to determine how much fuel was consumed for the turn. The result is the number of spaces the marker is moved down on the fuel track. This is in addition to fuel lost as a result of damage or used in emergency maneuvers during any of the three day or night phases.
- B. Should the fuel track be reduced to zero – the ship must return to anchorage for replenishment (See Rule 10).

8.4 Ship Board Radar

- A. If both shipboard radars are destroyed, the ship must return to anchorage for repairs. (See Rule 10)

Section 9.0 WINNING THE GAME

Victory conditions for scenarios 1 – 8 are listed on the scenario cards. Victory conditions for the Mini-Campaign and the Full Campaign are listed on the campaign cards.

Section 10.0 REPLENISHMENT AND REPAIR

- A. Should a player return to anchorage for replenishment or repair or both, roll on Table 18 or 18.1 or both depending on the situation, and consult the appropriate result to determine the length of stay before returning to the game. If a player is rolling on both tables, use the result that provides the longer stay.
- B. If the ship returns with any type of damage – even if fuel or ammo is at zero - it consults the repair section (Table 18). If the ship has no damage but either fuel or ammo are at zero, then consult the replenishment section (Table 18.1).

C. Any officers, Repair chiefs and crewmen killed are replaced and new Value Chits are drawn for them with their new values noted on the Ship Log Sheet. All repair sections are brought back to full strength per Rule 1.2.2.C.

D. When the player returns to action, he determines a new duty station based on the date he returns.

E. If your ship was sunk, new ratings for all crew members are determined by drawing new value chits. New values are noted on the Ship's Log Sheet.

F. Replenishment occurs under the following circumstances: Fuel track reaches a value of zero or ammo track reaches a value of zero.

G. There may be a point where the ship takes too much damage and the captain will have to make the decision to leave the field of battle. At any time when any one of the following conditions have been met, the player must withdraw for repairs: Both engine rooms damaged or destroyed, both fuel tanks damaged or destroyed, both fire rooms damaged or destroyed, rudder destroyed, both prop shafts damaged or destroyed, hull integrity reaches zero, maneuver track reaches zero, both shipboard radar destroyed. If 50% of armament is damaged or destroyed, the player may withdraw if he chooses. Withdrawal of the ship occurs at the end of the current phase, not turn.

H. If Rule 10.G occurs, the Japanese player is declared the winner for the scenario or mini campaign being played.

I. After replenishment or repairs or both, move all tracks to 10 (hull, maneuver, fuel, ammo and flood), and remove all damage markers.

J. It's entirely possible that a player could miss one or more Kikusui attacks depending on the length of repairs or replenishment. Consider yourself lucky.

Section 11.0 OPTIONAL RULES

A. The following optional rules may be played with either the basic game or the advanced game.

11.1 Willow

A. The Willow was an airplane made of wood, making it hard to detect by radar of the period. In order to simulate this feature, if the target is a Willow and the gun shooting is a 5 inch or 40mm, it negates any firing bonus the gun may have.

11.2 Gun Crew Aces

A. When a particular gun mount or tub gets five kills or more it receives +1 bonus when determining if Japanese planes are shot down. This is in addition to other bonuses the gun or mount may have. If the mount is damaged or destroyed or if the destroyer is sunk, the bonus is lost.

Section 12.0 PLAYING THE GAME

A. Included in the game are six historical scenarios, two hypothetical scenarios and two campaigns. Scenario 1 is an introductory one, designed to get a player comfortable with game procedures. Once a player is comfortable with the game system, the player may move on to other scenarios and campaigns provided with the game.

12.1 Designing your own Scenarios

A. Enterprising players may design their own scenarios, and use any date on the Time Record Sheet as a start date. Keep in mind that the game features the Fletcher class. The Sumner, Gearing and destroyer escort classes had different weapon load outs. Weapon load outs for the various versions of the Fletcher Class are provided at the end of the rules.

Section 13.0 SOURCES

Books:

Kamikazes, Corsairs and Picket Ships, Okinawa 1945 by Robin L. Rielly

Kamikaze Attacks of World War II by Robin L. Rielly

At War with the Wind by David Sears

Last Stand of the Tin Can Sailors by James D. Hornfischer

Tales from a Tin Can by Michael Keith Olsen

Okinawa 1945 – Final Assault on the Empire by Simon Foster

History of the United States Naval Operations in World War II Volume XIV

Victory in the Pacific 1945 by Samuel Eliot Morison

United States Destroyer Operations in World War II by Theodore Roscoe

US Destroyers 1942-45: Wartime Classes by Dave McCom.

Official Documents:

USS Dewey Damage Report dated December 1944

USS Aaron Ward Battle Damage Report, May 1945

Anti-Aircraft Action Summary, October 1945

US Navy Battle Damage Reports, 1945

Anti-Suicide Action Summary, August 1945

Battle Experience – Radar Pickets, March – May 1945 dated July 1945

Warship Principles of Construction and Damage Control, 1935

Standard Organization for 2100 ton Destroyer, September 1943

Suicide Attacks, April 1945

VT Fuzes for Projectiles and Spin Stabilized Rockets, 1946.

Bath Iron Works blueprints for Fletcher Class Destroyer

Websites:

US Naval History and Heritage Command
(<http://www.history.navy.mil/>);

Destroyer History Foundation
<http://www.destroyerhistory.org/destroyers/index.html>)

USS Abbot - (<http://abbot.us/DD629/main/>)

Section 14.0 CREDITS

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Cover painting “Trial by Fire” - used by permission from Tom Freeman.

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Proof Reader: Hans Korting

Section 15.0: DESIGN NOTES

The inspiration for the game came while I was reading the book, “Kamikazes, Corsairs, and Picket Ships,” by Robin L. Rielly. I immediately thought of a solitaire game in which the player is the “captain” of a Fletcher Class destroyer while serving on radar picket duty off Okinawa. I jotted down my ideas and began the long process of design to printing.

Why the Fletcher class? It was the predominant destroyer class at Okinawa. Other classes did serve, but the Fletcher class allowed for more scenario possibilities.

The weapons load out of the Fletcher class depicted in the game is typical for the class by 1945. The Fletcher class and other classes of destroyers were constantly undergoing upgrades as field experience made its way back to the shipyards and the designers.

The weapons lay out depicted in the game began in July 1943 and ended in February 1945. So for game purposes the player has as his armament five 5" guns (two forward and three aft), 10 40mm Bofors AA in five twin barreled tubs and seven 20mm Oerlikon guns.

In June 1945, a weapons change was initiated. It increased the number of 40mm barrels and 20mm barrels. It is not depicted in the game since the time period for the game ends in late June.

The purpose of the picket stations was to give advanced warning to the main fleet in case of aerial attack and to assist in fighter direction. Hence many of the destroyers had fighter direction teams on board. The assignment of FDT teams is depicted in the game.

Just where did most of the kamikazes appear in relation to the ship? In contacting the United States Naval History Heritage Command – they did not have the information. Apparently those figures were not compiled. While extensive reports have been made concerning ship damage and how best to combat kamikazes, the number of Japanese planes that attacked each picket station is not known. So a best guess had to be made.

Other sources pointed to the northern stations, particularly Picket Station 1 as being the most deadly (see diagram for location of picket stations at end of design notes). Japanese planes came from bases in southern Japan and Formosa. Hence in the game, if the player is assigned to Station 1, the action could be hotter compared to other stations.

Unlike the USAAF, which utilized a clock system to tell what direction an enemy plane was attacking relative the plane being attacked, the Navy used a bearing system. Hence the positions where Japanese could attack are represented by eight bearings - 0°, 45°, 90°, 135°, 180°, 235°, 270° and 315°.

The kamikazes attacked from every conceivable angle, so to make the game playable certain decisions had to be made. The high, medium and low designations are a function of both altitude and angle of attack. Otherwise players would be bogged down as planes made their way from high to low altitude, firing as each plane made its way closer to the ship. And with as many as 18 planes attacking, the player would be saddled with too many steps.

High altitude also represents a high angle of attack, medium altitude a medium angle of attack and low altitude represents a low angle of attack – a water level attack. Guns are assigned to the planes in these attack positions and attempt to shoot down the kamikazes.

As for the 5" mounts, and for the sake game play, the use of the MK37 gun controller and its relationship to the mounts was simplified. For the basic game, any 5" mount can fire at any kamikaze with its zone of fire. In the advanced game, the Gun Controller slaved all 5" mounts to one target and fired before a second target could be acquired. The mounts could fire at different targets, but had to do it manually, thus losing any advantage the gun controller provided.

Support for your ship is depicted by surface and air assets. While each did an admirable job in helping the destroyers on picket duty, the Japanese kamikazes still managed to get through. When it comes to air assets, 4 counters are provided since this is the average that will be available. Extra counters are available online at skdgaming.com.

Once a kamikaze struck the ship, the damage caused could be deadly. In some cases, a hit caused very little damage. Some ships took numerous hits by kamikazes and stayed afloat, while some took one hit and sank. Most of the planes were armed with bombs, so not only the plane and its spilled fuel caused damage, but its bomb penetrating the ship also caused damage.

Destroyers, unlike bigger ships, did not have empty spaces to counteract flooding. To counteract flooding, destroyers transferred oil to right the ship to an even keel, and sometimes flooded working compartments. Flooding capability is limited, and players will be forced to make decisions as to when and how many compartments to flood to bring the ship to an even keel.

Key individuals depicted in the game are the officers the Chief Petty Officer, and the damage repair parties. Each has certain capabilities and players will soon find out there aren't enough repair crews to repair everything – the player will have to prioritize.

The game is not meant to be a detailed simulation. But I hope the game will give players an idea of the deadly combat that the "tin can sailors" off Okinawa had to endure. There was nowhere to go; no foxhole to dive into – they had to stay and take it.

Steve Dixon



PICKET DUTY

Kamikaze Attacks Against U.S. Destroyers - Okinawa, 1945



Fletcher Class Destroyers that served off Okinawa 1945 - Complement: 20 Officers, 309 enlisted men

Ammen DD 527	Cassin Young DD 793	Hudson DD 475	Rowe DD 564
Anthony DD 515	Charles Ausburne DD 570	Ingersoll DD 652	Smalley DD 565
Aulick DD 569	Claxton DD 571	Irwin DD 794	Sproston DD 577
Bache DD 470	Cogswell DD 651	Isherwood DD 520	Stanly DD 478
Beale DD 471	Colhoun DD 801	Kimberly DD 521	Stoddard DD 566
Bennett DD 473	Converse DD 509	Knapp DD 653	Twiggs DD 591
Bennion DD 662	Cowell DD 547	Laws DD 558	Van Valkenburgh DD 656
Boyd DD 544	Daly DD 519	Little DD 803	Wadsworth DD 516
Bradford DD 545	Dyson DD 572	Luce DD 522	Watts DD 567
Braine DD 630	Evans DD 552	Morrison DD 560	Wickes DD 578
Brown DD 546	Foote DD 511	Picking DD 685	William D. Porter DD 579
Bryant DD 665	Fullam DD 474	Preston DD 795	Wren DD 568
Bush DD 529	Gregory DD 802	Pringle DD 477	
Callaghan DD 792	Guest DD 472	Pritchett DD 561	
Caperton DD 650	H. L. Edwards DD 663	Richard P. Leary DD 664	

From: Kamikaze Attacks of World War II, by Robin L. Rielly, McFarland & Company, 2010.

Armament Variants for the Fletcher Class Destroyer

<p>April 1942 – December 1943: Number of ships: 3 5-inch: 5 single mounts - 1.1 inch AA: 4 (quad mount) - 40mm: None - 20mm: 6-11 (single mounts) Torpedo Tubes: 10 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>
<p>June 1942 – September 1943 Number of ships: 3 5-inch: 4 single mounts - 1.1 inch AA: None - 40mm: 2 (twin mount) - 20mm: 8 (single mounts) Torpedo Tubes: 5 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>
<p>June 1942 – August 1944 Number of ships: 33 5-inch: 5 single mounts - 1.1 inch AA: None - 40mm: 4 (twin mounts) - 20mm: 4-8 (single mounts) Torpedo Tubes: 10 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>
<p>March 1943 – December 1944 Number of ships: 40 5-inch: 5 single mounts - 1.1 inch AA: None - 40mm: 6 (twin mounts) - 20mm: 6-11 (single mounts) Torpedo Tubes: 10 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>
<p>July 1943 – mothballs Number of ships: 167 5-inch: 5 single mounts - 1.1 inch AA: None - 40mm: 10 (twin mounts) - 20mm: 7 (single mounts) Torpedo Tubes: 10 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>
<p>June 1945 – mothballs - Number of ships: 53 5-inch: 5 single mounts - 1.1 inch AA: None - 40mm: 14 (2 quad & 3 twin mounts) - 20mm: 12 (twin mounts) Torpedo Tubes: 5 (quintuple mounts) - Depths Charges: 2 tracks for 600lb charges, 6 projectors for 300lb charges</p>

Source: US Destroyers, 1942-45 by Dave McComb, Osprey Press, 2010.