FLATTOP

Optional Rules Collection

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Tables

Additional Planes (Original Flattop rules)

Additional planes are placed at the beginning of the Air Operations Phase following the turn the enemy TF was observed. They may be armed and may take-off on the same turn they arrive. The number of additional planes is given in the special rules for each scenario.

Additional Allied Planes.

These planes become available if any Japanese TF is observed in mapboard sectors V or VIII. When available, they may be placed in the Ready box of Espiritu Santo or Australia.

Additional Japanese Planes.

These planes become available if any Allied TF is observed in mapboard sectors I or II. When available, they may be placed in the Ready box of the Truk base.

Air Modifiers (Original Flattop rules, Expanded Plane Function)

Some planes have an Air Modifier to use in Air-to-Air Combat to represent their superior or inferior defensive abilities. When involved in Air-to-Air Combat, the ATTACKING plane name adds (or subtracts) the defending plane name's Air Modifier to its BHT.

Air Modification Values

Aircraft	Value		Aircraft	Value		Aircraft	Value
Avenger	-1		Dauntless	-1		Kate	+1
Beaufort	-1		Hudson	-1		Pete	+2
B-17	-2		P-38	-1		Rufe	+1
B-25	-1		Dave	+2		Val	+1
B-26	-1		Jake	+2		Zero	+1

Revised Combat Modifiers (*The General*, Vol 18-6)

* Add/Subtract modifier to Result Number (not BHT) in Air-to-Air Combat and AA Combat against plane name. Negative modifiers do not reduce Result Number below zero. Any '*' Result Number is treated as -2 and is unchanged by modifiers totaling less than +2.

Revised Combat Modifiers

Air-to-Air Combat	
-6	RF not expended (interceptors & escorts only)
-2	at night
-1	in clouds
-6	if armed (W, P38, P39, P40, BF, R, Z)

Anti-Air Combat	
-2	planes at high altitude
-2	at night
+1	target contains 9-16 AFs
+2	target contains 17-24 AFs
+3	target contains 25-32 AFs
+4	target contains 33+ AFs
+1	torpedo planes in Anvil attack
-1	target is Kate (Coral Sea, Midway)

Air Attack Combat	
+2	crippled or anchored ship (not both)
+1	ship max speed is 1
+1	torpedo planes making Anvil attack
-4	at night
-2	in clouds

Surface Combat	
+1	target ship crippled or anchored

Revised Air Modifiers (*The General*, Vol 18-6)

* Add/Subtract modifier to Result Number (not BHT) in Air-to-Air Combat and AA Combat against plane name. Negative modifiers do not reduce Result Number below zero. Any '*' Result Number is treated as -2 and is unchanged by modifiers totaling less than +2.

Revised Air Modifier Chart

Aircraft	Value	Aircraft	Value	Aircraft	Value	Aircraft	Value
Albacore	+1	Betty	+1	Hudson	-1	Seafire	-1
Albacore	+2	Buffalo	+1	Jake	+2	Sea Hurr.	-1
Avenger	-1	Catalina	+2	Kate	+1	Swordfish	+2
B-17	-2	Dave	+2	Mavis	+1	Val	+1
B-24	-1	Dauntl.	-1	Nell	+1	Zero	+1
B-25	-1	Devstr.	+1	P-38	-1		
B-26	-1	Emily	+2	Pete	+2		
Beaufort	-1	Fulmar	+1	Rufe	+1		

Critical Hits (original Flattop rule book)

During Combat Resolution for any type of combat, if a 3 or 4 is rolled, there is a possibility of a Critical Hit being inflicted. The attacker rolls one die and on a result of 6, a Critical Hit is scored. Roll one die and consult the Critical Hit Table(pg 28).

Critical Hits (*The General*, Vol 18-6)

The following replaces the rules on Critical Hits (pg 28):

1. When using these Critical Hit optional rules, replace rule 21.6. with the following:
   If a CV/CVL receives a bomb hit while the ship has 4+ AFs in the Ready box OR 9+ AFs on board (all 3 boxes), a fire begins.
   If a CV/CVL receives a bomb hit while the ship has 9+ AFs in the Ready box OR 15+ AFs on board (all 3 boxes), a major fire begins.

2. During Combat Resolution for any type of combat, if a 5 or 6 is rolled and at least 1 hit is scored, a Critical Hit is inflicted. The attacker rolls one die and consults the section of the Critical Hit Table that corresponds to the target unit and type of attack.

3. Fire

    3.1 While on "Fire", a ship may not perform any Air Operations. Each turn the Fire burns, the ship suffers 1 hit and the loss of 2 AFs. This damage is assessed at the end of each Combat Phase beginning the turn the Fire starts.

    3.2 Beginning the turn after the Fire starts, and each turn after if its still burning, the player rolls one die at the start of the Combat Phase. A roll of 1-4 extinguishes the Fire and no damage is assessed that turn.

    3.3 More than 1 Fire may burn on a ship concurrently. These are treated separately, each causing damage and being extinguished individually. Note that a single bomb hit could start 2 fires.

4. Major Fire

    4.1 A ship suffering "Major Fire" may not perform Air Operations for remainder of game. Each turn the Major Fire burns, the ship suffers 2 hits and the loss of 5 AFs. This damage is assessed at the end of each Combat Phase beginning the turn the Major Fire starts.

    4.2 Beginning the turn after the Major Fire starts, and each turn after if its still burning, the player rolls one die at the start of the Combat Phase. A roll of 1-3 extinguishes the Fire and no damage is assessed that turn.

    4.3 "Major Fire" supersedes "Fire". If a ship is already on "Fire and receives damage enough to cause a Major Fire, the Fire is considered out and only the Major Fire burns. A ship with a Major Fire ignores any further Fire or Major Fire results.

5. Half-speed restrictions are cumulative. A ship restricted to half-speed for more than one reason at the same time is crippled and cannot move.

6. All direct and Critical Hit damage inflicted by a single Air Formation takes effect immediately, before any other attacks. This does not apply to damage resulting from Fire or Major Fire because such damage is assessed at the end of the Combat Phase.

The following table replaces the Critical Hit Table in Flattop rule book (pg 28). (Note that AVs are treated as other ships.)

Critical Hit Table

CV/CVL — Bomb Hits	
1	Elevator jammed. Ship has no Readying Factor next turn
2	Deck damage. Planes may not take-off or land next turn
3	Elevator damaged. Ship Readying Factor halved (round up) for remainder of game
4	Heavy hit forward. All planes in "Just-Landed" box eliminated; planes may not take-off next turn
5	Fire
6	Fire

CV/CVL — Torpedo Hits	
1	Boiler fires extinguished. Ship may not move next turn
2	Engine room damaged. Ship moves 1/2 speed next turn
3	Engine room damaged. Ship moves 1/2 speed next turn
4	Engine room heavily damaged. Ship moves 1/2 speed for remainder of game
5	Sharp list. Planes may not take-off or land next turn
6	Major fire

Other Ships	
1	3 additional hits
2	2 additional hits
3-6	1 additional hit

Bases	
1	2 additional hits
2	1 additional hit
3-4	Roll a die and eliminate that number of Air Factors
5	No Readying Factor next turn
6	Planes may not take-off or land next turn

Air Formations	
1-2	No effect
3-6	Roll a die and eliminate that number of Air Factors

Expanded Plane Functions (original Flattop rules)

Combining Air Factors.

When two or less Air Factors of a plane name are involved in Air-Air or Air Attack Combat, these Air Factors may combine with any other Air Factors of another plane name performing the same mission (escort/interceptor in Air-Air, or as bombers in Air Attack).

Air Modifiers

See above.

Para-Frag Bombs

May be used only in Santa Cruz and Guadalcanal scenarios and only by A-20, B-25 and B-26. Planes armed with Para-Frag bombs must make a Level Bombing Attack from low altitude against a base. Any other type of attack has no effect. The same BHT is used as would be used for that plane name armed with GP bombs. Para-Frag bomb hits cause no damage to the base itself, but count as 2 hits for eliminating Air Factors.

Skip Bombing

May be used only in Eastern Solomons, Santa Cruz and Guadalcanal scenarios and only by A-20, B-25 and B-26. Planes armed with Skip bombs must make a Level Bombing Attack from low altitude against a ship. Any other type of attack has no effect. The BHT used is 1. However, if any hits are scored the ship also receives a Critical Hit.

Strafing

Strafing attacks may only be made by Zero, Wildcat, BF, P38, P39, P40, A20 and B-25s. Planes making a strafing attack may not be armed when they take off. Planes used in Air-to-Air combat MAY make strafing attacks in the same turn and are subject to AA fire. Planes making a Strafing attack must make a level bombing attack from low altitude. Any other type of attack has no effect. The same BHT is used as would be used for that plane name in Air-to-Air combat. Strafing attack hits cause no damage to the Base/Ship but count as hits for eliminating Air Factors.

Special Plane Handling

Sea planes and Float planes may land at bases listed as LP. However, each readying move for these planes takes 2 RF.

The following plane names may move into or through more than one box at a base/ship during one Air Operations Phase: Zero, Wildcat, BF, P39 and P40. It still costs 1 RF for each move but makes it possible for these planes to take-off on the turn after they land.

The following planes take 2 Ready Factors instead of 1 for each readying move at a base: B17, A20, B25, B26 and Hudson.

Planes may land armed instead of jettisoning their bombs. For each armed Air Factor, a player must roll one die and consult the Night Landing Table (if it's a Night turn, add a +1 Modifier). An armed plane is placed in the Ready box on the turn it lands.

Landing at Damaged Bases

Planes may land at a damaged base in excess of the base's current LF but each factor must use the Night Landing Chart (if it's a Night turn, add a +1 Modifier). Planes may NOT land at a base in excess of the base's Undamaged Maximum LF.

Altitude Effects On Movement

Air Factors at low altitude expend 2 move points for each hex they move into. This includes a hex where an Air Factor moves from low to high altitude. Only one point is expended to go from high to low.

Land-Based Planes

Land Based planes are worth only 1 Victory Point each.

Off-Board Base Movement

Planes may move off-board between off-board bases. The distances between bases is as follows:

Kavieng — Truk = 36, Australia — New Caledonia = 73.

Players may use distance in hexes between off-board bases and map hexes as follows:

Kavieng — S1, U1 = 3, Truk — AA 1 = 33, Australia — A40, B40 = 7,

New Caledonia — II 44, KK 44 = 23.

Chance Combat

Players may attempt to initiate Air-Air Combat in any hex. All other rules still apply. Interception attempt is resolved using the Interception Table.

*Additional Expanded Plane Functions (***The General,** *Vol 27-2)*

Large Formation Search Modifier

Use a -1 Search Table Modifier for Air Formation of 10+ Air Factors.

Anvil Attacks

Anvil Attacks may be declared by torpedo planes. Modifiers are included on Combat Tables included in this document.

Dauntless Extended Range

The Range Factor of the Dauntless may be increased to 7 if BHT is reduced to 4.

Early Risers

For scenarios that begin at 0600 allow land-based planes at off-board bases to start in their respective entry hexes and to move normally on Turn 1. Fill in Air Record Sheet retroactively to reflect actual hour of takeoff.

Expanded Ship Functions (original Flattop rules)

Fueling Ships

Ships may fuel on any and every turn in which the TF they are in contains an AO(oiler), no matter how many ships are in the TF. Each ship that is fueling that turn must stay in the TF with AO for the whole turn.

Once fueling has begun, a ship must stay with the AO till fueling is completed or have its MF reduced to 1 (ships with MF of 1 are unaffected) until it completes fueling. The same is true for a TF that does not begin fueling by a required turn according to the Special Rules for a scenario.

It takes 10 turns to fuel, but the turns do not have to be consecutive and if fueling is interrupted the process does not have to be started again; the partial fueling already completed counts and fueling is continued from that point. The presence of more than 1 AO in a TF does not reduce the time it takes a TF to fuel. Ships cannot refuel in a Storm hex.

Towing

A ship that is crippled (dead in the water)may be towed by another ship. The towing ship must begin the turn in the hex with the ship to be towed and then may move with the towed ship that turn and each turn thereafter. The MF of the ships (towing and towed), while they remain together, is 1 hex every 2 turns as in rule 20.2.1. The towing ship may cut loose the ship it is towing at anytime and resume normal movement; the crippled ship would then be dead in the water again. A ship may not tow another ship into or through a Storm hex. PGs and SSs may not tow other ships but may be towed.

Rescuing Survivors

When CV, CVL, AV, CAV, BB, CA, CL, AP or APD is sunk, other ships may attempt to rescue survivors. PG and SS may not. Ships may rescue friendly or enemy survivors. To rescue survivors, the rescuing ship must begin the turn in the hex where the ship was sunk and may not move that turn. Survivors cannot be rescued more than 5 turns after the turn the ship was sunk. A ship has 5 Survivor Factors. Ships cannot pick up more Survivor Factors from 1 ship than that ship has. Each ship may only carry 2 Survivor Factors at a time. Survivor Factors count as 5 VPs each at end of game. If a ship with Survivor Factors is sunk, the Factors are lost.

TF Organization

Planes that attack on the edge of a TF are not subject to AA fire from all the ships. Only CL, DD and PG in the TF can use their AA factor against planes that make an attack against CL, DD or PG. All CL, DD, PG in TF may total their AA factors. All other basic AA combat and Air combat rules apply.

Long Range Bombardment

During Bombardment Combat, a player may use long range bombardment instead of normal bombardment. All ships in a TF must use the same type of bombardment. Only BBs may perform long range bombardment and the BHT used is 6. A base may not use its SF against ships making a long range bombardment attack.

Torpedo Reloads (Japanese)

Only Japanese DDs can reload torpedoes. A Japanese DD can reload in any turn it is not involved combat including a turn in which it is placed in the Screen position during a battle in which there is no breakthrough combat involving it. DDs that reload should have their Torpedo marker removed.

Ammunition Reloads

A ship that remains in one of the following bases for 6 consecutive turns may regain its full ammunition factor and torpedo factor: Rabaul, Lae, Espiritu Santo, Port Moresby.

Additional Expanded Ship Functions

Ship Names (*The General*, Vol 27-2)

Ignore section of rule 7.15 that forces revealing of ship names. Never reveal a ship name at any time.

Troop Transfer (*The General*, Vol 26-5)

AP and APD ships anchored at a friendly base(including a captured one) may shift troops between ships at the rate of 3 factors per turn. They may not land troops and shift them in the same turn.

Alternate Initiative (original Flattop rules)

Players may use one of the following three ways to decide who has the initiative each turn.

1. Players alternate having the initiative each turn.

2. Players roll the die normally, but the player who did not have the initiative last turn adds 1 to the die roll.

3. Players roll the die normally, but the player who has more Air Formations on the board adds 1 to the die roll.

Alternate Plane Movement Sequence (original Flattop rules)

Players may alternate moving 1 Air Formation at a time during the Plane Movement Phase. The Air Formation may be moved on the map or on the Log Sheet. When one player has completed moving all his Air Formations the other player moves all his remaining Air Formations. Players should flip or mark each Air Formation as it is moved.

Less Luck (original Flattop rules)

Use one of the following two methods to reduce the amount of luck in combat resolution.

1. The number of hits scored is always equal to the Result Number in all types of combat. No die is rolled.

2. The number rolled on the die modifies the Result Number as follows:

    1-2 = the number of hits equals the Result Number -1

    3-4 = the number of hits equals the Result Number

    5-6 = the number of hits equals the Result Number +1

Another way to reduce the luck factor in the game is to delete the use of the Search Table and the Shadow Table. All planes may observe each turn and shadowing attempts are always successful.

SUBMARINES

Submarines (original Flattop rules)

1. Submarines may be setup anywhere at start but not within 10 hexes of any enemy base. No more than 6 submarines may be set up in any one mapboard Sector.

2. Submarines are moved at the end of the TF Movement Execution Phase after all TFs have been moved on the mapboard and the log sheet. Each player can move 6 or less submarines each turn. Submarines cannot move after a turn in which they were involved in any type of combat. Submarines always have a MF of 1.

3. Submarines can never be placed in a TF. They may move on the mapboard or on the Log Sheet like other ships. When moving on the Log Sheet, they are noted as S. Submarines on the mapboard are always considered to be observed units: the actual counter for each sub unit must be placed on the map. Submarines at periscope depth moving on the Log Sheet can be observed by planes at low altitude; Submarines at deep depth cannot be observed. Submarines at periscope depth may observe units only in the same hex; the condition number is 3. Submarines at deep depth cannot observe.

4. No more than 6 Submarines of each side can be in one hex at any time during the game. This is an exception to Rule 9. Submarines may not enter any all-land hex, partial land hex, or cross a reef hexside.

5. Submarines can be used for shadowing, but only within the restrictions of their MF, and only when they are at periscope depth. Submarines can be shadowed if at periscope depth, but only by planes at low altitude.

6. If a Submarine went to deep depth during the Combat Phase, it is considered to be at deep depth for the entire next turn. Otherwise, it is considered to be at periscope depth at all times.

7. In any turn in which Submarines are in a hex with any enemy units, a Submarine Combat Step is added to the Combat procedure after the Surface Combat Step. Submarines take no part in any other type of combat; they may not combine with other ships or planes in any combat. Submarines in a hex with enemy units may announce they have gone to deep depth and there is then no combat. If Submarines announce they have not gone to deep depth, Submarine combat takes place. There are 2 types of Submarine combat: Submarines vs. Planes and Submarines vs. Ships. If both types of Submarine combat are possible in the same hex, the combat involving Submarines vs. Planes is always resolved first.

8. Submarines in a hex with enemy planes that wish to initiate an attack resolve their AA fire against the planes as a normal AA combat and then are attacked by the planes as a normal Air Attack Combat.

   8.1. The BHT used to resolve a Submarine's AA fire is 4.

   8.2. Only the following planes armed with GP bombs that make a level bombing attack from low altitude can attack subs; all other types of attacks have no effect. A20, Avenger, BeauFighter, Beaufort, B25, B26, Catalina, Dauntless, Devastator, Hudson, Betty, Emily, Jake, Judy, Kate, Mavis, Nell, Val, Catalina, Mavis and Emily use BHT of 2, all other planes listed use BHT of 1.

9. Submarines in a hex with enemy ships are first attacked by the enemy ships and then any surviving Submarines may attack the ships.

   9.1. Only CL, DD and PG may attack Submarines. CLs and PGs have 1 attack factor, DDs have 2 attack factors. The BHT used is 2 for Allied ships and 1 for Japanese ships. Subtract 1 on night turns.

   9.2. The BHT used is 9 for Allied subs and 11 for Japanese subs. Submarines have 4 attack factors each. Submarines can make an unlimited number of attacks per game. Add 1 if it is a night turn. Add 3 if submarine was not attacked by planes or ships this turn. Subtract 1 for each ship that attacked the sub this turn. All normal surface attack combat modifiers apply.

10. Submarines are worth 8 Victory Points each.

Submarines (*The General*, Vol 18-6)

Depth

1. Submarines may be at one of three depths: Surface, Periscope, or Deep. A sub may change from one depth to any other depth each turn.

2. If a Submarine is at surface depth and is attacked by an AF or TF, the Submarine may attempt to dive to periscope depth to escape the attack in the following manner. The BHT is established and the player with the Submarine must then roll that number or lower to be able to dive. A Submarine that dives may only be attacked at periscope depth. If a Submarine chooses not to or is unsuccessful in the diving attempt, it is attacked at surface depth and the BHT for the attack is increased by two tables (+2).

3. If a submarine is at periscope depth, it is attacked normally but cannot use its AA factor.

4. Submarines at surface depth or periscope depth can observe and be observed.

5. A Submarine at deep depth cannot be attacked. A Submarine at deep depth cannot be observed, cannot observe anything, and can move 1 hex only every even turn. A Submarine at deep depth may not enter a partial-land hex.

6. A SS type Submarine at surface depth can move a second hex every third turn, providing it has been at surface depth for the last two consecutive turns and remains at surface depth on the turn it moves two hexes.

Submarine Types

Submarine Types

SS	I-Type (Japan), Gato Class (US)
	Standard combat sub represented in the game.
SST	SF 0, AAF 1, MF 1, Damage 1, Torpedo Factor 1, VP 8
	R0-Type (Japan), S-Boats (US)
	Small subs entirely unsuited to combat.
SSM	SF 1, AAF 1, MF 1, Damage 1, Torpedo Factor 2, VP 10
	Minelayers 1200+ tons. Japanese SSMs also operate floatplanes.
	May rescue 1 survivor factor.
	The Japanese SSM with the floatplane (1 x Pete) must be at surface depth and spend 3 hours to launch or retrieve the plane.
	When launching, the Japanese player rolls a die to see if the plane can fly.
	If the roll is a 1, the plane is unserviceable for the remainder of game (no VP award).
	If roll is 2, the plane must roll again next turn. On a roll of it may take-off.
	The plane may only fly once per 12 hours, may not be placed in AF with other planes, and may not engage in combat.
	The plane has a MF of 4 and a RF of 4.
	This SSM sub is worth 12 VPs.

Operation Areas

1. Submarines may not surface during the day within 5 hexes of an enemy base.

2. Submarines are not allowed within 3 hexes of an enemy base at any time.

3. Pete and Dave floatplanes may attack Submarines with a BHT of 1. The planes were used in this capacity and their numbers around the Bougainville area were deleted for playability. Rabaul and Shortland should have 1 special Air Formation of Petes or Daves assigned to them; do not use any plane counters, only an Air Formation counter. If destroyed, these Air Formations are replaced 1 hour after destruction by a new unit in the Just-Landed box of the appropriate Base. These Air Formations do not count towards replacements. Each is worth 1 VP.

Combat

One of the biggest problems with the submarine system is combat resolution. To help relieve this imbalance, whenever a player has a submarine that is about to be attacked by a TF, he must first roll one die and consult the Submarine Attack Table (below). If more than one TF is present, roll for each.

Submarine Attack Table

Die roll	Effect
1	TF may attack but may not be attacked by sub.
2	Attack is resolved normally.
3	Attack is resolved normally.
4	The sub may attack first and then the TF may attack.
5	The sub may attack first and then the TF may attack.
6	The sub may attack but may not be attacked by the TF.
Modifiers:	
+1 Night Turn	
+1 in Storm (no combat of any kind in a Storm ?!?)	
+1 TF is in a Minefield	
+2 TF is anchored	
-1 submarine is a SSM or SST	
-1 enemy AF in the hex	
-1 TF has been attacked by a sub within the last 12 hours	

Scenario Changes & Additions

Coral Sea

Allied subs are 5xSST; Japanese subs are 2xSST, 5xSS.

Eastern Solomons

Allied subs are 1xSSM, 6xSS; Japanese subs are 1xSST, 2xSSM and 10xSS.

Santa Cruz

Allied subs are 1xSSM, 11xSS; Japanese subs are 12xSS.

Guadalcanal

Allied subs are 1xSSM, 12xSS; Japanese subs are 2xSSM, 1xSST and 10xSS. One of the SSM's can carry a Pete floatplane (1).

Submarines (*The General*, Vol 19-6)

1. Submarines may operate at three levels — surface, periscope, & deep. The deep level may not be used in partial landhexes.

2. A submarine may move 1 hex per turn on the surface, one hex per even hour at periscope depth, and may not move if deep. A submarine is moved based on its depth at the beginning of the movement phase. A submarine may change to any depth during movement.

3. A sub may observe up to condition three only in its own hex if it is on the surface (air units may be observed at condition one if one hex away and at HI and any sub with radar may observe normally); up to condition two in its own hex if at periscope depth; and only condition 1 if deep.

4. A sub may send/receive RTs at either periscope depth or on the surface.

5. A sub on the surface is subject to normal detection. A sub at periscope depth is only observed if it attacks a ship or is in a hex with DDs which did not move that turn. A deep sub is only observed by a TF with at least 4 DDs which did not move that turn; and the sub is told only that there are ships overhead.

6. If a sub is on the surface and is involved in combat, the attack against the sub is resolved first. If a sub is at periscope depth, the sub's attack is resolved first. Deep subs may only receive attacks. During night turns, the sub's attack is always resolved first.

7. A sub may be ordered to dive upon receiving an attack (e.g. from surface to periscope depth for an air or surface attack and from surface or periscope to deep for an ASW attack). This will happen during the combat phase & will have an effect upon the movement capabilities for the next movement phase. A sub which dives under an air attack cannot make an attack itself that turn. A sub which dives under a surface or ASW attack before making its own attack has the

surface or ASW attack resolved at its new depth. A sub which dives after making an attack has the surface attack resolved at surface level and the ASW attack resolved at periscope depth.

8. A sub which begins and ends its move in the same hex with ASW units has the ASW attack resolved at the most favorable depth to the ASW combat (surface or periscope) which the sub was at during movement.

9. Per the above, it would be possible for a sub on the surface to dive to periscope depth before combat, thus escaping shelling, fire its torpedoes at periscope depth, then suffer an ASW attack at that depth, and then dive deep. If the ASW units remained overhead during the next turn and the sub elected not to rise, it would only suffer deep ASW attack that turn.

Additional Submarine Optional Rules (The General, *Vol 26-5*)

1. Submarines at periscope depth can be observed by planes flying at low altitude if they expend 3 MFs in the hex and pass their Search die roll. A TF whose plotted move takes it into the subs hex, may attack the sub as long as the aircraft remains in the hex to spot.

2. All floatplanes can carry GP bombs and attack subs with BHT 1.

3. For night attacks, submarines cannot combine their attack factors.

4. Target selection for submarine attacks at night use the following table:

Random Target Selection for Submarine Night Attack

Die Roll	Selection
1	DD, AP if no DD, PG if no AP, CL if no PG.
2	DD, AP if no DD, PG if no AP, CL if no PG.
3	AP, APD if no AP, DD if no APD.
4	PG, DD if no PG.
5	CL, DD if no CL.
6	Capital Ship, roll again below.
If Capital Ships...	
1	CA, BB if no CA.
2	CA, BB if no CA.
3	BB, CV if no BB.
4	BB, CA if no BB.
5	AV/CAV, CV if no AV/CAV.
6	CV, AV/CAV if no CV, CA if no CV/AV/CAV.

Note: if indicated target ship is not present *and* alternate target is also not present, refer to alternate target for last ship type in the table named. If all ship types are the same, no die roll is necessary. If more than one ship of type indicated is present then:

1) if less than 6 ships, use single die roll to select ship.

2) if more than 6 ships, divide into groups and use die rolls to select group and then ship.

ADDITIONAL RULES

PT Boats (*The General*, Vol 18-6)

GF = 0, AAF = 1, MF = 2, Damage = 1, Torpedo Factor = 1, VP = 4.

PT-Boats of this period were armed with 2-4 WWI torpedo tubes and a varied selection of .30 and .50 caliber machine-guns. Those PTs with 2 torpedo tubes had 4 small depth charges that were totally useless. PTs were capable of speeds up to 35 knots when in good shape. For purposes of this article PTs are 2 per counter. PTs are treated as ships except for their Movement Factor. PTs have a very short action radius.

1. PTs are treated like aircraft for purposes of movement. They require a log column and a TF box. These may be made from unused groups or from a separate sheet of paper with a corresponding counter. They have a Range Factor of 12.

2. After expending their 1 attack, PTs must rearm using the Optional Rearming rule. PTs have the option of readying in 3 hours but may only do so without torpedoes.

3. Due to severe problems with servicing, each PT must, after reloading, roll a die. On a roll of 1-4, the PT may operate normally. On roll of 5-6 the PT must start rearming over again. Each time the PT starts the rearming process it may choose the 3 or 6 hour reloading option.

4. PTs are immune to all torpedo attacks and all Minefields. Aircraft attacking PTs have their BHT reduced by 2 tables(-2). Due to their small size and muffled engines, whenever a player has a PT that is about to be attacked by a TF, he must roll a die and consult the PT Attack Table (below). If more than one TF is present, roll for each one.

5. The BHT used for the PT is 7 and 11 for the TF IF the TF attacks first. If the PT attacks first the BHT used for the PT is 11 and 9 for the TF. For night turns, subtract three from the BHT(-3).

PT Attack Table

Die Roll	Result
1	TF may attack but may not be attacked by the PT.
2	TF may attack first and then the PT may attack.
3	Attack is resolved normally.
4	The PT may attack first and then the TF may attack.
5	The PT may attack first and then the TF may attack.
6	The PT may attack but may not be attacked by the TF.
Modifiers:	
+1 Night Turn	
+1 in Storm (no combat of any kind in a Storm ?!?)	
+1 TF is in a Minefield	
+2 TF is anchored	
-1 if enemy AF is in the hex	
-1 TF has been attacked by a sub within the last 12 hours	

Scenario Additions

Coral Sea

None

Eastern Solomons

Allies 2xPT start at Tulagi. Tulagi has AAF 1, Damage Factor of 4.

Santa Cruz

Allies 4xPT start at Tulagi. Tulagi has AAF 3, Damage Factor of 6.

Guadalcanal

Allies 9xPT start at Tulagi. Tulagi has AAF 3, Damage Factor of 6.

Mine Warfare (*The General*, Vol 18-6)

Planting Minefields

1. Minefields may be planted in any hex where anchoring is allowed. Minefields are considered to occupy a designated hexside. An exception is when a base is in the target hex; the Minefield is then considered a Port Minefield. Such a Minefield occupies the whole hex where ships anchor (i.e.: to land troops, rearm, or to establish a Seaplane Base).

2. Minefields may be planted by ships or submarines.

3. Minefields are measured in Mine Factors; the higher the Mine Factor the more effective the Minefield is. All Minelaying ships begin the game with a number of Mine Factors; this is the maximum number of Mine Factors this ship may carry at one time. Ships may reload mines from a Depot. Depot locations and the number of Mine Factors available are listed in the Scenario Table(below).

4. After reloading (or at the start of a game), the player must record the intended primary Target Hexside and an adjacent secondary Target Hexside; use the Wind Direction Numbers to indicate hexsides. If the Target is a Port, no secondary target Hexside is necessary.

5. To establish a Minefield, the minelaying ship enters the hex and exits over the hexside the Minefield is to affect. The actual hexside mined and the number of Mine Factors planted are recorded on a separate piece of paper. Submarines may not plant Minefields if they are at deep depth. Ships that plant Minefields may move 1 or 2 hexes during the turn.

6. A ship may plant less than all of its Mine Factors. The ship may keep any remaining Mine Factors on board, but must return to the Depot so a new Target Hex may be specified.

7. If the ship is attacked during a turn in which it makes a minelaying run, the run is aborted. The Mine Factors remain on board the ship. The ship may attempt another planting run on a later turn.

8. If for some reason the player decides not to plant the Minefield in the intended Target Hex, then the ship must return to Depot before designating another Target Hex.

9. If a ship is observed while minelaying, no special information is related — unless the Condition Number is "3". If the Condition Number is "3", the observing player is told that Mine Factors are present in the hex. If a submarine is minelaying, this can only be observed by an Air Formation AND the Condition Number must be "3".

10. To reload Mine Factors, a ship returns to a Depot (designated in the scenario), and if Mine Factors are available, may reload using the Rearming Optional Rule. Mines may be reloaded at the same time a ship is rearming ammunition and torpedoes. A Skip Bomb counter may be used to indicate Mine Factors onboard.

11. The U.S. DMs are WWI four stack DDs that do not have a good cruising range. As a result, these ships have a MF of 1 unless: they are within 2 hexes of an observed enemy unit, or they are within 5 hexes of the designated Target Hex. DMs based at Espiritu Santo may only designate a Target Hex in Sectors III, VII, and VIII, or within 14 hexes of Tulagi. DMs based at Tulagi may only plant Mine Factors in the areas mentioned above or within 26 hexes of Tulagi.

12. Japanese SSMs require 3 passes through the Target Hexside to plant their 1 Mine Factor.

13. Any minelaying ship with a Gunnery Factor is treated like a DD for Surface Combat.

Minefield Detection

1. Ships may search a suspected hex for mines by simply declaring this when moving on the mapboard. If such a hex contains a Minefield, it is found. Coastwatchers can never find an enemy minefield.

2. When a player finds a Minefield, he is told only that a Minefield exist in the hex. He is not told on which hexside the Minefield exists, nor how many Mine Factors are in it.

Minefield Combat

1. An enemy TF must be observed to be attacked by a Minefield. In most cases, coastwatchers will be able to observe a TF that enters a Minefield. Any TF that enters a hex which contains an enemy base are automatically observed. An unobserved TF that enters a Minefield is unaffected by it.

2. When an observed enemy TF crosses a hexside that contains a Minefield or enters a Port Hex that contains a Minefield, the TF is attacked by the Mines.

3. The BHT of a Minefield in an open hexside is "3". An open hexside is any hexside which contains no land. The BHT of a Minefield in a strait hexside is "14". A strait hexside is nay hexside that has 2 separate land areas in it (2 land areas that are not connected within the hex). The BHT of a Port Minefield "15". The number of attacking factors is the number of Mine Factors in the hex.

4. Hits suffered by a Minefield attack must be distributed among ships in the TF, one per ship in the following manner. Each DD, each AP, each PG, each CL, each AO, any other ship type/s. If the number of hits exceeds the number of ships in the TF, ships take extra hits in the same order.

5. Each TF that enters a Minefield is attacked by the Minefield separately. (??? are Mine Factors reduced after an attack?)

6. If a TF is attacked by aircraft while in a friendly Minefield, the BHT (of the attack) is increased by 1 table (+1).If a TF is attacked by enemy ships while in a friendly Minefield, the TF must accept an attack by the Minefield.

7. A TF in an enemy Minefield undergoes a Minefield attack before any combat.

Minesweeping

1. Only Minefields that have been found may be swept.

2. To sweep a non-Port Minefield, a TF must contain only MS ships. The TF must cross the Minefield hexside. In doing so, the TF s attacked by the Minefield with a BHT of '9'. (dangerous job, but this seems kind of high since these ships were trained to do this, BC). For each MS that survives, the number of Mine Factors in the Minefield is reduced by one. * Note that the MS will not know which hexside contains the Minefield, and may make several runs through the hex before actually sweeping some mines!

3. To sweep a Port Minefield, a player may roll a die each turn. On a roll of 1-4 there is no effect. On a roll of 5 the Minefield is reduced by 1 Mine Factor. On a roll of 6 the Minefield is reduced by 2 Mine Factors. This procedure represents the efforts of small boats available at most bases. A player may add one (+1) to the die roll for any base that is a Depot, a Seaplane base, or a PT base.

4. An MS may escort a TF through a Minefield that has not been swept. In this case the TF undergoes a Minefield attack with BHT reduced by 3 tables (-3).

Victory Points

1. Each Mine Factor planted more than 6 hexes from a friendly base gets one point.

2. Each Mine Factor planted in a hex with an enemy base gets three points

3. Each swept Mine Factor gets one point.

Scenario Additions

Coral Sea

Port Moresby is a Depot with 2 Mine Factors and has a Minefield with 8 Mine Factors. Rabaul is a Depot with 2 Mine Factors and has a Minefield with 3 Mine Factors. The Japanese replace 4 PG at Rabaul with 1 ML and 3 MS, and the 4 PG at Tulagi with 2 ML and 2 MS.

Eastern Solomons

Allies: Port Moresby has a Minefield with 8 Mine Factors. Espiritu Santo is a Depot with 6 Mine Factors and has a Minefield with 3 Mine Factors. Delete 2 DDs and add 3 DM that start at Espiritu Santo and 2 MS that start at Tulagi. Tulagi is a special non-plane base with an AAF of 1 and a Damage Factor of 4. It is 'knocked out' by 4 hits.

Japanese: Rabaul is a Depot with 3 Mine Factors and has a Minefield with 4 Mine Factors. Add 1 DM and 2 MS which must start at Rabaul.

Santa Cruz

Allies: Port Moresby has a Minefield with 10 Mine Factors. Espiritu Santo is a Depot with 6 Mine Factors and has a Minefield with 5 Mine Factors. Delete 2 DDs and add 2 DM and 2 MS that start at Tulagi. Tulagi is a special non-plane base with an AAF of 3 and a Damage Factor of 6. It is 'knocked out' by 6 hits.

Japanese: Rabaul is a Depot with 3 Mine Factors and has a Minefield with 4 Mine Factors. Add 1 DM and 2 MS which must start at Rabaul.

Guadalcanal

Allies: Port Moresby has a Minefield with 10 Mine Factors. Espiritu Santo is a Depot with 8 Mine Factors and has a Minefield with 5 Mine Factors. Add 1 MS that starts at Espiritu Santo. Add 2 DM and 1 MS that start at Tulagi. Tulagi is a special non-plane base with an AAF of 3 and a Damage Factor of 6. It is "knocked out" by 6 hits. Tulagi can become a Depot if Mine Factors are brought to it during the game.

Japanese: Rabaul is a Depot with 3 Mine Factors and has a Minefield with 5 Mine Factors. Add 2 DM and 2 MS which must start at Rabaul.

Allies

DM   GF=1, AAF=1, MF=2, DF=2, Mine Factors =2, TF=0   VP=10

MS   GF=0, AAF=1, MF=1, DF=1, Mine Factors =0, TF=0   VP=6

Japan

DM   GF=1, AAF=1, MF=2, DF=2, Mine Factors =2, TF=2   VP=10

MS   GF=0, AAF=1, MF=1, DF=1, Mine Factors =0, TF=0   VP=6

ML   GF=0, AAF=1, MF=1, DF=1, Mine Factors =1, TF=0   VP=8

Ammunition

1. Ships must declare whether their ammo is GP or AP. (A simple alternative is to say that CL, DD, APD, PG and SS have GP ammo, and BB, CA, CAV, and CV/CVL have both. Amount is controlled by Ammunition Factor.

2. GP ammo is used only against bases & small ships

3. AP ammo is used against all ships.

4. If ammo is used against the wrong type of target, four is subtracted from the BHT.

5. Ammo may be split up among the total factors available in any amounts desired, but players must be careful to note which type has been used.

6. GP bombs used against small ships(DD, PG, AO, AP, APD) do so at the most advantageous BHT # for the type of attack (EXAMPLE: a Dauntless making a dive bombing attack with a GP bomb against an APD uses the "7" BHT). AP bombs used on these targets do so at the least favorable BHT.

Launch Under Attack

1. If a base or CV is attacked in a turn in which it uses a maximum launch, it is considered to have planes on the ground (CV) for purposes of computing losses during that attack. Losses will be subtracted from that AF before its combat is computed. Note that this will be slightly difficult if the launched AF is intercepting that attacking formation. In this case, prefigure for normal losses then resolve combat normally.

2. The same thing will occur if the attacker has the attacking planes overhead at the beginning of turn's movement phase and the other player makes any type of launch.

3. Allow a number of Air Factors equal to the Normal LF to be in the air; then roll 1d6 and allow that many Air Factors to be in the air with the Air Formation; all remaining air factors (from the Air Formation that launched) are still on the ground. Subtract losses after combat and allow remaining planes to join Air Formation.

Search Table

Procedure

During the Plane Movement phase, player A declares a search attempt and describes the Flight Path of the searching unit (AF) by calling out a path of hexes the search unit flies through. Player B marks this Flight Path on his map for reference. When completed, player B rolls 1d6 and consults the search table, reading the result to Player A.

There are 2 result columns on the table. The left column is used when a TF is NOT present within the search area. These results represent a successful search (1-4) or a failed search (5,6). When a TF is IN the search area, find the result on the right-hand column using the correct range. Range is the number of hexes from the nearest Flight Path hex to the TF. The search area is any hex within 2 hexes of the Flight Path.

The table is meant to generate search reports like "Enemy ships sighted" (no details), or "Carrier and 2 Battleships with Cruiser Escort", or "2 Cruisers with DD Escort" (maybe failed to see a Carrier). Also, "No Sighting" which means nothing is in area (a successful search) and "No Report" which is a failed search.

The term 'Class' appears several times in the table. When reading a search report, replace the word Class with an actual class name. Class names are listed below the table in order of priority. Always use Class I first (if present), then Class II (if present), etc. For example: a TF with 2 CV, 4 CA and 6 DD gets a result of "Enemy (Class) with (Class) Escort". This reads as "Enemy Carriers with Cruiser Escort". The same result with no CV's would read, "Enemy Cruisers with Destroyer Escort".

The ship types that qualify for each class are given below, as well as the size for each class.

Search Reports Table

Die Roll	No TF in Search Area	Range	TF Within Search Area
		0	# Class, # Class, "with (Class) Escort"
1	"No Sighting"	1	"Enemy (Class)", "with (Class) Escort"
		2	"Ships Sighted"(+/- 1 Hex)
		0	# Class, # Class
2	"No Sighting"	1	"Enemy (Class)"
		2	"Ships Sighted"(+/- 2 Hex)
		0	"Enemy (Class)", "with (Class) Escort"
3	"No Sighting"	1	Skip Class, half Class, "with (Class) Escort"
		2	"No Sighting"
		0	"# Large Ships" *or* "# Small Ships"
4	"No Sighting"	1	"Large Ships" *or* "Small Ships"
		2	"No Sighting"
		0	"Ships Sighted"
5	"No Report"	1	"No Report"
		2	"No Report"
		0	"No Report"
6	"No Report"	1	"No Report"
		2	"No Report"

Class Order	Type	Ship Size
"Carrier"	CV, CVL, CVE	Large
"Battleship"	BB	Large
"Transport"	AO, CS, AP	Large
	PG	Small
"Cruiser"	CA, CAV, CL	Large
"Destroyer"	APD, DD, DE	Small

Plane Movement & Air Combat Phase

1. Do not use initiative.

2. Determine movement order as follows:

   2.1 Both players roll 2 dice, one red and one white. Whichever player rolls the highest number on the White die goes first and may move a number of Air Formations equal to the number on the Red die. When these movements are completed, the other player moves a number of Air Formations equal to the number on his Red die.

   2.2 Launch, Land, and/or Move a number of Air Formations equal to the Red Die roll.

2.3 Repeat procedure until all Air Formations have moved. If one player finishes moving all his Air Formations the other player may move all his remaining Air Formations regardless of the die roll.

3. Armed Air Formations must be launched before any other Air Formation may take-off, land, or move.

4. Air Combat is resolved as it occurs. After each Air Combat is resolved, move the attacking Air Formation out of the target hex into any adjacent hex.

5 Conduct Shadow movements as a normal Search. (Flying in a ZOC pattern around last sighting can simulate a search pattern to re-establish contact.)

6. Carrier capacity.

6.1. Planes may not land on CV/CVL/CVEs with Air Factors in the READY Box greater Than MINIMUM LF.

6.2. Planes may not takeoff from CV/CVL/CVEs with Air Factors in the JUST–LANDED Box greater than MINIMUM LF.

MODIFICATIONS FOR GAMEMASTER

Flattop Gamemastered (*The General*, Vol 19-6)

Introduction

1. The gamemastered game is played by three or more people. The number on each side may be determined as in an ordinary game, but one participant will act as GM and will not play for either side.

2. It is the job of the GM to receive orders from each side each turn, interpret and process the information, and report the results to each player.

3. The GM is in charge of all facets of the game and is the final arbiter of all rules questions. The GM will make all dice rolls. All communications between opposing sides go through the GM. If playing a full command control multi-player game, all communications between all players should go through the GM.

4. The GM will follow all rules of the game(both as presented here and in the regular rules book) and interpret all orders impartially.

Orders

1. All moves and actions during the game are sent from players to the GM in the form of orders for each TF, AF base or other unit. All planned moves and combat for a turn must be included in that turn's orders.

2. Orders may be written provisionally and may contain as many cases & sub-cases as a player deems necessary.

3. It is the duty of the player to make certain that what he says is what he means. Unclear and ambiguous orders will be interpreted by the GM as best he can. Self contradicting orders may be treated as "no move." This will be even more crucial if using the command control system described below (Section 20).

4. AF orders will cover the complete flight and combat of the unit. Desired decision points for the unit must be spelled out in advance and each desired branch action spelled out.

5. A player will state in orders for each AF, TF, base & independent ship the report numbers for conditions 1 & 2 (as in regular rules Section 7).

Examples:

> "TF 2 at B/M23 shell Henderson Field." This order is clear assuming that all ships in the TF were to be used in the shelling.

> "AF 23 attack enemy TF at B/P33." This order has too little information. It makes no assignment of planes to types of ships and no mention of altitude or bombing mode. It also does not say what to do if the TF is no longer at P33.

> "AF 17 move N4, NW 2; do not divert but report all sightings; high altitude." This order is eminently clear and concise.

> "AF 3 fly N till hex DD 03 is reached or if a TF is spotted. Shadow TF as long as fuel permits. Return to base by fastest route. Report back every turn of shadowing. If DD 03 is reached and no TF is spotted, fly S back to base." While very detailed, these orders may still have some holes in them in a command control game.

Reports

1. The GM will return reports to each player after he resolves all actions for a turn.

2. The report will give all observations made by the player's units, weather conditions, and all combat results (but not the opponent's exact losses) as well as any other pertinent information.

3. During night turns, the GM may wish to run two turns at once, saving time — especially if the game is to be played by mail. This would simulate the use of less personnel during night hours.

Sequence of Play

1. The sequence of play is the same as the regular rules except for the deletion of the Initiative Phase.

2. The Plane Movement Phase is changed to read — the GM moves all planes (simultaneously) per their orders.

Weather

1. All weather rolls and cloud movements are hand led by the GM.

2. Each player is only told the cloud positions that he can see. Cloud cover can be seen by any unit in any hex in or adjacent to the cloud pattern.

3. Wind direction for an area is reported if and only if a player has any observing units in that area.

Observation

1. The GM will report to each player what each unit sees during its movement.

2. Observation conditions & the use of the Search & Shadowing Tables are per the regular game (except in the command control rules presented below).

TF Move & Shadow

1. TFs move as in the regular game. Movement notation on orders should be written start hex, move, and end hex. Moves should be listed as direction (N, NE, SE, S, SW, NW) and the number of the hexes moved from & to. Example: "TF 3: AA 25 — NE 1, N 1 — BB 23"

2. BB, CAV and AV units do not have to stop to launch Float planes. They do have to stop to recover them.

3. If two TFs are ordered to shadow each other, neither moves.

4. A TF with radar can shadow with one subtracted from the die roll. It can be ordered to move into the shadowed unit's hex if possible.

5. A unit shadowing at night has two added to the die roll (1 for a submarine).

6. A unit with an observation level of three has one subtracted from the shadow die roll.

7. Cloud modifiers to the Shadowing Table are only applicable to AFs.

Plane Movement

1. All plane movement is considered to be simultaneous.

2. Plane movement is ordered just like TF movement (8.1). Planes may also be given a variety of orders such as altitude changes, shadowing, divert to observe, shadow from one hex away, etc. The player must still obey all rules and is again at the mercy of the GM to interpret meaning.

3. Special interception occurs when planes are ordered to remain in the hex (for one or more MP) in which they engaged in combat the previous turn. Such movement is designated by "O" for orbit (this counts as one MP used) and results in observation being made in the subject hex. The special interceptors must also start their turn in the hex (Example: Player A bombarded AA 25 in the previous turn. This turn he moves "AA 25 — O, N4 — AA 21." He has used 5 MP and may be attacked in AA 25 if the opposing player retains a CAP force there. Player A will be told anything that could be observed in AA 25 for the turn.

4. Going from LO to HI anytime during the a turn costs one MP. Altitude changes must be noted on the order sheet. If players wish they may use an overscore for HI altitude & an underscore for LA.

Ready CAP

1. Ready CAP represents planes which are on the ground or CV in alert condition. These planes may take-off to intercept only in the hex in which they are located. The number of planes which may be launched and the altitude which they may attain is dependent upon the amount of warning available from the incoming strike. Orders for ready CAP should give the GM the size of the attacking formation needed to trigger a reaction. A player might be willing to take his lumps from two incoming planes but would want to react to a force of ten.

1.1. Ready CAP may consist of only regular interceptors.

1.2. The Ready CAP Table (below) gives launch capacity as a factor of warning versus desired launch altitude.

1.3. The GM will form the ready CAP aircraft which are available to launch into an AF and resolve combat as normal interception.

1.4. To prevent overuse, ready CAP may only be used during daylight hours.

1.5. Players should realize that ready CAP is two faced. If a small strike triggers interceptors, a large strike 3 turns later may find those same interceptors on the ground readying & unable to respond when needed.

Ready CAP Table

Altitude	Hexes of warning given				
	1	2	3	4	5+
LO	—	MIN	NOR	NOR	MAX
HI	—	—	MIN	NOR	NOR

CAP Intercept

1. CAP cannot normally change altitudes to intercept an incoming strike. The following modification allows a HI level CAP to intercept a LOW level strike.

   1.1   If a CAP AF is at HI altitude and all incoming strikes for the turn are at LOW level a portion of the CAP may dive down & intercept the incoming strike.

   1.2   If a CAP AF at HI altitude has a 3-1 superiority in Air Factors over all incoming HI level strikes, the CAP AF m AF may split.

   1.3   The proportion of Air Factors that may dive are given by the following table (all fractions rounded down):

HI-Level CAP & LO-Level Strike Table

Die roll	1	2	3	4	5	6
Fraction able to intercept	0	1/4	1/3	1/3	1/2	2/3

   1.4   After determining the number of Air Factors able to intercept, the GM will form the Air Factors into a new AF and place them on operations chart. Air to air combat will then be resolved normally.

   1.5   Diving AFs cannot combine with an existing LOW level CAP AF, until the end of the Combat Phase.

   1.6   Given the conditions set forth above, the "dive" is automatic. However, a player may issue orders preventing a CAP AF from dividing in this manner.

Surface Combat

1. For PBM games, each player should include the die number (regular rules 19.4) and any other attack/defense instructions with the TF orders. This includes screens, torpedo attacks, and breakthrough instructions.

2. DDs may bombard but only with a BHT of 4.

Combat Resolution & Damage

1. The GM is in charge of all combat resolution. The report to each player will be in the form Attacker/Defender/HT/Factors/Result. The GM will report the results of friendly action as if a die roll of "3" or "4" had occurred (i.e., the expected result). A player's own losses are reported precisely.

2. The entry under Factors should not be used to inadvertently report losses. (Example: in an air raid on a base, AA fire would normally destroy two planes out of eight attackers. If a "6" is actually rolled & four are lost, the GM still reports that he destroyed two planes and is under attack by six.) If the attackers stay in the hex to assess damage next turn (9.3), then the actual number of planes overhead will be reported (assuming normal observation conditions).

3. Torpedo hits count as 2 on all ships except CVs.

Command Control

In any game, the player is assumed to be controlling his forces at some command level. FLATTOP players are base or TF commanders. For increased realism, the operation of units at lower levels is subject more to the orders of command rather than the actions of command. In simulations of this type, communication is a problem between units if command levels are realistically considered.

These rules are also applicable to multi-player games, with the only change being that the GM should allow direct communication only between players who occupy the same hex.

Control Levels

1. Each player may only control TFs which contain either BBs or CVs and bases.

2. All other units are considered non-controlled and are subject to orders issued by higher commands.

3. Orders must be prepared in advance for submarines, non-controlled TFs and independent ships.

4. Any changes in the above orders must be made by RT (22.0) unless the non-controlled units are in the same hex as a controlled unit.

5. AF orders are given upon launch and may be changed only by Radio Transmission.

6. Orders may be as complex and detailed as desired but are still subject to interpretation by the GM.

Radio Transmissions

1. All enemy Radio Transmission (RT) is assumed locatable by radio direction finding.

2. Because radio & radio direction finding were very inaccurate sciences in the 1940s. The following "fog of war" rules apply to RTs:

2.1. There is a 1 in 6 chance that a RT will not be heard by the receiving unit/command. There is an additional 1 in 6 chance that a message which does get through will be garbled at the receiving point.

2.2. The hex location disclosed by the referee (for direction finding) is determined by rolling two die and consulting the following table:

Radio Direction Finding Table

Die Roll	1-2	3-4	5-6
1	N1	N2	S2
2	NE 1	N 1, NE 1	S 1, SW 1
3	SE 1	NE 2	SW 2
4	S1	NE 1, SE 1	SW 1, NW 1
5	SW 1	SE 2	NW 2
6	NW 1	SE 1, S 1	NW 1, N 1

The referee will apply the result to the actual location of the intercepted transmission.

3. RT is assumed to have two forms: coded and uncoded.

3.1. Coded messages may be sent from & to ships, bases, subs & TFs. These messages are subject only to the disclosure to the enemy of the calculated sending location. Note that these orders do not have to actually be in code but are merely interpreted by the GM as if they were. As such, content is not given to the enemy; only the fact that a message was sent from that particular hex.

3.2. Uncoded messages must be used for transmission to and from AFs. These messages are subject to both content and sending location disclosure to the enemy.

4. A player may send a message and not request an acknowledgment of receipt, in which case, the sending hex only (plus the content if sent to or by an AF) is revealed to the enemy.

5. Reports of combat results for non-controlled units will be withheld from the player until they make a RT or join a controlled location. Thus the losses to an AF in an attack will not be revealed until that unit lands, unless the player wishes to risk a RT.

6. Orders must state when RT is to be made for non-controlled units. This is important if players do not wish to giveaway TF locations by calling for RTs from AFs in the air.

7. The originator of RT is assumed to be the base or TF which is controlling the receiving unit. An AF receives from either its launching or landing point only. Ships & subs receive from the TF or base assumed to be most concerned with their mission unless another has been specified in the scenario or by the players.

7.1. Each player should designate a main HQ base(usually Espiritu Santo and Rabaul for the USN & IJN respectively).Messages otherwise unassigned are assumed to pass through these HQ.

7.2.   Ready CAP automatically has orders to intercept attackers the turn of launch. All further orders must be sent to these units by RT.

7.3.   If a shadow plane is to "vector" an attacking AF to its target (not a normal practice), RT must be established for every turn (including the first) for both units and the TF until the target is reached. This definitely warns the enemy that an attack is imminent and meets the warning requirements needed to trigger Ready CAP.

8.   (OPTIONAL) Since larger aircraft carried radiomen, all four-engined planes (B-17, B-24, Mavis, Emily) and the PBY may use code also. Escorted bombing missions may still not use code since the escorts would still have to have RT.

Examples

1.   Player A wishes an unattached DD to join TF 3. TF 3 would send a message to the DD keying the GM to alter the pre-written orders for the DD. Assuming the DD acknowledges, the enemy is told the locations of both the DD & the TF (although not which is which).

2.   Player A wishes to notify his AF 4 that the CV landing point has been changed. Acknowledgment is not requested. The enemy player is given the message and the sending hex but not the receiving hex. If the GM rolls a "6," AF 4 continues to the previously arranged landing hex and finds no CV. Obviously the player could give locations keyed off of previous locations, such as "new hex SW 2" or other misguidance he thinks the GM will understand.

3.   A submarine sights a TF and the player wishes to redirect an AF to shadow. The sub, base or CV, and plane locations are given as well as the contents of the message to the plane.

4.   A shadow plane informing a base/CV of a TF location would reveal his own message and location.

Coastwatchers & Troops

In the game, coastwatchers and troops are entirely too powerful in their capacity to observe. These observers are everywhere at once on what are very often large islands. The following rules are designed to restore them to their proper perspective.

The Allies and Japanese have observers on the listed islands and bases per tables A & B. These tables list the troop & CW concentrations for each historical scenario. Note that these are major changes from the map listings. In most of the central islands, CWs were not assigned and did not appear until early 1943. They may be placed there if designing your own post '42 scenarios.

Blank counters of different colors may be used represent CWs and troops. Each counter represents an individual CW organization or troop concentration.

1. At the beginning of a scenario each counter may be placed on any hex on its particular island except that CWs may not be placed on enemy bases and New Guinea island "halves" must be respected.

2. Each counter may move 1 hex on the 0100 and 1200 hour turns of each day in the scenario.

3. Roll two dice for each hex which contains counters of both sides during the 1200 turn. A result of "2" will eliminate the CW and a result of "3" will eliminate the troops. If both sides have troops, a result of "2" will eliminate the Allies, "3" eliminates both & "4" eliminates the Japanese. The players will learn of elimination only upon regular RT checks.

Coastwatcher/Troops Elimination Table

If CWs and troops occupy the same hex and die roll is…	Result
2	CW eliminated
3	Troops eliminated
4-12	No effect

If both sides have troops in the same hex and die roll is…	Result
2	Allied troops eliminated
3	Both side's troops eliminated
4	Japanese troops eliminated
5-12	No effect

4. Eliminated CWs cannot be replaced. Eliminated troops are recreated only on islands with bases. These replacements are placed on the base on the 2400 turn and may be moved on the next 0100 turn.

5. CWs and troops cannot be moved from their starting islands.

Table 24.A (Islands) and 24.B (Bases)

Island/Base	Coral Sea	E. Solomons	Santa Cruz	Guadalcanal
Bougainville	2xAC,2xJT	2xAC,3xJT	2xAC,3xJT	2xAC,3xJT
Buka	1xJT			
Choiseul		1xJT	1xJT	1xJT
Espiritu Santo	1xAT			
Florida	JpB	1xAT	1xAT	1xAT
Furgusson Is.		1xAC	1xAC	1xAC
Guadalcanal	3xAC	3xAC,1xAT,2xJT	3xAC,2xAT,3xJT	3xAC,3xAT,3xJT
Kolombaranga	1xJT	1xJT	1xJT	1xJT
Lae		1xJT		
Maliaita	1xAC	1xAC	2xAC	2xAC
Ndeni	1xAT			
New Britain	2xAC,4xJT	2xAC,4xJT	2xAC,4xJT	2xAC,4xJT
New Georgia	1xAC	1xAC,2xJT	1xAC,2xJT	1xAC,2xJT
New Guinea (N)	2xAC,2xJT*	2xAC,4xJT	2xAC,4xJT	2xAC,4xJT
New Guinea (S)	4xAT	8xAT	8xAT	8xAT
New Ireland	1xAC,2xJT	1xAC,2xJT	1xAC,2xJT	1xAC,2xJT
Rabaul	1xJT			
Rendova	1xJT	1xJT	1xJT	1xJT
Russell Is.			1xAC	
San Cristobol	1xAC	1xAC	2xAC	2xAC
Santa Isabel		1xAC,1xJT	1xAC,1xJT	1xAC,1xJT
Treasury	1xJT	1xJT	1xJT	1xJT
Vella Lavella		1xJT	1xAC,1xJT1xAC,1xJT	
AC = Allied CW, AT = Allied Troops, JT = Japanese Troops, JpB = Japanese Base, * = Must be West of Star				

British Flat Tops in the Solomons (*The General*, Vol 18-6)

Armored Flight Decks

The following rules recreate the effects of bombs and gunfire on the armored flight decks of British carriers and apply only to these ships.

1. No Air Factor losses occur to aircraft in Readying box. They are considered to be in armored hangars.

2. Losses to aircraft in Just Landed box are 1 Air Factor for each hit.

3. Air Factors in the Ready box lose 2 AiR Factors for each hit.

4. A carrier's AAF is reduced by 2 per hit if there are planes in the Ready box.

5. The Critical Hit Table is consulted only on a die roll of 4 (original rules) or 6 (modified rules). When rolling on the Critical Hit Table subtract 1 from the die roll and treat a 0 as no effect.

6. Bombs do not count as hits on the carrier itself and will not sink it. (Japan was using 500 lb. bombs). ????

7. Gunnery Combat does half damage to a British Carrier, round up.

British Ships and Aircraft

The following rules apply only to British ships and aircraft.

1. All British CV, BB, CA, and CL have radar.

2. Swordfish and Albacores have ASV (Air to Surface Vessel) radar. These aircraft may subtract 1 when rolling on the Search Table. They may also observe a TF at a distance of 3 hexes with Condition Number 1.

3. Seafires must use the Night Landing Chart each time they land to represent landing accidents, but can add 3 to the die roll.

4. The Japanese receive a +1 AA fire modifier against Albacore and Swordfish.

5. Albacore and Swordfish have a modifier of-1 instead of -4 when making an attack at night.

6. Albacore and Swordfish do not use the Night Landing Table for night landings.

7. To reflect the excellent British fighter control, British interceptors add 2 when they use the Interception Table while within 2 hexes of a British CV.

British Air Groups

Indomitable	Illustrious	Victorious
2 Martlets	2 Martlets	2 Sea Hurricanes
8 Sea Hurricanes	6 Seafires	6 Fulmars
8 Albacores	8 Swordfish	8 Albacores
These are actual air groups on the carriers during the games time period. It is probable that the composition would have been different had the British expected to duel with Japanese carriers		

British Ships (**The General,** *Vol. 18-6*)

Type	Name	GF-AA-MF	DF	AF	TF	MC	LF	RF
CV	Formitable	1-7-2	712	0		20	10/3	7
	Illustrious	1-6-2	712	0		20	10/3	6
	Indomitable	1-7-2	712	0		20	10/3	7
	Victorious	1-6-2	712	0		20	10/3	6
BB	King George V	20-5-2	16	200				
	Anson	20-6-2	16	200				
CA	London	4-2-2	5	150				
	Manchester	4-1-2	5	150				
	Berwick	4-1-2	5	150				
	Kent	4-1-2	5	150				
	Suffolk	4-1-2	5	150				
	Shropshire	4-1-2	5	150				
	Australia	4-1-2	5	150				
CL	Dido	2-2-2	4	151				
	Euraylis	2-2-2	4	151				
	Sirius	2-2-2	4	151				
	Pheobe	2-2-2	4	151				

British Plane Values

Name	ID	MF	AF	Air Modifier	Anti-Sub
Albacore	AL	5	10	+2	1
Fulmar	F	7	7	+1	
Seafire	SF	10	4	-1	
Sea Hurricane	SH	8	5	-1	
Swordfish	SW	4	8	+2	1
Martlet	MA	8	6	0	

British Air Hit Table — Air Attack vs. Base

| Aircraft | Air | Level Bombing | | | | Dive Bombing | |
| | | High | | Low | | | |
		GP	AP	GP	AP	GP	AP
Albacore	1	3	1	5	1	—	—
Fulmar	6	—	—	4	—	—	—
Seafire	10	—	—	3	—	—	—
Sea Hurricane	9	—	—	4	—	—	—
Swordfish	1	3	1	5	1	—	—
Martlet	9	—	—	4	—	—	—

British Air Hit Table — Air Attack vs. Ship

| Aircraft | Air | Level Bombing | | | | Dive Bombing | | Torp. |
| | | High | | Low | | | | |
		GP	AP	GP	AP	GP	AP	
Albacore	1	—	—	1	5	—	—	8
Fulmar	6	—	—	1	—	—	—	—
Seafire	10	—	—	1	—	—	—	—
Sea Hurricane	9	—	—	1	—	—	—	—
Swordfish	1	—	—	1	5	—	—	8
Martlet	9	—	—	1	—	—	—	—

Ship Values — Japanese Naval Aviation

Type	Name	GF-AA-MF	DF	AF	TF	MC	LF	RF
CV	Akagi	1-4-2	6	12	0	30	12/3	8
	Hiryu	1-4-2	5	12	0	24	8/3	8
	Hiyo	1-4-1	5	12	0	18	7/3	6
	Junyo	1-4-1	5	12	0	18	7/3	6
	Kaga	1-4-2	6	12	0	30	12/3	8
	Shokaku	1-5-2	6	12	0	28	10/3	8
	Soryu	1-4-2	5	12	0	24	8/3	8
	Zuikaku	1-5-2	6	12	0	28	10/3	8
	Hosho	1-2-1	2	16	0	7	3/1	3
CVL	Ryujo	1-3-2	4	14	0	16	5/2	4
	Shoho	1-2-2	3	16	0	10	4/2	4
	Zuiho	1-3-2	4	14	0	10	4/2	4
AV	Chitose	1-2-2	3	12	0	8	2/1	2
	Kamikawa	0-1-1	2	12	0	7	1/1	1
	Kimikawa	0-1-1	3	12	0	7	1/1	1
CAV	Chikuma	2-2-2	6	12	1	2	1/1	1
	Tone	2-2-2	6	12	1	2	1/1	1
AS	Chiyoda	1-2-2	3	12	0			
	Nisshin	1-2-2	3	12	0			

Ship Values — Japanese Heavy Combatants

Type	Name	GF-AA-MF	DF	AF	TF
BB	Fuso	15-3-1	11	20	0
	Haruna	12-3-2	10	24	0
	Hiei	12-3-2	10	24	0
	Hyuga	15-3-1	11	20	0
	Ise	15-3-1	11	20	0
	Kirishima	12-3-2	10	24	0
	Kongo	12-3-2	10	24	0
	Musashi	28-4-2	18	28	0
	Mutsu	18-3-1	12	24	0
	Nagato	18-3-1	12	24	0
	Yamashiro	15-3-1	11	20	0
	Yamato	28-4-2	18	28	0
CA	Aoba	3-2-2	5	12	1
	Ashigara	3-2-2	5	12	1
	Atago	5-2-2	6	12	1
	Chokai	5-2-2	6	12	1
	Furutaka	3-2-2	5	12	1
	Haguro	5-2-2	6	12	1
	Kako	3-2-2	5	12	1
	Kinugasa	3-2-2	5	12	1
	Kumano	5-2-2	6	12	1
	Maya	5-2-2	6	12	1
	Mikuma	5-2-2	6	12	1
	Mogami	5-2-2	6	12	1
	Myoko	5-2-2	6	12	1
	Nachi	5-2-2	6	12	1
	Suzuya	5-2-2	6	12	1
	Takao	5-2-2	6	12	1

Ship Values — Japanese Light Combatants and Auxiliaries

Type	Name	GF-AA-MF	DF	AF	TF
CL	Abukama	1-1-2	4	20	2
	Isuzu	1-1-2	4	20	2
	Jintsu	1-1-2	4	20	2
	Kitikami	1-1-2	3	15	4
	Nagara	1-1-2	4	20	2
	Oi	1-1-2	3	15	4
	Sendai	1-1-2	4	20	2
	Tama	1-1-2	4	20	2
	Tatsuta	1-1-2	5	20	2
	Tenryu	1-1-2	5	20	2
	Yubari	1-1-2	5	20	2
	Yura	1-1-2	4	20	2
AO	Oiler	0-1-1	1	0	0
AP	Transport	0-1-1	1	0	0
APD	Transport	1-1-2	2	1	1
DD	Destroyer	1-1-2	2	1	1
PG	Patrol Boat	0-1-1	1	0	0
SS	I-Type	*-1-1	1	1	2
SST	RO-Type	*-1-1	1	1	1
SSM	Minelayer	1-1-1	1	1	2

Ship Values — U.S. Naval Aviation

Type	Name	GF-AA-MF	DF	AF	TF	MC	LF	RF
CV	Enterprise	1-7-2	7	12	0	33	11/3	9
	Hornet	1-5-2	7	12	0	33	11/3	9
	Lexington	1-4-2	6	12	0	30	12/3	8
	Saratoga	1-5-2	8	12	0	32	12/3	8
	Wasp	1-5-2	5	12	0	28	10/3	7
	Yorktown	1-4-2	6	12	0	30	11/3	9
CVL	Ranger	1-3-2	4	??	0	16	6/3	5
CVE	Long Island	1-3-2	3	??	0	10	4/2	4

Ship Values — U.S. Heavy Combatants

Type	Name	GF-AA-MF	DF	AF	TF
BB	Arizona	18-3-1	10	200	
	California	20-3-1	11	240	
	Colorado	20-3-1	11	200	
	Idaho	22-3-1	11	240	
	Indiana	25-7-2	15	240	
	Maryland	20-3-1	11	240	
	Mississippi	20-3-1	11	240	
	North Carolina	25-7-2	15	240	
	Nevada	18-3-1	10	200	
	New Mexico	20-3-1	11	240	
	Oklahoma	18-3-1	10	200	
	Pennsylvania	18-3-1	10	240	
	South Dakota	25-9-2	15	240	
	Tennessee	20-3-1	11	200	
	West Virginia	22-3-1	11	200	
	Washington	25-7-2	15	240	
CA	Astoria	4-2-2	5	15	0
	Australia	4-1-2	5	15	0
	Canberra	4-1-2	5	15	0
	Chester	4-2-2	5	15	0
	Chicago	4-2-2	5	15	0
	Houston	4-2-2	5	15	0
	Indianapolis	4-2-2	5	15	0
	Louisville	4-2-2	5	15	0
	Minneapolis	4-2-2	5	15	0
	New Orleans	4-2-2	5	15	0
	Northampton	4-2-2	5	15	0
	Pensacola	5-2-2	5	15	0
	Portland	4-2-2	5	15	0
	Quincy	4-2-2	5	15	0
	Salt Lake City	5-2-2	5	15	0
	San Francisco	4-2-2	5	15	0
	Vincennes	4-2-2	5	15	0

Ship Values — U.S. Light Combatants and Auxiliaries

Type	Name	GF-AA-MF	DF	AF	TF
CL	Atlanta	2-3-2	4	15	0
	Detroit	2-1-2	4	15	0
	Helena	4-2-2	5	15	0
	Hobart	3-1-2	4	15	0
	Honolulu	4-2-2	5	15	0
	Juneau	2-3-2	4	15	0
	Nashville	4-2-2	5	15	0
	Raleigh	2-1-2	4	15	0
	San Diego	2-3-2	4	15	0
	San Juan	2-3-2	4	15	0
	St. Louis	4-2-2	5	15	0
AO	Oiler	0-1-1	1	0	0
AP	Transport	0-1-1	1	0	0
DD	Destroyer	1-1-2	2	1	1
PG	Patrol Boat	0-1-1	1	0	0
PT	Patrol Torpedo	0-1-2	1	1	1
DM	Destroyer	1-1-1	*	1	1
ML	Minelayer	0-1-1	1	1	0
MS	Minesweeper	0-1-1	1	1	0
SS	Gato Class	*-1-1	1	1	2
SST	S-Boat	*-1-1	1	1	1
SSM	Nautilus	1-1-1	1	1	2

Base Values — Japanese

Base	PH	MC	LF	RF	AA	SF	Scenario
Buin	LP	*	10/5	5	7	—	
Buka	LP	8	6/4	2	3	—	
Buna	LP	*	6/3	3	3	—	E. Solomons
	LP	*	10/6	5	7	—	All Others
Gasmata	LP	*	8/4	4	5	—	
Guadalcanal	LP	*	8/4	5	5	—	What If [?]
	LP	*	12/6	8	10	1	What If [?]
Kavieng	LP	*	10/5	5	9	—	
Kwajalein	LP,SP	*	*	5L/4S	—	—	Wake Island
Lae	LP	*	10/5	5	5	—	Coral Sea
	LP	*	12/5	10	10	—	All Others
Marshalls	LP,SP	*	12/6	6	—	—	Midway
Rabaul	LP	*	12/4	7	8	8	Coral Sea
	LP,SP	*	20/9	15	15	8	All Others
Shortland	SP	*	8/4	4	5	—	
Truk	LP,SP	*	*	20	—	—	
Tulagi	SP	6	6/3	2	1	—	

Base Values — Allies

Base	PH	MC	LF	RF	AA	SF	Scenario
Australia	LP,SP	*	*	25	-	-	All
Espiritu Santo	LP,SP	*	5/3	2	4	-	E. Solomons
	LP,SP	*	10/8	10	12	3	S. Cruz/Guad
Gili-Gili	LP(F)	10	6/2	2	2	-	E. Solomons
	LP(F)	*	10/6	5	7	-	S. Cruz/Guad
Hawaii	LP,SP	*	*	*	-	-	Mid., Wake
Henderson	LP	*	8/4	5	5	-	E. Solomons
	LP	*	12/6	8	10	1	S. Cruz/Guad
Johnston Is.	LP,SP	12	6/3	4	-	-	Midway
Midway	LP,SP	36	16/6	9	24	8	Midway
	LP,SP	30	12/4	8	-	-	Wake Island
Ndeni	SP	6	6/4	2	2	-	All
New Caledonia	SP	*	4/4	2	-	-	Coral Sea
	LP,SP	*	20/20	12	-	-	All Others
Port Moresby	LP	*	20/8	8	10	-	All

New U.S. Plane Values

Type	ID	MF	AF	Air Modifier	Anti-Sub
Buffalo	B	7	6	+1	
Vindicator	V	7	5	0	1
B-24		24	8	15	-1

U.S. Air Hit Table (new plane types) — Air Attack vs. Base

Type	Air	Level Bombing				Dive Bombing	
		High		Low			
		GP	AP	GP	AP	GP	AP
Buffalo	7	—	—	—	—	—	—
Vindicator	3	—	—	—	—	—	—
B—24	3	13	—	—	—	—	—

U.S. Air Hit Table (new plane types) — Air Attack vs. Ship

Type	Air	Level Bombing				Dive Bombing		Torp.
		High		Low				
		GP	AP	GP	AP	GP	AP	
Buffalo	7	—	—	—	—	—	—	—
Vindicator	3	—	—	1	5	3	6	—
B-24	3	—	3	—	—	—	—	—

3.3.1, second line — "A" should read "B".

3.3.2, second line — "B" should read "A".

6.6, first sentence — should read "Planes may not enter a storm hex unless they must land immediately and the base is in a storm hex."

6.6, seventh line — "+1 modifier" should read "-1 modifier".

6.7, — add "A unit in a storm hex cannot be observed."

6.10, second line — "(towards the Wind Direction marker)" should read "(towards the wind direction as shown by the Wind Wind Direction Marker)".

6.10, — add "A CV or CVL that moves only one hex or does not move at all during a turn is assumed to have moved into the wind."

7.3.2, — should read "If the result is a '-',the Air Formation may not observe during that turn. It may move normally but must remain on the mapboard,"

7.3.3, — add "If it is a night turn, one is added to the Search Table die roll."

Add "7.3.5 Air Formations that are not on the mapboard at the beginning of the turn may not consult the Search Table and may not observe anything this turn."

7.6, fifth line — "move" should read "are".

7.9, should read "Only units that themselves are on the mapboard can be used to observe other units. This includes Air Formations of the non-moving player that are on the mapboard (even Air Formations that could not or did not observe during their own Plane Movement Phase). Bases and coastwatchers are always considered on the mapboard and thus can always be used for observation."

Add "7.9.1 Coastwatchers can observe planes over any all-land hex of the island their symbol appears in. If the hex is clear, the Condition Number is 3. If the hex contains clouds, the Condition Number is 1. Coastwatchers can observe planes over any partial-land hex of the island their symbol appears in. If the hex is clear, the Condition Number is 2. If the hex contains clouds, the Condition Number is 1. Coastwatchers can observe planes in any all-sea hex adjacent to any partial-land hex of the island their symbol appears in if the hex is clear; the Condition Number is 1."

Add "7.9.2 Coastwatchers can observe ships in any partial-land hex of the island their symbol appears in; the Condition number is 2. Coastwatchers can observe TFs in any all-sea hex adjacent to any partial land hex of the island their symbol appears in; the Condition Number is 1."

Add "7.9.3 Coastwatchers cannot observe planes in a hex with an enemy base."

Add "7.9.4 The Japanese Coastwatcher symbol on New Guinea only affects hexes inside the Japanese Coastwatcher Perimeter Line shown on the mapboard by a black dotted line. The Allied Coastwatcher symbol on New Guinea affects all hexes on the Island."

8.1, second line — delete "A".

8.5.5, In the diagram, the abbreviation for Port Moresby is wrong; it should be "M".

8.5.6, Example, first line — "10" should read "12".

8.12.1, third line — add "Rufe" after "Wildcat".

10.2, The example shows an incorrect way of marking the turns for TF movement. Each "1" should be replaced with "0100", each "2" with "0200" and each "3" with "0300".

11.1, add "No shadowing is allowed on night turns."

11.3.2, and 11.3.3 (clarification) — Players who want to maintain absolute secrecy can use a slightly weird system for shadowing die rolls. The Shadowing player must close his eyes when rolling the die. The player with the TF looks at the number rolled then picks up the die, without telling the shadowing player what number was rolled. The shadowing player can then open his eyes and the player with the TF informs him whether he can shadow or not.

Add "12.10 An AO must be in a TF with at least one other non-AO ship at all times."

14.3, first sentence should read — "Each Air Factor has a Movement Factor (hereafter referred to as MF) as shown on the Plane Data Chart on the Air Record Sheet."

14.14, last line — "+1 modifier" should read"-1 modifier".

15.2, sixth line — "sea" should read "all-sea".

16. — should read "Air-to-Air Combat involves only plane units. Only interceptors can initiate Air-to-Air Combat; escorts and bombers may not initiate it."

Add "16.1.1 If both sides have planes in a hex with a ship or base and one side has interceptors, the interceptors can automatically initiate Air-to-Air Combat; the other side may not avoid it. The Interception Table is not used."

Add "16.1.2 If both sides have planes in a hex which is one or two hexes from a plane carrying ship or base and one side has interceptors, the interceptors may attempt to initiate Air-to-Air Combat. The player must consult the Interception Table to see if the attempt is successful."

Add "16.1.3 The player with the interceptors can choose not to use all his interceptors in Air-to-Air Combat (even if they are all in one Air Formation), except when both players have

interceptors, in which case they must use all their interceptors if combat is initiated."

17.6, add at the beginning of the rule — "If some planes of one plane name are attacking one ship and some are attacking another or several others, each of these attacking groups is considered a separate plane name for the purpose of resolving AA fire."

19.8.3, fourth line — delete "DD".

21.5, Example, 5th line — delete "still".

23.1, seventh line — "AA Factor by 2" should read "AAF by 1".

25.5, add — "An AP which has been fully unloaded (has unloaded for all eight turns) is worth 2 Victory Points."

Optional Rules Errata

SUBMARINES — 8., b., seventh line — "Jake (+1)" should read "Jake (1)".

SEARCH TABLE Add the following modifier; +1 if the AF begins the turn in a hex with a Cloud Marker.

CLOUD MOVEMENT TABLE — Should read —

1   Same Sector

2-5   Sector the Cloud Marker was heading towards (or the same sector if the Cloud Marker was heading of a board edge)

6   Sector I

NIGHT LANDING TABLE — add the following modifiers; -1 in a storm, -1 if armed.

COMBAT RESULT TABLE, Number of Attacking Factors — "21-23" should read "21-25".

JAPANESE AIR HIT TABLES, Air Attacks vs. Bases. Level Bombing Low Altitude, Dave/Jake/Pete — delete "1" (should be a dash).

OBSERVATIONS TABLES — delete "Coastwatcher" in the two places it appears on these tables.

ALLIED AIR OPERATIONS CHART B — Gili-Gili should have an RF of "2" during E. Solomons

JAPANESE AIR OPERATIONS CHART B — Under Rabaul "AF: 8" should read "SF: 8".

AMMUNITION RECORD SHEET — delete the AV Kamikawa since it has no Gunnery Factor.

AMMUNITION RECORD SHEET — add CA Indianapolis with an Ammunition Factor of 15.

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