

GET OFF MY CLOUD ! V.1.1.

An extrapolation of the 'Axis & Allies Air Force Miniatures' game by 'Wizards Of The Coast'. This adaption by Gary Mitchell. No copyright infringement is intended, and the project is not for profit.

1. BLERB

1.1. SCALES

A game turn last about 10 to 15 seconds

A hex is roughly 500 yards across. Few fighters could engage with guns at ranges of more than 1000 yards

Altitude – for ease of play there are six abstracted bands. This assumes tech matched opponent (see 7.2. for where this is not the case).

Aircraft speed is also abstracted and relative; small differences not being especially important. Each speed number represents (roughly) 100 mph.

We have had to devise stats for aircraft not in the original game – email for details for our 'take' to garymitchell5@hotmail.com.

1.2. SETTING UP

a) Choose a scenario (see 12.0.)

b) Lay out the map sections. Half hexes are never in play. Matching halves from adjacent maps make up a full hex. Unless using a 'floating map'(see 1.2.1.), planes that exit the battle map are considered to have retreated from the battle, and are removed from the game, counting as 'disengaging' for Victory Conditions (see 6.0).

c) Deploy aircraft as detailed by the chosen scenario

1.2.1.1 *Floating Maps*: At any time during play, players may adjust the positions of all aircraft (and ground targets) on the battle map toward the centre (usually because a moving plane is about to fly off the map sheet). This is called a 'floating map'. To adjust positions, move all aircraft on the map the same number of hexes in the same direction, keeping each plane's orientation and altitude the same. N.B. Some scenarios will not permit the use of 'floating maps'.

1.2.1.2. With a non-floating map the moving planes must manoeuvre to remain on the board, or it is considered to have disengaged the game for victory points (see 6.0.).



1.3. AIRCRAFT STATS AND ABILITIES

How to read a stat card:

The diagram shows a 'TYPHOON INTERCEPTOR' stat card with the following components and labels:

- Name:** TYPHOON INTERCEPTOR
- Nationality:** Represented by a roundel symbol.
- Pilot:** Represented by a silhouette.
- ECM:** The 'built-in' inherent ECM value (highlighted in a box).
- Cost:** 43 (highlighted in a box).
- Normal Speed:** SPEED 2-4
- High Speed:** HI SPEED 5-6
- Attack Values:** ATK 1: 8, ATK 2: 6, ATK 3: 4
- Armor:** ARMOR 4
- Vital:** VITAL 7
- Hit Points:** HITS 3
- Maneuver Bonuses:** TURN 3, ROLL 3, CLIMB 3, DIVE 5
- Special Abilities:** Poor at Altitude, Powered Roll, Steady Shooter.
- Warload:** Warload: 2 (highlighted in a box).
- Set Icon:** 29/31
- Collector Number:** 29/31

Name: This is the name of the aircraft.

Nationality: Shown by the nationality symbol (usually self-evident on models)

Year (appears on card back with official cards): The year that this aircraft first became available. After the date of service withdrawal you can't use aircraft that weren't available at that time. Well, usually... Some research will be needed.

Type (appears on card back with official cards): Aircraft in the game are Fighters, Light Bombers, Heavy Fighters, Fighter-Bombers, Helicopters, Bombers, Transport, Multi-Role or Naval Fighters.

Cost: The number of points you pay to add the aircraft to your 'flight'.

Pilot: The quality of the aircraft's pilot. From worst to best pilot quality is Poor, Average, Veteran, or Ace. Pilot quality influences your aircraft attacks. 'Average' is the default.

ECM: The inherent ECM value of the aircraft *not including* equipment carried as part of its 'warload' (see below).

Normal Speed: The speed (in hexes) the aircraft can choose for its move while remaining at normal speed. For example, '2–4' means that the aircraft can move 2, 3, or 4 hexes in a game turn at normal speed.

High Speed: The speed (in hexes) the aircraft can choose for its move if it chooses to move at high speed. For example, '5' means that the plane can move 5 hexes in a game turn, but at high speed. Planes moving at high speed don't manoeuvre as well as planes at 'normal' speeds.

Climb: The aircraft's bonus to manoeuvre checks for Climb manoeuvres (see 7.4 - 7.5).

Dive: The aircraft's bonus to manoeuvre checks for Dive manoeuvres (see 7.4 - 7.5).

Turn: The aircraft's bonus to manoeuvre checks for Turn manoeuvres (see 7.4 - 7.5).

Roll: The aircraft's bonus to manoeuvre checks for Roll manoeuvres (see 7.4 - 7.5).

Armour: The number of hits that an attacker needs to roll with a single attack to deal 1 point of damage to this aircraft (see 8.2.).

Vital Armour: The number of hits that an attacker needs to roll with a single attack, to destroy this aircraft outright, with a single 'burst' (see 8.2.).

Hit Points: How many total points of damage it takes to destroy the aircraft. For example, an aircraft with 3 hit points is destroyed when it has accumulated 3 points of damage (unless, of course, it's destroyed outright by a number of hits that equals or exceeds its vital armour rating - see 8.2.).

Attack Values: The number of attack dice you roll when this aircraft attacks with gun or cannon (but *not* with missiles or rockets carried – see 8.1. and 9.2.). The number varies for attacks at a range of 1, 2, and 3 hexes, and 'factors in' pilot quality.

Special Abilities: Most aircraft have one or more special abilities (see Appendix 1). Up to *three* of these can be allocated to each aircraft by umpire/player agreement.

Flavour Text (*appears on card back of official cards*): A brief description of the aircraft's history or noteworthy facts about it. Stuff we probably already know.

Set Icon/Collector Number: The set icon tells you which set of the official cards a miniature belongs to. The collector number lists the aircraft's order in the set and how many total miniatures there are in that set. As the original game is OPP ('out of production') this is (probably) most of them. The complete original game stats can be found here :- <https://www.trovestar.com/generic/index.php?Collection=18>

Additional stats are available on the internet, and there is a 'Facebook' group at <https://www.facebook.com/groups/673251276374712/> We recommend joining.

Warload: Most aircraft also have an inherent 'warload' they can carry. Where these 'warloads' are optional they should be decided before play starts. There are two types of warload – air-to-ground weapons (like bombs, torpedoes and missiles to 'drop' during missions) and air-to-air weapons (rockets and missiles to use in aerial combat). Warload points are:-

WWI era fighters – e.g. Sopwith camel	0 or 1 bomb
WWII era fighters – e.g. Spitfire	0 or 1 (rocket, bombs or fuel drop-tanks)
WWII era fighter bombers – e.g. Typhoon	2 (rockets and/or bombs)
WWII era light bombers – e.g. Stuka	3 (rockets and/or bombs)
WWII era medium bombers – e.g. Heinkel	5-6 (bombs – in exceptional cases rockets)
WWII era heavy bombers* – e.g. Lancaster	8-10 (bombs)
Cold War era jets*	3-8 (rockets, missiles, drop-tanks, and/or bombs)

Aircraft marked * can also have ECM and chaff pods as part of their 'warload'. Once a 'warload' has been dropped / used it is recorded as such and cannot be used again that game. N.B. Any direct fire 'rockets' carried count as 'warload', as do guided missiles.

For guideline parameters see 'Appendix 3'

1.4. (Generic) Bombers And Transports

Some scenarios call for generic bombers. There's no reason bombers and transports can't have individual models and stats of their own, but they can also be represented by 'tokens'. By 'bombers' and 'transports' we mean two or more engined types. A small JU87 'Stuka' or Fairey Battle should have stats, as per a normal aircraft, as a 'Light Bomber'. Bomber models are big – hence the use of tokens – but they do look good on the table if you have them.

The generic stats for slow, medium, WWII era bombers (aka Bomber Stats #1) provided with the original rules are:-

BOMBER STATS	
The bomber tokens in this scenario represent two-engine <input type="text"/> medium bombers. They have the following characteristics:	
Armor	3
Vital Armor	8
Hit Points	5
Speed	2
Point Value	40
The bombers can only turn or fly straight, and can't perform any other maneuvers. Each bomber has defensive machine guns: Attack 3 at range 1, and Attack 2 at range 2. It can attack in any direction.	

For more details see 'Appendix 3'.

2.0. SEQUENCE OF PLAY

The game is played in game turns. During each game turn, players follow a sequence consisting of the below phases and steps:

A. Initiative Phase (3.0.)

Roll for initiative. The winner of the roll gets to move second that game turn - which is usually an advantage - and is the 'second player' for the game turn. The loser of the roll has to move first, and is the 'first player' for the game turn.

B. Movement Phase (4.0.)

- The first player chooses *one* of his or her aircraft to activate and conducts its move.
- The second player chooses one of his or her aircraft to activate and conducts its move, unless the second player's aircraft are outnumbered (see the 'Unequal Numbers' rule 2.2.).
- Alternate activating aircraft until all aircraft remaining in the game have moved this game turn.
- Mark each aircraft that's finished its move with a 'Move Finished' marker.

N.B. Guided missiles (see 9.2.) move on their launching planes turn, so ground bases can in this context, be considered 'aircraft'.

C. Attack Phase (5.0.)

- The first player chooses one of his or her aircraft to attack with and resolves its attack.
- The second player chooses one of his or her aircraft to attack with and resolves its attack.
- Alternate attacking with your aircraft until all attacks are resolved.
- Mark each aircraft that's made an attack with a 'Fire Resolved' marker.

D. End of Turn (6.0.)

- Score victory points and adjudicate victory.
- Pick up all 'Move Finished' and 'Fire Resolved' markers.

See also 11.3.4. for 'Night Fighting' changes to the sequence to accommodate searchlights, fighter direction etc.

2.1. Multiplayer Games

If you have more than one player on a side, then 'first player' or 'second player' means 'first side' or 'second side'. Each player on a side moves or attacks with one aircraft when that side moves or attacks, alternating between them. If one player on a side controls more aircraft than other players on the same side, then the player with fewer aircraft moves his first plane when his partner moves the first plane - he simply 'runs out' of planes to move or attack with before his partner does.



2.2. Unequal numbers

When one side in the battle outnumbered the other side, the Movement Phase is a little different.-

If you win initiative and have more planes: Your opponent moves a plane first, then you move a plane. Alternate normally. When your opponent runs out of planes to move, keep activating your planes and moving them one at a time until you've moved all your planes.

If you win initiative and have fewer planes: Your opponent activates and moves planes one at a time until you have more planes left to move than your opponent does. You then move your first plane of the game turn. Alternate normally after that.

To put it another way, if you win initiative, you always get to be the last aircraft to move in the Movement phase, regardless of numbers. If you lose initiative, you always have to be the first aircraft to move.

Unequal numbers have no effect on attack resolution - the first player chooses an aircraft to attack with, and attacks alternate normally.



3.0. INITIATIVE PHASE

The Initiative phase determines the order in which players act each game turn. Each player makes an initiative roll by rolling two dice and adding any bonuses that apply. (some aircraft have special abilities that provide initiative bonuses in different situations – see 'Appendix 1') For multiplayer games, one player per side rolls for initiative.

The player with the better result wins initiative. If you and your opponent have the same initiative total, the player with the better initiative bonus wins initiative. If it's still tied, roll again until one player wins.

If you win initiative, you're the second player for the game turn. Your opponent is the first player (see 2.0.). Moving second is an advantage, since you can see where your opponent moved his or her aircraft and position yourself to avoid attack or make an attack of your own. However, moving first means that your attacks are resolved first, so losing initiative isn't always bad.



4.0. MOVEMENT PHASE

Move each aircraft in your 'flight' each game turn. Move them one at a time, alternating with your opponent (see 2.0. - 2.2.).

To move an aircraft, choose a speed in the moving aircraft's speed or high-speed range. For example, an aircraft with Speed 2-3 / High Speed 4 can move 2 or 3 hexes at normal speed, or 4 hexes at high speed. A moving aircraft usually moves into the hex its nose is pointed at, but you can turn after moving into a new hex or attempt a manoeuvre check to execute various tactical manoeuvres such as Breaks, Tight Turns, or Power Dives (see 7.0. to 7.5.).

Aircraft move at either 'normal speed' of 'high speed' each game turn – *not both*.

Place a "Move Finished" marker by the aircraft's base when you're finished with its movement.

N.B. Supersonic capable aircraft *can* move faster than 'Speed 10' if not 'crippled' (see 10.0.) – but in doing so they are concluded to have 'disengaged' from the area (see 6.0.) and will count towards an opponent's victory points.



5.0. ATTACK PHASE

Take turns attacking with your aircraft, one aircraft at a time.

You may attack enemy aircraft using your aircrafts' attack values (see 'Attack and Defence' 8.0.). Excepting those using guided missiles (see 9.2.), most planes have a maximum range 3 for their attacks; the closer you are, the more attack dice you get to roll. An aircraft can't attack an enemy in its own hex. You don't have to attack, but it's almost always better to take your shots when you get them. Aircraft can also launch missiles in this phase (see 9.2.).

Umpires may wish to introduce ammunition limitation rules for guns and cannon – for 'warloads' *in all cases* – once the item is 'shot' – it's gone!

To resolve an attack, declare which of your aircraft is firing, which enemy aircraft it's attacking, and make an attack roll or launch weapon. Alternate resolving attacks with your opponent. Each aircraft can only attack once per game turn.

Aircraft damaged or destroyed by an enemy attack are affected immediately, and may be destroyed before they get to make an attack... *c'est la guerre!*



6.0. END OF TURN

Check to see if you've met the victory conditions for the scenario you're playing (see 12.0.).

Victory Points: Some scenarios (for example, the 'Air Superiority' – 12.5.) award victory points for destroying enemy aircraft or forcing them to retreat and disengage from the battle (usually by flying off a map edge).

Enemy aircraft destroyed VP = aircraft points cost

Enemy aircraft retreats/disengages VP = 1/2 aircraft's points cost

If your scenario uses victory points to track success, you win at the end of the game turn your score reaches or exceeds the total specified in the scenario, *and* you also have more points left in play than your opponent.



7.0. MOVEMENT AND POSITION

The hexes on the battle map mark the position and facing of each aircraft. Getting into a strong firing position without giving your opponent a good shot at you is the key to success in a dogfight. Here's what you need to know about how aircraft move on the battle map:-

Aircraft Must Move: Most aircraft in the battle moves once each game turn during the Movement Phase. You *must move* each aircraft each game turn. N.B. VTOL may instead move just one hex, only helicopters can 'hover' and keep position within their same hex. By 'VTOL' we mean vectored thrust aircraft like the Harrier.

Alternate Movement: Move aircraft one at a time during the Movement Phase. The first player picks one of his or her aircraft to activate, and conducts its move. Then the second player picks one of his or her own aircraft to activate, and conducts its move, and so forth (see 2.0. – 2.2.).

7.1. Facing

The direction that an aircraft is pointed is its 'facing'. An aircraft always faces one of the six sides of its hex; its facing is the side its nose is currently pointed at. Aircraft can't change facing unless they turn or perform a manoeuvre.

Instead of 'moving' to a new hex helicopters and VTOL can instead simply change hex facing as an 'on the spot' tight turn (see 7.5.), *which must be rolled for*.

Clock-face Directions: If you need to identify which hex side you're referring to, you can use clock-face terms to be precise. The six hex sides around your aircraft are 12 o'clock (straight ahead), 2 o'clock (ahead right), 4 o'clock (behind right), 6 o'clock (dead behind), 8 o'clock (behind left), and 10 o'clock (ahead left). 'Check your six' is a good maxim to follow. '12 o'clock high' is dead ahead and at a higher altitude.

7.2. Altitude

Aircraft can be at one of six different altitude bands: 1, 2, 3, 4, 5, or 6. The higher your altitude number, the higher your aircraft. Your scenario may provide you with a starting altitude, but your altitude changes through the battle as your aircraft climbs or dives. The number on the stand should be turned to show the altitude by being placed under the aircraft's nose.

When using 'unmatched tech' allow open-cockpit types altitudes 1-3 only; unpressurised enclosed cockpits and helicopters altitudes 1-4; pressurised prop aircraft heights 1-5; pressurised jets 1-6. A Hawker Hurricane could therefore climb above a Fiat CR32 to avoid combat.

7.3. Mid-Air Collision

Mid-air collisions were not uncommon in large engagements. If two aircraft end up in the same hex *and at the same altitude* at the end of the Movement phase, each aircraft rolls a die. A roll of 1 is a possible collision (1 or 2 for a Poor pilot). If both planes involved roll possible collisions, they collide. Both planes are immediately destroyed. See also 7.7.

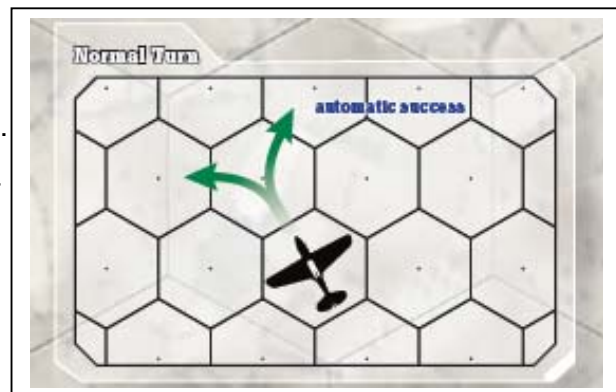
7.4. Moving Aircraft Models

Aircraft move a number of hexes equal to the speed you choose (see 4.0). If you don't turn or manoeuvre, your aircraft simply moves straight ahead on its previous turns' speed and altitude. In one game turn, an aircraft's movement can include any number of normal turns (see c) below) *and one* difficult manoeuvre (see d) below).

a) Choose Speed: An aircraft moves a number of hexes equal to the speed you announce. When you begin moving an aircraft, choose a speed from the aircraft's speed or high speed ranges, which appear on its stat card. High speed affects an aircraft's ability to manoeuvre (see e) below).

b) Normal Movement: Aircraft can move straight or perform normal turns as they move. An aircraft at normal speed can turn once per hex it enters; an aircraft at high speed can't turn or manoeuvre in consecutive hexes.

c) Turn (normal): You may perform a normal turn of 1 hex side (60°) each time you enter a hex, unless you attempt a difficult manoeuvre in that hex. *You can't turn before you start moving for the game turn, you turn at the end of a hex moved.*



d) Difficult Manoeuvres: Once per move (i.e. *once per game turn*) an aircraft can attempt a difficult manoeuvre when it would leave a hex. A difficult manoeuvre requires a manoeuvre check (see 7.5.).

e) High Speed Limitation: If you are at high speed, *you can't turn or manoeuvre in consecutive hexes.*

f) Normal Turn: automatic success – there is not a test roll for these.

N.B. 'Climbing' and 'Diving' are *always* 'Difficult Manoeuvres'.

7.5. Difficult Manoeuvres

In addition to normal movement, aircraft can attempt 'difficult manoeuvres'. Difficult manoeuvres are divided into climbs, dives, rolls, and turns. *You can't attempt a difficult manoeuvre and perform a normal turn in the same hex* (but you can move into a hex, make a normal turn, and then announce an attempt to perform a difficult manoeuvre in the next hex you're moving into).

To execute a difficult manoeuvre, you must pass a manoeuvre check. To make such a check roll two dice and add the plane's manoeuvre bonus.

Procedure:-

1. Announce the manoeuvres you're attempting when you leave the preceding hex.
2. Determine the check's success number:
This is 10 if you chose a speed in your aircraft's normal speed range, or 13 if you chose high speed this game turn.
3. Roll two dice and add them together. *Add* your aircraft's relevant manoeuvres bonus - Climb, Dive, Roll, or Turn - depending on the type of manoeuvres you're attempting.
4. *Your check succeeds if your result equals or beats the success number. Your check fails if your result is less than the success number.* If you fail, follow the manoeuvre failure result.

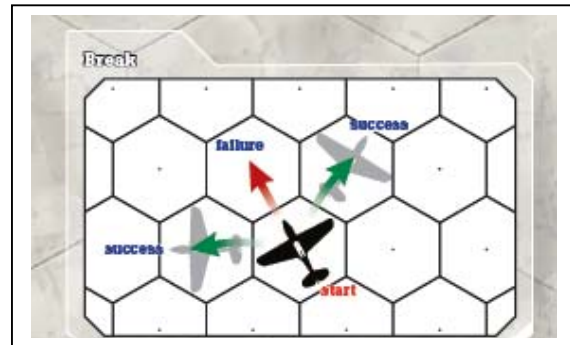
Difficult manoeuvres include:

Break (Roll)

Make a Roll manoeuvres check.

Success: Sideslip to the hex at your 10 o'clock or 2 o'clock and turn 1 hex side (60°).

Failure: Move straight on 1 hex.

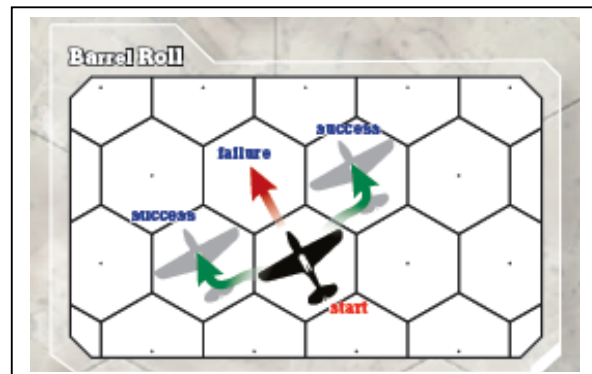


Barrel Roll (Roll)

Make a Roll manoeuvres check.

Success: Sideslip to the hex at your 10 o'clock or 2 o'clock and keep the Same facing.

Failure: Move straight on 1 hex.



Climb

Make a Climb manoeuvres check.

Success: Move straight 1 hex *and* increase altitude by 1 level.

Failure: Move straight on 1 hex.

N.B. Jets climbing *above* altitude 6 are deemed to have disengaged for victory conditions (see 6.0.).

Power Dive

Make a Dive manoeuvres check.

Success: Move straight 1 hex *and* decrease altitude by 1 or 2 levels (to choice).

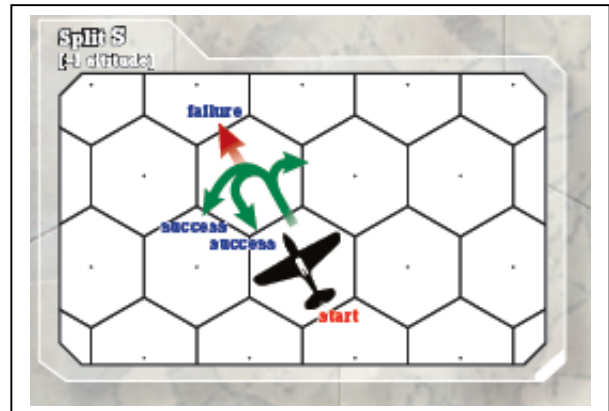
Failure: Move straight on 1 hex *and* decrease altitude by 1 level.

Split S (Roll)

Make a Roll manoeuvres check.

Success: Move straight on 1 hex, decrease altitude by 1 level, and turn 2 or 3 hex sides (120° or 180°).

Failure: Move straight on 1 hex and decrease altitude by 1 level.

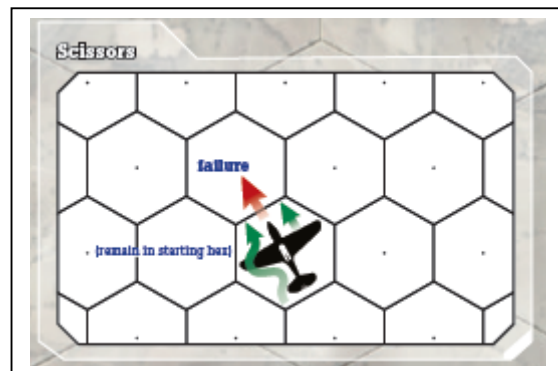


Scissors (Turn)

Make a Turn manoeuvre check.

Success: Remain in current hex, counting it as 1 hex of movement.

Failure: Move straight on 1 hex.

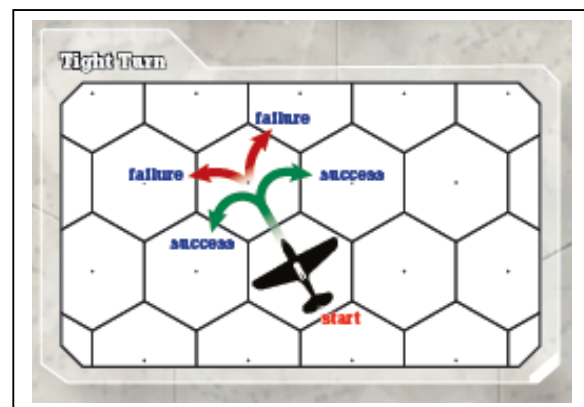


Tight Turn

Make a Turn manoeuvres check.

Success: Move straight on 1 hex and turn 2 hex sides (120°).

Failure: Move straight on 1 hex and turn 1 hex side (60°).



7.6. Movement and Special Abilities

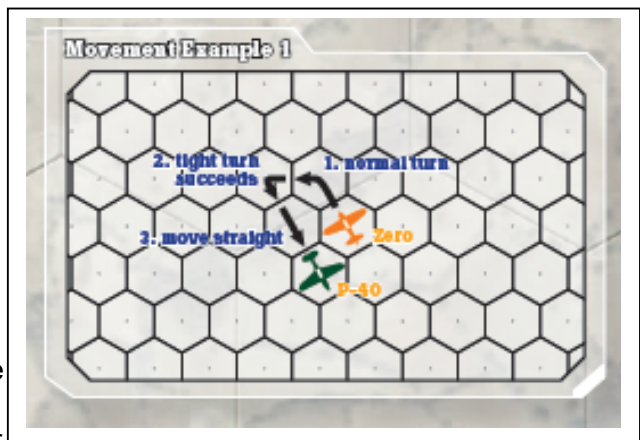
Some aircraft have special abilities (see Appendix 1) that allow them to adjust their positions at the end of the Movement phase. Conduct all aircraft movement normally, and after the last plane of the game turn has taken its move, check to see if any of them intend using special abilities to modify their final positions. The first player declares whether he or she is using a special ability(s) after the Movement phase first, then the second. Declare the use of special abilities one at a time, alternating between players, until both players have used all special abilities they wish to use.

7.7. Stacking

If two or more aircraft of the same side end up in the same hex, with the same altitude, at the end of the Movement Phase, all planes of that side after the first that moved into that hex return to their previous hex, retaining their same facing. An aircraft that is forced to adjust its position this way may not attack this game turn (the pilot's too busy avoiding collision). Friendly aircraft at different altitudes can (of course) be in the same hex, as can aircraft of opposing sides, at the risk of collision (see Mid-Air Collision. 7.3.)

7.8. Movement Examples

EXAMPLE 1: The player controlling the A6M2 Zero wants to get around behind the P-40 and set up a good shot. He chooses a speed of 3 for the game turn. The Zero begins by moving forward 1 hex, and turns left in that hex. Then it moves ahead 1 hex, and attempts a Tight Turn, which requires a Turn manoeuvre check. The Zero is at normal speed, so the success number for the check is 10. The Zero's Turn bonus is +6. The Zero's player rolls two dice, getting a 6. The check total is 12, so the Tight Turn succeeds, and the Zero turns left hard. Then the Zero completes its movement by moving forward 1 more hex, getting right behind the P-40. Zeroes are dangerous in turning fights!



EXAMPLE 2: The player controlling the P-40 wants to get on the Messerschmitt's tail. She chooses a speed of 5 for the game turn, which is high speed for the P-40. At first, the player tries a path that won't require any manoeuvre checks, but she realises that she can't get into the hex behind the Bf 109 and then turn, because she has to turn in the previous hex too - you're not allowed to manoeuvre in consecutive hexes at high speed. So she tries a different plan, beginning her move by making a Break manoeuvre to the right. The P-40 has a Roll rating of +5; she rolls two dice and gets an 8, for a total of 13 - exactly what she needs for success in a high-speed manoeuvre check. From that point the P-40 player can easily get behind the Messerschmitt by moving straight and making two normal turns to the left.



EXAMPLE 3: The Bf 109 is at altitude 4, and the Spitfire is at altitude 3. The Bf 109 player sees an opportunity to dive down right on the Spit's tail. He starts by choosing speed 3, and attempts a Split-S for his first hex of movement. The Split-S is a Roll manoeuvre, and the Bf 109's Roll rating is +4. He rolls two dice and gets a 4, totalling 8 - not enough! The Split-S doesn't work out, and instead the player has to follow the manoeuvre's failure result. He moves the Bf 109 straight ahead, but on the bright side he still loses the altitude he wanted to lose. The player would like to try a Tight Turn to correct for his previous bad roll, but you're only allowed one difficult manoeuvre per move, so he can't. Now at altitude 3, the Bf 109 executes two normal turns in its remaining movement, and finishes up just out of range of the Spitfire.



8.0. ATTACK AND DEFENCE

Aircraft fire at enemy targets in the Attack phase (see 5.0.). The overall effectiveness of an aircraft's offensive 'gun' armament is measured by its attack rating, which accounts for its machine guns, automatic cannons, and other factors such as sight quality, stability, pilot skill and rate of fire. It may also launch guided missiles and 'warload' 'rockets' (see below, 9.2.) as 'Attacks'.

We define *all* one-shot unguided missiles carried (as a 'warload point') as being 'rockets'. These have a range of 4 and do 5 X dice damage. Simply calculate as if 'guns', *saving they are considered 'one-shot' weapons from the warload allowance carried.*

One Attack Per Game Turn: Even if an aircraft is in position to fire on multiple targets, it only attacks once per game turn, including launching one guided missile or shooting one rocket from its warload. It cannot 'shoot' and 'launch' in the same turn. *Exception:* 1 X D6 'dumb bombs' can be dropped per plane per hex traversed. Roll a dice per aircraft to see how many land on that hex. Most bombers will be fairly accurate – heavies not so much.

Alternate Attacks: Attacks alternate between the first player and the second player.

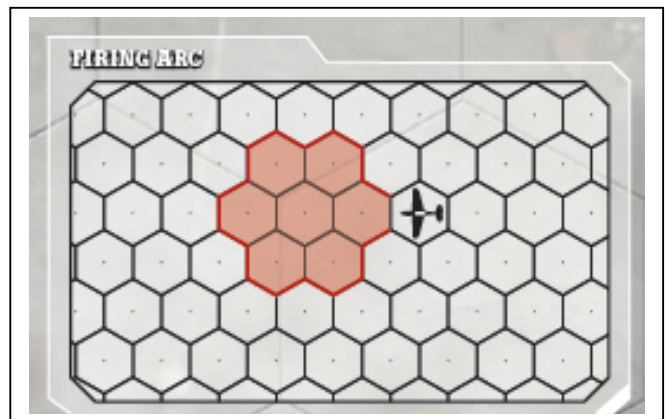
Firing Arc And Altitude: An aircraft can only attack a target in its front firing arc and at the same altitude (for guided missiles see 9.2.).

No 'Range 0' Attacks: An aircraft cannot attack a target at range 0.

Immediate Effect: Gun, cannon and 'rocket' attacks take effect immediately, so an aircraft destroyed by an aircraft that fires before it gets to shoot is removed from the game before it can fire back. *C'est la guerre.* Guided missiles need to 'fly' to the target, and may not always be successful (see 9.2.).

8.1. Firing Arc (Guns, Cannons & Rockets)

Most single-seat 'gun' fighters can only attack enemy aircraft in their 'firing arc'. The firing arc is a zone of hexes in front of the plane's nose. The game assumes that planes can make minor adjustments to their heading in order to take a shot at enemies that aren't straight ahead of them. N.B. Rockets can reach a hex further ('4' not '3')



8.2. Resolving Attacks (Guns, Cannons & Rockets)

To resolve an attack, follow these steps:

1. *Determine Range And Attack Dice:* Count the number of hexes from the attacker to the target. Check the attacking aircraft's stat card to see how many attack dice you roll against the target at that range (for rockets see above, 8.0.)
2. *Check The Target Aspect:* Determine which side of the target's hex the attack is coming from. The target aspect determines the base target number for your attack roll (see the Target Aspect diagram, 8.3. below). i.e. what you need to get a 'hit'.
3. *Compare Pilot Quality:* Compare the pilot quality of the attacking aircraft and the target aircraft. *If the attacking aircraft has a better pilot, it gets an attack bonus.* From worst to best, pilot quality is Poor, Average, Veteran, or Ace.
4. *Check Special Abilities:* Many aircraft have special abilities that modify their attack dice (see Appendix 1).
5. *Roll For Your Attack:* Having collated all this, roll your attack dice, modifying results for any attack bonus or penalty that applies. High rolls are better. Each die result that's equal to or higher than the target number for this attack (shown in 8.3.) is one hit. *An unmodified 'natural' roll of 6 always counts as 2 hits, regardless of any target number and attack penalties.*
6. *Compare Hits To Target Armour.* Total up the number of hits of your attack dice, and compare them to the target aircraft's armour. If you equal or beat the target's armour rating, you deal 1 point of damage to it. If you equal or beat the target's vital armour rating, you destroy it outright.

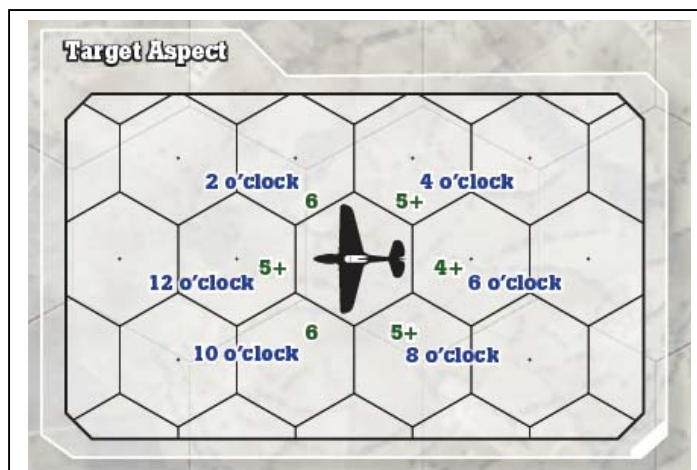
Hits < Target's Armour = Miss (negligible damage)

Hits > or = Target's Armour = Hit! Deal 1 point of damage.

Hits > or = Target's Vital Armour = Target destroyed!

8.3. Target Aspect (Guns, Cannons & Rockets)

'Target aspect' is the target's facing relative to the attacking aircraft. Attacks from behind the target are more accurate than shots from straight ahead or from the sides. Target aspect determines the basic target number for the attack to hit.



In Between Target Aspect Arc - Use The Less Favourable Attack: If the attacking plane is firing from a hex that is exactly halfway between two target aspects, the higher target number is the minimum hit number for the attack. For example, if an attacking P-40 is exactly at a Zero's 3 o'clock position, the attack hits the Zero's 2 o'clock, not its 4 o'clock, so the hit number is 6, not 5.

8.4. Attack Bonuses and Penalties (Guns, Cannons, Rockets & Hitting Guided Missiles)

The base target number for an attack is determined by the target aspect, as shown in the Target Aspect diagram (8.3.). Some circumstances provide a bonus or penalty to your attack roll. These are:-

Pilot Quality: If the attacking aircraft has a higher-quality pilot than the target aircraft, it gets an attack bonus. Remember, from worst to best, pilot quality is Poor, Average, Veteran, or Ace.

Crippled: If the attacking aircraft is crippled, it gets an attack penalty. If the target aircraft is crippled, the attacking aircraft gets an attack bonus.

Special Abilities: These can also confer 'attack bonuses' (see Appendix 1).

Calculate bonuses and penalties as follows:

Attack Bonus (+1 per die): Add 1 to the result of each die in your attack roll. For example, if you rolled an attack of four dice that came up 1, 3, 5, and 6, an attack bonus makes those results 2, 4, 6, and 6 (but only the unmodified 6 still counts for two hits).

Attack Penalty (-1 per die): Subtract 1 from the result of each die in your attack roll. For example, if your attack roll is 1, 3, 5, and 6, an attack penalty changes those results to 0, 2, 4, and 6 (the penalty doesn't affect the unmodified 6, which counts as two hits).

NOTE: *Multiple Bonuses And Penalties Stack Up:* Each factor contributing a bonus or penalty is applied. For example, if you have two factors providing a bonus and one providing a penalty, the net effect is an attack bonus of +1 per die. If you have two factors providing a penalty, the net effect is an attack penalty of -2 per die.

See 9.2. for additional guided missile penalties concerning EM.



9.0. ECM AND MISSILES

9.1. ECM

ECM (electronic counter-measures) are used to prevent (or inhibit) missile and radar lock-on. It is 'inherent' in a plane's type (see below). Extra ECM can also be carried in warload 'pods'. We included under ECM the use of onboard radars, jamming etc

Inherent defensive ECMs are:-

Piston engine non-bomber aircraft	2
Piston engine bomber aircraft	1
Turboprops and helicopters	1
Jets (without built-in ECM)	0
Jets (with built-in ECM)	1 to c.1975 design; 2 c.1975+ design
If VTOL jet	+1
If jet has 'stealth' tech	+2
If has ECM pod / chaff / flares as 'warload'	+1 for each 'warload' pod 'used' that turn

Only 1 X non disposable ECM pod can be carried as 'warload', and is considered to be always active. Any applicable number of chaff / flare 'warloads' can be carried, each having one 'shot'.

Radar is considered an ECM ability that will also be discussed later in night-fighting (see 11.3.4.). Airborne radar is usually built in to an aircraft (but could also be carried in a warload 'pod' on a specialist 'wild weasel' or similar). We count this as being a non-disposable 'ECM' pod for simplicity of play.



9.2. Guided Missiles

Unguided missile 'rockets' effectively count as if 'guns' (see 8.0. to 8.4.). Note they count as a 'disposable warload' carried by a plane.

a) Guided missile firing procedure:

- 1) Launch during the firing phase and move 1 hex forward and declare the target aircraft. Place a missile marker. N.B. Only one can be launched a turn.
- 2) Roll a D6 to obtain 'lock on' target – a 4 or more is required – *add* ECM of launching aircraft (or ground base firing SAM batteries) and *subtract* the ECM of the target. *Add 1* to the roll if target is a jet and target's exhaust is within 4 o'clock to 8 o'clock of launcher. *Missiles failing to gain lock are removed from play and are 'wasted'.*
- 3) Missiles establishing lock move the next two hexes of their 'launch move' towards their designated target.
- 4) Any missiles hitting are adjudicated to see what damage (if any) is inflicted.
- 5) *On subsequent turns to the first* guided missiles move at the same time as their firing aircraft. First test (as above) to see if lock is maintained - if it is proceed as above. *Add 1* to this score for an initial lock having already been achieved.

b) An aircraft cannot launch missiles and fire guns/rockets in the same turn. Guided missiles can only be fired at aircraft at the same altitude, or at one altitude above, or below.

c) Guided missiles move at speed 12 (speed 3 on their first turn of launching, see a) above), and run for a total of three turns. They must *always* move 1 hex forward before being able to turn 60°, or change one level of altitude.

d) If a guided missile 'hits' a plane it does 6 X dice damage (note 8.3. 'Target Aspect' also applies). Deduct also one Attack Penalty for each inherent ECM point of the target, include as penalties also chaff / flare 'warloads' released before impact (see 8.4.).

e) Guided missiles with a 'lock' *will pursue off map* any aircraft disengaging at supersonic speed (see 4.0.).

See also 11.3.2. 'Flak' for the use of guided missile SAM missile batteries.



10.0. EFFECTS OF DAMAGE

An aircraft is destroyed when it takes accumulated damage equal to, or greater than, its hit points, or when a single attack equals or exceeds its vital armour rating. Accumulating 'damage' also affects an aircraft's ability to make manoeuvres and attack.

Damaged: An aircraft with 1 point or more of damage is 'damaged'. Damaged aircraft have no special penalties until they have only 1 hit point left, at which point they become 'crippled'.

Crippled: A damaged aircraft that is down to its last hit point is 'crippled'. Crippled aircraft take a -2 penalty to all manoeuvres checks, and can't choose high speed or move faster than speed 10. Enemy aircraft attacking a crippled aircraft gain an attack bonus. Crippled aircraft take an attack penalty when they attack.

Destroyed: An aircraft that accumulates damage equal to its hit point rating, *or that is hit a number of times equal to or more than its vital armour in a single attack*, is 'destroyed'. Remove destroyed aircraft from play and the map. 'Destroyed' covers a variety of different outcomes. An aircraft might explode and break up in mid-air, or the pilot might be killed, or the aircraft might have crucial controls shot away, its engine knocked out, an oil line severed, or it might catch fire. A destroyed aircraft could go into a spin, climb or dive uncontrollably, or slowly lose power and coast to a relatively soft landing many miles away. 'Destroyed' really means that the aircraft is no longer combat worthy and has begun to crash; it's not under the pilot's control and takes no more part in the action. The exact way the plane crashes isn't that important in the game.

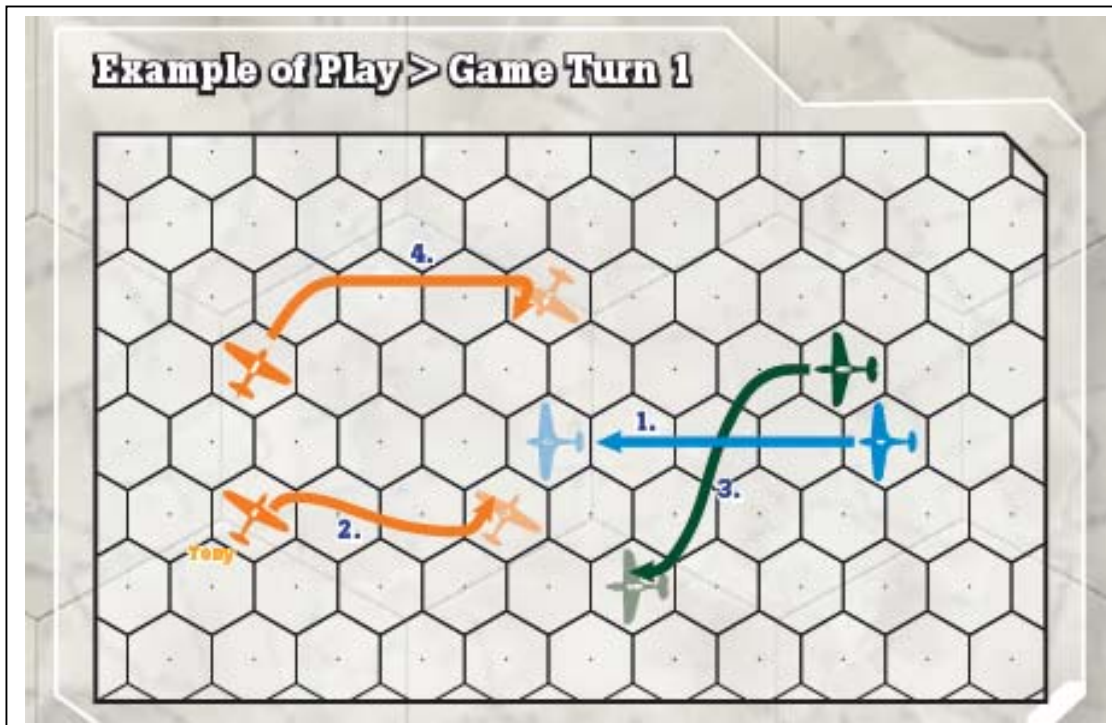
OPTIONAL. In campaigns, however, players may dice for 'pilot survival' of destroyed aircraft. If it's important to know what happens to the pilot of a destroyed aircraft, roll a die. On a 5 or higher, the pilot/crew survives. Add +1 if the battle takes place over friendly territory, or -1 if the battle takes place over enemy territory or the sea. Pilots who don't 'survive' aren't necessarily killed—they might be captured, or injured badly enough to be out of the war for a long time. Players may like to add a further +1 to survival chances if an experienced 'Ace', or -1 if Poor (a 'fifteen minuter').

10.1. Example of Play

The players have decided to try a WWII Far East scenario. The Japanese player's flight consists of an A6M2 'Zeke'/'Zero' and a Ki-61 'Tony'. The Allied player's planes are a P-40C Flying Tiger and a Hurricane Mk I (this might be a duel over the skies of Burma in early '42).

Turn 1

Initiative Phase: The Japanese player rolls 10 on two dice; the Allied player rolls 6. The Japanese player wins initiative, and is the second player for this opening game turn.



Movement Phase:

1. The Allied player begins by moving his weaker plane into position to threaten a patch of sky the opposing player might want to use, knowing that it's unlikely he'll actually get a shot. He chooses speed 4 (high speed) for the Hurricane, and moves it straight ahead.

2. The Japanese player now has to move a plane. She decides to move the Tony into position for a shot on the Hurricane from outside the Hurricane's firing arc, and begins her move by declaring speed 3 and attempting a Break, which is a Roll manoeuvre. The Tony's Roll rating is +5. She rolls an 8 on her manoeuvres check, +5 for a total of 13, which easily succeeds. She moves 2 more hexes and makes a normal turn to get in on the Hurricane's 10 o'clock - not a very good attack angle, but at least it's a safe one.

3. The Allied player moves the P-40. He sees an opportunity to take a decent shot at the Tony, and chooses speed 4. Two normal turns let him set up 2 hexes from the Tony.

4. The Zero moves last. There's no good way to get at the P-40, so the Japanese player decides to double up on the Hurricane. She chooses speed 4 (high speed) for the Zero, and starts to work behind the Hurricane. In her last hex of movement, she attempts a Tight Turn. This is a Turn manoeuvre; the Zero's Turn rating is +6. The Japanese player rolls a 7 on her manoeuvres check, adds 6, and gets a 13 - just enough to succeed at a high-speed turn.

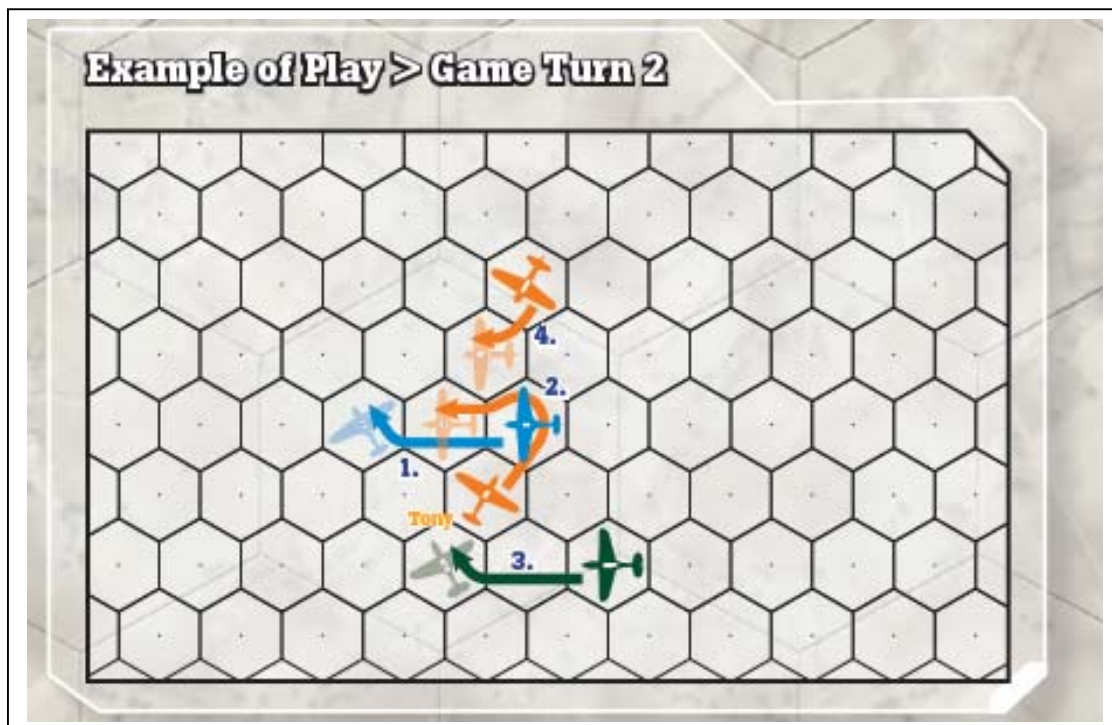
Attack Phase: That concludes the Movement phase, so now the players move on to the Attack phase. The first player gets to attack first in this phase. The Hurricane has no shots, but the P-40 has a decent one on the Tony. At range 2, the P-40 has five attack dice. The shot is exactly between the Tony's 2 o'clock and 4 o'clock, and ties go against the attacker, so is treated as a shot at the 2 o'clock, so the target number for the attack is 6. The P-40 is a Veteran pilot attacking an Average pilot, so he'll get

a +1 on each attack die. The Allied player rolls 6, 6, 4, 4, and 2, scoring 4 hits (unmodified 6's always count as two hits each). This beats the Tony's armour of 3, but doesn't exceed its vital armour of 6, so the Tony takes 1 point of damage.

Now it's the Japanese player's turn. She begins with the Tony. It has six attack dice at range 1, but it's attacking the Hurricane's 10 o'clock arc, so the target number is 6. The Axis player rolls 5, 4, 4, 3, 2 and 1, scoring no hits. The Zero has a much better shot. It has four attack dice at range 2, and it's shooting at the 4 o'clock arc (target number 5). The Zero has a better pilot than the Hurricane, so it gets a +1 bonus on each attack die. The Japanese player rolls 5, 5, 4, and 1, which becomes 6, 6, 5, and 2. However, these 6's don't count as two hits each - only unmodified 'natural' 6's count double. Still, that totals 3 hits, which equals the Hurricane's armour 3 and deals 1 point of damage to it.

That concludes Turn 1, so it's on to the Initiative phase of Turn 2.

Turn 2



Initiative Phase: The Allied player rolls a 5; the Axis player rolls 11. The Allied player is first player again.

Movement Phase:

1. The Allied player begins by moving the Hurricane, choosing speed 2 and attempting a Tight Turn in the second hex. Unfortunately, he rolls a 3, so even with the Hurricane's +5 Turn bonus, he fails the Tight Turn and executes a normal turn instead.

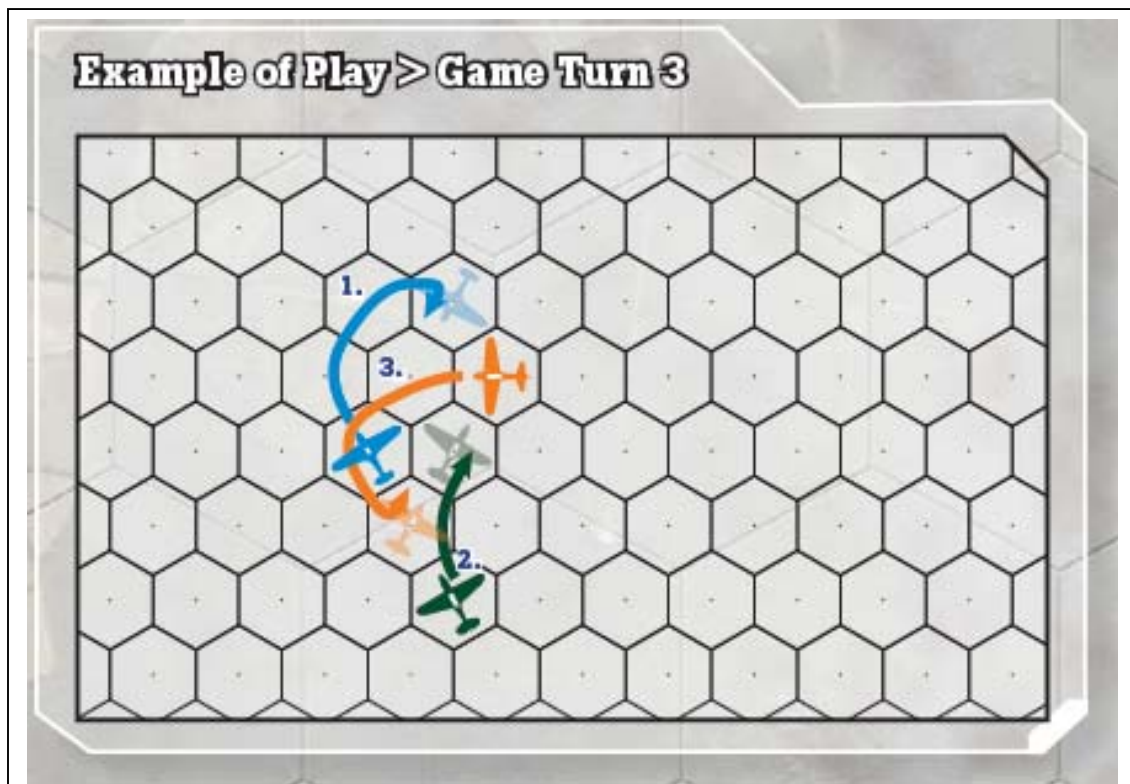
2. The Japanese player chooses to move the Tony next. She chooses speed 2, and decides to try a Tight Turn. The Tony's Turn bonus is +4. The Japanese player rolls an 8, totalling 12, which succeeds, and then gets in behind the Hurricane.

3. The Allied player moves the P-40 next. He chooses speed 2, and begins with a Break manoeuvres. The P-40 has a +5 on Roll checks, but the Allied player rolls 2 X '1's ('snake eyes') and fails. He settles for moving ahead 2 hexes and turning to keep the Tony in his arc of fire.

4. The Zero decides to continue to concentrate on the Hurricane, and so chooses speed 2. The Japanese player begins the move with an attempt to perform a Scissors manoeuvre and rolls a 9, +6 for the Zero's Turn rating - an easy success. That allows her to move the Zero just one hex forward this move, and turn in behind the Hurricane.

Attack Phase: Now it's time for the Attack phase. Again, the Hurricane has no shots, so the Allied player takes the only shot he has, the P-40 on the Tony. The P-40 has five attack dice at range 2, and the target number for shooting at the Tony's 8 o'clock is 5. The P-40 gains +1 on each die because it's a Veteran pilot attacking an Average pilot. The Allied player rolls 6, 6, 4, 4, and 1, which becomes 6, 6, 5, 5, and 2. Two unmodified 6's and two 5's give him 6 hits, which beat the Tony's vital armour, destroying it outright. The Tony is shot down in flames! Because the Tony was destroyed before it could fire, it doesn't get to attack this game turn. The Japanese player resolves the Zero's attack. It has four attack dice at range 2, and is shooting at the 4 o'clock arc, target number 5. However, the Hurricane is now damaged, so the Zero's 'Killer Instinct' special ability now applies, giving it a bonus attack die. The Zero gains a +1 bonus per die because of the comparative pilot quality. The rolls are 5, 4, 3, 2, and 1, which become 6, 5, 4, 3, and 2 — only 2 hits (only unmodified 6's count double), which isn't enough to beat the Hurricane's armour 3. It's close, but the Hurricane is a sturdy plane, and the Zero can't quite get enough rounds on target this time.

Turn 3



Initiative Phase: The Japanese player wins initiative yet again with a roll of 11 to 4. Because the Japanese player won initiative, she gets to move the last plane in the Movement phase—both Allied aircraft must conduct their moves before she does.

1. The Hurricane chooses speed 3, and succeeds in a Tight Turn check.

2. The P-40 chooses speed 2, and makes a normal turn so that its guns are covering the Hurricane's tail, and vice versa.

3. Then the Japanese player moves the Zero. She chooses speed 3, and tries to get on the P-40's tail with another Tight Turn, which she easily succeeds on (Zeros are nimble). The Allied player may have made a serious mistake by trying to cover the Hurricane with the P-40!

Attack Phase: The Allied player gets the first shot. The P-40 has no shot, of course, but the Hurricane can fire. It only has two attack dice at range 3, and it's shooting into the Zero's 12 o'clock arc (target number 5). The Zero's Expert Dogfighter ability means that the Hurricane takes a -1 penalty per die. The Hurricane rolls a 4 and a 3, and scores no hits. Then the Japanese player gets to make her attack with the Zero. The Zero has seven attack dice at range 1, and it's right on the P-40's tail (target number 4). Both pilots are the same quality, and no special abilities apply. She rolls 6, 5, 5, 4, 4, 3, and 2, totalling 6 hits. That certainly beats the P-40's armour of 4, and falls one short of its vital armour 7. A lot of other fighters would go down under that kind of punishment, but P-40s are very rugged planes, and it stays in the air after taking 1 point of damage.

After three game turns, its one veteran Zero against a damaged Hurricane and a damaged P-40. The Allies hold the edge, but it's still anybody's game!



11.0. ADVANCED RULES (*OPTIONAL*)

When you've mastered the basics of movement and attack, you're ready to add a couple of new rules elements to your games. These rules can therefore be considered 'optional'.

11.1. Advanced Initiative Rules – 'Tailing' And 'Choosing Game Position'

When you play a game under the Advanced Rules, add two new rules to the Initiative phase: 'Tailing' and 'Choosing Turn Position'.

Tailing. 'Tailing' provides an initiative bonus, making it more likely that an aircraft in an advantageous position will be able to set up an attack by moving *after* its target moves. Getting behind your opponent is the most fundamental air combat tactic - you can attack him, and he (usually) can't attack you. This is represented in the game by 'tailing'. To determine which aircraft are in tailing positions, check the map at the beginning of each Initiative phase. An aircraft is considered tailing an enemy plane if:

- The tailing aircraft is within 1 to 4 hexes of the tailed aircraft.
- The tailing aircraft is in the rear half of the tailed aircraft's facing.
- The tailed aircraft is in the front half of the tailing aircraft's facing.
- Both aircraft are within 1 altitude level of each other.

If you are tailing more of your enemy's aircraft than your enemy is of yours, you are deemed to have the 'tailing advantage', and you get a +2 bonus on your initiative roll. If you're each tailing the same number of aircraft, no one gets this bonus.

Choosing Turn Position. When you win initiative, you can choose whether you are the first player or the second player for the game turn. It's usually more advantageous to be the second player, but the first player gets to make the first attack of the Attack phase, and in some circumstances that's better than being able to move after your opponent moves.

11.2. Advanced Movement Rules – 'Status'

The advanced rules add an important new component to aircraft movement: 'Status'. 'Status' allows you to position your aircraft ready for banking, climbing, or diving, giving you some very useful benefits in movement, attack, and defence. *N.B. Only Fighters, Heavy Fighters, Fighter-Bombers, Naval Fighters, and Multi-Role may use the 'Status' option – not Bombers of any kind, nor Transports or Helicopters.*

Choosing a 'Status' allows you to gain a powerful benefit (usually that game turn), in exchange for giving your opponent information about what your aircraft is obliged to do next game turn. It adds a touch of extra realism to the game's movement rules, since aircraft with 'Status' choices have to commit to fairly realistic behaviours. For example - if you nose over on an enemy below you, you're likely to dive past him after your attack; if you try to out-climb an enemy whose plane climbs better than yours, you're asking for trouble. These different modes also provide you with more tactical gameplay. For example, if you find you're the first player for the game turn,

you can be reasonably sure that an aircraft you move early in the Movement phase isn't going to get a good shot at an enemy plane. So, if you *do* have to move early, it's a good idea to choose 'Evading Status' for the extra defence. 'Diving Status' offers an excellent attack bonus, but to use it you'll have to get an altitude advantage over your prospective target, which means on any given game turn, climbing might be a good idea. Best of all, adjusting your miniature's pose just looks cool! (*NB for many models not from the original game, and differently based, 'Status' may have to be simply declared and noted with a counter*).



When you finish moving an aircraft, you may set up for your attacks this game turn, and for manoeuvres next game turn, by banking or inclining the model on its base. You don't have to choose a 'Status' if you don't want to - if you don't choose any 'Status', your aircraft remains in a 'Neutral Status', with no advantages or drawbacks.

An aircraft retains its current 'Status' until it moves again on the next game turn.

Required Manoeuvres: Aircraft that begin the Movement Phase with a 'Status' *must* perform or attempt specific manoeuvres before they do anything else in their current move. You must meet (or attempt to meet) a required manoeuvre in the first hex you enter during your plane's move. After that, you are free to continue your move normally (but, of course, you may have already used your one difficult manoeuvre for the move in performing this required manoeuvre).

Diving Status (nose down)

- You can attack an enemy 1 altitude below you. You get a +1 bonus on each attack die when attacking an enemy below you.
- If you begin your move in Diving Status, you are required to Power Dive (see 7.5.).
- You can't select Diving status at altitude 1.

Evading Status (banking left or right)

- Enemies get a -1 penalty on each attack die when attacking you.
- You get a -1 penalty on each attack die.
- If you begin your move in Evading status, you are required to turn or attempt a Tight Turn in the same direction you're evading in (see 7.5.).

Climbing Status (nose up)

- You can attack an enemy 1 altitude above you.
- Enemy aircraft with a better Climb bonus than yours get a +1 bonus on each attack die when attacking you.
- If you begin your move in Climbing Status, you are required to Climb. You get a +4 bonus on your Climb manoeuvres check (see 7.5.).
- You can't select Climbing status at altitude 6.

N.B. As suggested, these 'Statuses' also affect your aircraft's ability to attack and avoid attack:-

a) Firing Arc and Altitude. An aircraft with 'Diving Status' can attack targets at its altitude or at an altitude 1 level lower.

b) Attack Bonuses and Penalties. In addition to pilot quality and 'damage' (see 10.0.), your attack roll can also be modified by the 'Status' of the attacking aircraft and the target aircraft.

i) 'Evading Status': If the target or the attacking aircraft have the Evading Status, you take an attack penalty of -1 per die (or two attack penalties if both are evading).

ii) Climbing Status: If the target aircraft has the Climbing Status and your attacking aircraft has a better Climb rating than the target, you get an attack bonus of +1 per die.

iii) Diving Status: If your attacking aircraft has the Diving Status and the target aircraft is 1 altitude lower, you get an attack bonus of +1 per die.

11.3. Special Battlespace Conditions

Not all air battles took place in bright daylight and clear skies. Weather often played a crucial role in shaping the aerial battlefield, and many air raids took place at night. Anti-aircraft fire from flak batteries presented aircraft with a constant threat over important ground targets or enemy warships. These special conditions can be incorporated into your games to provide more realistic and problematic aerial encounters.

11.3.1. Clouds

Clouds can play an important role in an aerial encounter, offering a pilot in trouble a safe refuge, or hiding nearby enemies from sight.

Clouds come in four basic types: solid, heavy, light, and none ('clear air'). Solid clouds offer few stretches of clear air, and are very easy to hide in. Heavy clouds have large open breaks or gaps. Light clouds are just as thick as solid or heavy clouds, but they're smaller and farther apart, leaving more clear air between them. 'Clear air' is considered devoid of cloud.

Cloud cover often varies at different altitudes. For example, a battle area might be clear at altitude 1, solidly covered at altitude 2, lightly cloudy at altitude 3, and clear at altitude 4 and 5. Changing altitude allows pilots to take advantage of these changing conditions—a pilot could dive down into a solid layer to get away from

trouble, or climb up into intermittent clouds to keep from being noticed by an enemy he intends to attack.

If you want to know exactly where clouds are in your scenario, mark their locations on your battle map by using cotton wool balls, paper cut-outs, or other markers. In general, an isolated cloud is 1 to 4 hexes long, 1 to 2 hexes wide, and covers 1 to 3 altitude bands, usually with its base at altitude 2 or 3. For game purposes you can assume that all the clouds in the same area are about the same height, and begin at the same altitude. In areas of light cloud cover, clouds are about 5 to 10 hexes apart; in heavy cover, clouds are about 2 to 5 hexes apart. In the time scale of the game, clouds stay in place and don't change for the duration of the battle.

To determine whether an aircraft is 'in cloud':-

Solid: An aircraft in a solid cloud band at the end of its move is in clouds.

Heavy: An aircraft in a heavy cloud band at the end of its move can attempt to move into the clouds. Roll a die; on a roll of 3 or higher, the aircraft is in cloud.

Light: An aircraft in a light cloud band at the end of its move can attempt to move into the clouds. Roll a die; on a roll of 5 or higher, the aircraft is in cloud.

Clear: An aircraft in a clear band at the end of its move is *not in* cloud.

If you want to stay in a cloud, you must attempt to move into the clouds again on your next game turn.

An aircraft that is 'in cloud' follows these rules:

It can't tail enemy aircraft or be tailed (see 11.1.).

It can't attack or be attacked; except by guided missiles or radar targeted weapons.

It remains in the cloud until it moves again.

Random Cloud Arrangement. If you want to add randomised clouds to your air battles, roll a die when you set up your scenario and consult the following chart:

	1	2	3-4	5-6
Altitude 1	Light	Clear	Clear	Clear
Altitude 2	Solid	Solid	Heavy	Light
Altitude 3	Heavy	Heavy	Light	Light
Altitude 4	Heavy	Light	Clear	Clear
Altitude 5	Light	Clear	Clear	Clear
Altitude 6	Clear	Clear	Clear	Clear

11.3.2. Flak Fields

Whilst light anti-aircraft fire is generally targeted at specific, low-flying, enemy aircraft, heavy anti-aircraft batteries often employ the tactic of making a piece of the sky a terminally dangerous place by creating a 'flak field'. In specific scenarios, one side may have one or more flak fields to place during the course of the battle.

Flak fields follow the rules below:

Area Affected: A flak field covers an area of seven hexes - one central hex, and all six adjacent hexes.

Altitude: Each flak field exists *only* at a specific altitude (e.g. altitude 2, 3, or 4).

Aircraft Attacked During Its Move: Any aircraft entering a hex of a flak field may be attacked. Make a flak roll in each hex of a flak field that an aircraft moves through. Roll a single die. On a roll of 1, the moving aircraft is immediately attacked. Roll a die again to determine *the number of attack dice in the flak attack*.

Resolve Attacks Normally: The target number for each flak attack dice is 4. If the attack equals or exceeds the moving plane's armour, the moving aircraft takes 1 point of damage. If the attack equals or exceeds the plane's vital armour, the moving aircraft is destroyed (both as per the usual rules).

Flak fields attack *all* aircraft that enter, regardless of whether they're friendly. It was common for defending fighters to break off when a bomber formation entered a flak field, only to resume their attack once the enemy bombers had passed through.

Ground-to-air SAM guided missiles used in 'flak fields' are best gamed by having a set number of missiles fired from ground locations, assuming each takes one turn to reach altitude 1, as detailed in 9.2., thereafter homing and climbing as per the other guided missile rules (see 9.2.) – *save they can climb two altitudes turn, being bigger and more powerful missiles*.



11.3.3. Barrage Balloons

Barrage balloons are large, tethered balloons that help to guard an area against low-level air attack by creating an obstacle over that area. The strong wires between ground and balloon could damage or destroy an aircraft colliding with them. Some barrage balloons were fitted with small bombs that slid down the wire on contact to ensure the aircraft's destruction.

Barrage balloons follow the rules below:

Area Affected: A barrage balloon guards 1 hex.

Altitude: A balloon only threatens aircraft at altitude 1.

Aircraft Attacked During Its Move: Any aircraft entering a barrage balloon hex may be attacked. Make a 'balloon roll' when an aircraft enters the hex.

Balloon Roll: Roll a die. On a roll of 1 or 2, the moving aircraft is immediately attacked by the balloon. Roll a further die:

1–2 No effect

3–4 Aircraft takes 1 point of damage

5–6 Aircraft is destroyed

Barrage balloons threaten all aircraft that enter their hex, regardless of whether they're hostile or friendly.

11.3.4. Night Combat & Radar Direction

Air-to-air combat at night posed many challenges. Spotting enemy aircraft in darkness with the unaided eye was nearly impossible. All sides developed a variety of techniques and technologies to deal with the challenge of intercepting enemy bombers attacking at night - listening posts and searchlight networks, fighter direction by ground-based radar stations, and increasingly capable airborne radars. Fighter-on-fighter combat during the hours of darkness was very unusual until the middle years of WWII, but by that war's end highly capable night fighters routinely engaged in deadly games of cat-and-mouse in the skies. Post WWII night combat became more common.

Night combat falls into two categories: 'moonlight' or 'darkness'.

Effects of Moonlight. Attack Penalty: All attacks suffer an attack penalty (–1 per die).

Effects of Darkness.

a) No Tailing: Ignore all tailing in night combat (see 11.1.).

b) An aircraft can't attack unless it has a special ability allowing it to attack in darkness, or it is under ground direction, or the target is illuminated, or the attacker has specialist radar (see Appendix 1).

c) Attack Penalty: All attacks suffer an attack penalty (–1 per die).

N.B. Bombers can only attack in darkness if fired at first (i.e. in reply to being shot at). Usually they sought not to give away their position.

Fighter Direction In Darkness

- a) Ground-based radar installations can track enemy aircraft in darkness and vector interceptors into place through fighter direction procedures. In a night 'darkness' combat scenario, one side or the other may have fighter direction available. Fighter direction is described in terms of capacity - the number of friendly fighters that can be guided to targets in the area at the same time. For each point of direction capacity available, you can provide fighter direction to one friendly fighter – plus one extra if the night fighters have their own airborne radar systems.
- b) Assigning Direction: After the Initiative phase, assign fighter direction to friendly aircraft. Your aircraft receives direction until you choose to reassign direction to a different aircraft in a subsequent Initiative phase.
- c) We recommend 1/2 directors to the number of fighters provided.

Illumination

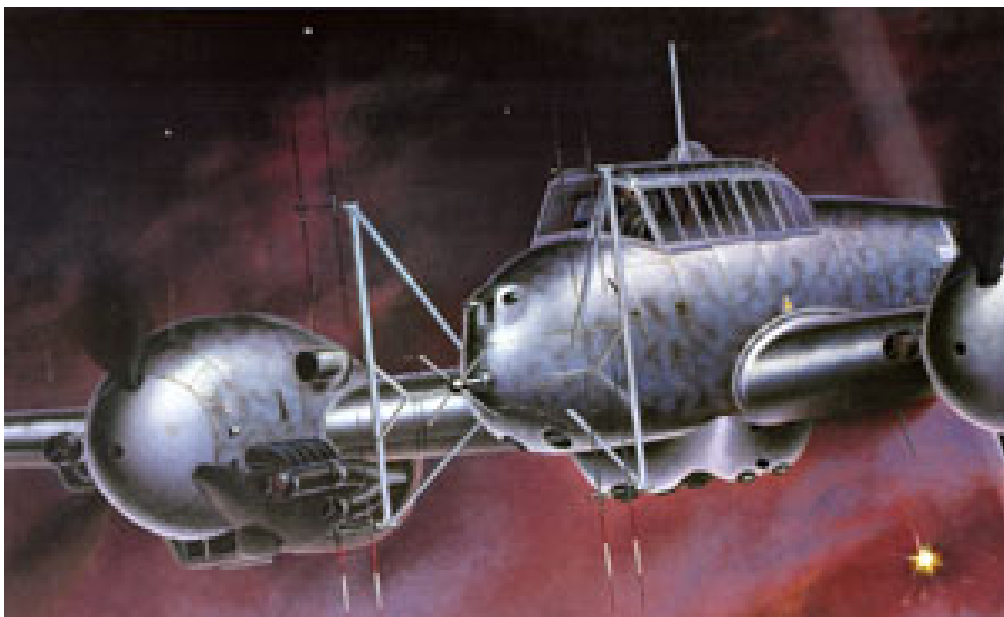
Batteries of searchlights can track enemy aircraft at night, illuminating them for friendly fighters to find and attack. In a night combat scenario, the side defending the battle area against an enemy raid may have searchlight batteries and/or radar and SAMs deployed on the ground below.

Illumination Roll: Immediately before the Attack phase, make an illumination roll for each enemy aircraft. Roll a die:

- Heavy bomber = Illuminated on a 2+
- Medium bomber = Illuminated on a 3+
- Light bomber = Illuminated on a 4+
- Heavy fighter, Fighter/Bomber = Illuminated on a 4+
- Fighter, Jet Aircraft or Naval Fighter = Illuminated on a 5+
- Others = Illuminated in a 2+

If the illumination roll succeeds, the searchlight only illuminates the target until the end of the game turn. Illumination must be re-rolled for each game turn.

We recommend ½ searchlights per defending number of fighters.



12.0. SCENARIOS

You can use one of the scenarios below, or devise your own:-

1. AIR SUPERIORITY DOGFIGHT

FORCES: Two fighter aircraft a side, equally rated in pilot quality and of comparable aircraft quality.

MISSION: Gain air superiority over the map

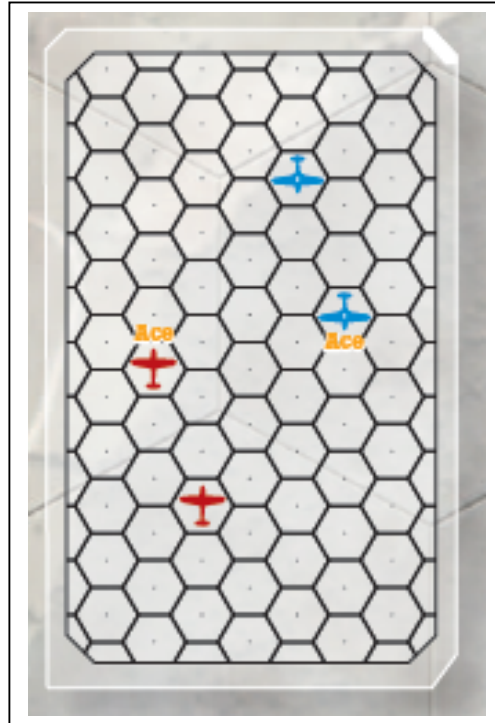
WINNING: Shoot down both enemy aircraft or force them to disengage from the map.

Normal victory point conditions apply.

SET UP: As diagram – map of any size but *do not* use a floating map. Pilots choose their own altitude.

TIME PERIOD: Any

NOTES: Shoot down the Fokkers! One of each side would be an Ace.



1.a. AIR SUPERIORITY DOGFIGHT – BATTLE OF BRITAIN.

FORCES: British: Spitfire Mk I Ace and Hurricane Mk I.

German: Bf 109E Ace and Bf 109E Wingman.

MISSION: Gain air superiority over the map

WINNING: This scenario is a simple contest of air superiority: Defeat the enemy fighters while taking the least amount of damage possible. Normal victory point conditions apply.

SET UP: As diagram – map of any size but *do not* use a floating map. Pilots choose own altitude.

TIME PERIOD: 1940.

NOTES: During the Battle of Britain, the mission of the British Spitfire fighters was to (generally) take on the German Messerschmitts, sweeping the Bf 109s out of the way so that Allied pilots in Hurricanes could go directly after the German bombers.



1.b. AIR SUPERIORITY DOGFIGHT – SOUTH PACIFIC: PATROL OVER THE SLOT.

FORCES: USA: P38 Lightning Ace and FM-1 Wildcat.

Japanese: KI 61 'Tony' Ace and A6M3 Zero Escort.

MISSION: Gain air superiority over the map

WINNING: This scenario is a simple contest of air superiority: Defeat the enemy fighters while taking the least amount of damage possible. Normal victory point conditions apply.

SET UP: As diagram – map of any size but *do not* use a floating map. USA (blue) at altitude 3; Japanese (red) at altitude 4.

TIME PERIOD: 1943.

NOTES: After securing a foothold on Guadalcanal, the Allies fought their way westward along the Solomon Islands throughout 1943. Operating from Henderson Field and newly captured airstrips in New Georgia and Vella Lavella, Allied fighters battled the Japanese for control of the air in the central and upper Solomons. 'The Slot' – the stretch of water running through the centre of the Solomon Islands – became the front line in a months-long struggle for air superiority.

1.c. AIR SUPERIORITY DOGFIGHT – GUADALCANAL.

FORCES: USA: P39D Rookie and FM-1 Wildcat.

Japanese: KI 43 'Oscar' Ace and A6M3 Zero Escort.

MISSION: Gain air superiority over the map.

WINNING: This scenario is a simple contest of air superiority: Defeat the enemy fighters while taking the least amount of damage possible. Normal victory point conditions apply – *excepting* the US player scores VPs equal to $\frac{1}{2}$ of any Japanese plane disengaging that is damaged or crippled, as they are unlikely to make it home. The scenario ends after 5 game turns if neither side has won by then – as the Japanese will seek to break off.

SET UP: As diagram – map of any size but *do not* use a floating map. USA (blue) at altitude 2; Japanese (red) at altitude 3.

TIME PERIOD: 1943.

NOTES: The Guadalcanal campaign was fought over a single key objective: Henderson Field. The allies had control of the airfield, so US attack planes controlled the surrounding seas during daylight, making it difficult for the Japanese to reinforce the island. To push the Americans off Guadalcanal, the Japanese needed to therefore defeat their scratch 'Cactus Air Force' of Navy, Marine and Army pilots based at Henderson, and also to knock-out the airstrip. The challenge the Japanese faced was that Guadalcanal was over 550 miles from their principal base at Rabaul, and their fighters couldn't remain over the island for more than a few minutes before being obliged to turn for home.



2. INTERCEPT THE INTERCEPTORS

FORCES: Two fighter aircraft a side, equally rated in pilot quality and of comparable quality.

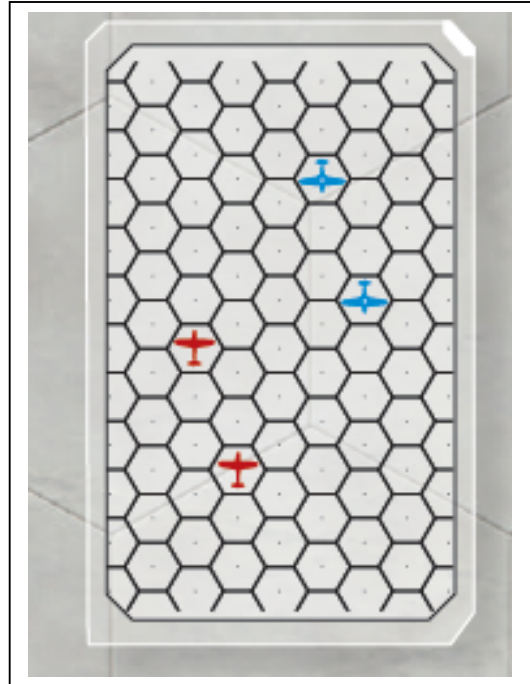
MISSION: Gain air superiority over the map

WINNING: Shoot down both enemy aircraft or force them to disengage from the map in order to protect a bomber force. The Red player wins if both of his or her aircraft reach altitude 5 without taking any damage. Otherwise, the first player to shoot down an enemy aircraft wins.

SET UP: As diagram – map of any size but *do not* use a floating map. The Blue player starts with 2 X fighter aircraft at altitude 3. The Red player starts with 2 X fighter aircraft at altitude 2.

TIME PERIOD: Any

NOTES: Shoot down the Fokkers! The bombers must get through!



2.a. INTERCEPT THE INTERCEPTORS – BATTLE OF BRITAIN

FORCES: Two fighter aircraft a side, equally rated in pilot quality.

MISSION: Gain air superiority over the map

WINNING: Shoot down both enemy aircraft or force them to disengage from the map in order to protect a bomber force. The British player wins if both of his or her aircraft reach altitude 5 without taking any damage. Otherwise, the first player to shoot down an enemy aircraft wins.

SET UP: As diagram – map of any size but *do not* use a floating map.

The German player starts with 2 X Bf 109E aircraft at altitude 3. The British player starts with 2 Hurricane Mk I aircraft at altitude 2.

TIME PERIOD: 1940

NOTES: British doctrine generally called for their Hurricanes to attack the German bombers, whilst the Spitfires were supposed to engage and destroy the Bf 109s. The Hurricanes usually tried to avoid the enemy fighters when they could. In turn, the German Bf 109s had the mission of intercepting and destroying the British fighters before they reached the German bombers. Things didn't always go as planned...



3. LIMITED FUEL

FORCES: Pilot quality is Average. The Red player starts with 3 X fighters (marked 109 + 110) and 2 X bomber tokens (see 1.4. for stats) at altitude 4. The Blue player starts with 3 X fighters (marked Spit and Hurr). *The bomber tokens in this scenario represent appropriate bomber for Red – use specific stats for preferred aircraft.*

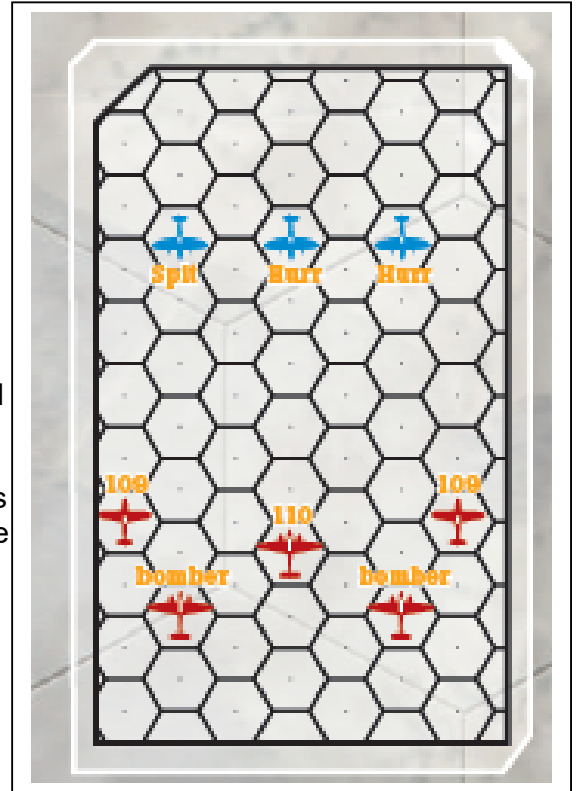
MISSION: The bombers must get through! This scenario ends after 5 game turns. The Red fighters have to leave the south edge of the map by the end of game turn 4 or they count as destroyed. Until they are attacked, the bombers cannot turn.

WINNING: The Red player wins if neither bomber is damaged by the end of the scenario. Otherwise, the player with the most victory points at the end of game turn 5 wins.

SET UP: As diagram – map of any size but *do not* use a floating map. The map is fixed in place - any plane that flies off the edge is considered to have retreated, but the Red fighters are allowed to leave by the south edge of the map without giving the Blue player victory points.

TIME PERIOD: Up to c.1950

NOTES: Best suits the days before drop-tanks and inflight refuelling.



3.a. LIMITED FUEL – BATTLE OF BRITAIN

FORCES: Pilot quality is Average unless stated. The German player starts with 2 X Bf 109E aircraft, a Bf 110, and 2 X bomber tokens (see 1.4. for stats) at altitude 4. The British player starts with 2 X Hurricane Mk I aircraft and a Spitfire Mk I 'Ace' at altitude 3. *The bomber tokens in this scenario represent Heinkel He 111 medium bombers. For those not wishing to use generic bomber stats see Appendix 3.*

MISSION: The bombers must get through! This scenario ends after 5 game turns. The Bf 109s have to leave the south edge of the map by the end of game turn 4 or they count as destroyed. Until they are attacked, the bombers cannot turn.

WINNING: The German player wins if neither bomber is damaged by the end of the scenario. Otherwise, the player with the most victory points at the end of turn 5 wins.

SET UP: As diagram – map of any size but *do not* use a floating map. The map is fixed in place - any plane flying off the edge is considered 'disengaged', but the Bf 109s are allowed to leave by the south edge of the map without giving the British player victory points.

TIME PERIOD: 1940

NOTES: One of the serious challenges confronting the Luftwaffe was that the air battles took place over British soil, some distance from the German bases. The Bf 109E was an excellent fighter, but before the advent of drop-tanks didn't have a long range. In some missions the German fighters had to turn back after only 10 minutes over the target area. When the Bf 109s had to leave early, the German bombers were very vulnerable to attack from the British defenders.

4. 'SCHNELLBOMBER'

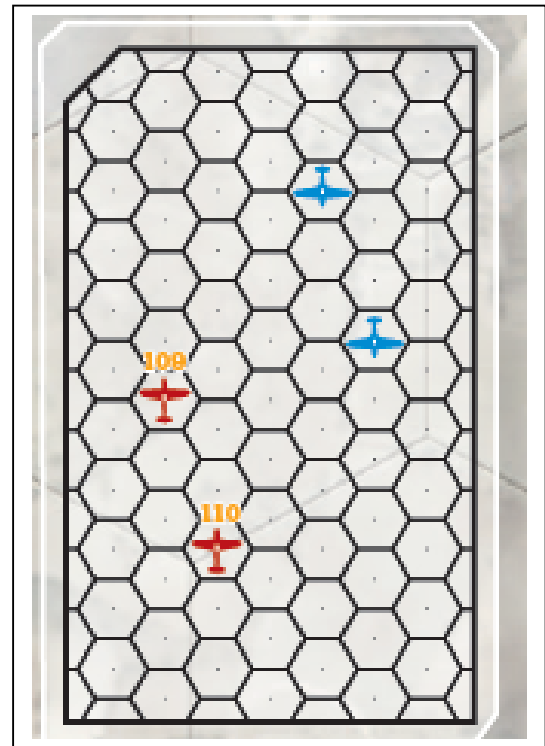
FORCES: Pilot quality is Average unless it is required to give each side an Ace. The Red player starts with a fighter and a fighter-bomber at altitude 3. The Blue player starts with 2 X fighters at altitude 3.

MISSION: The bombers must (or must not) get through!

WINNING: The first player to score 2/3 of the starting total as victory points wins the scenario. At the end of each game turn where the fighter-bomber ends at altitude 1 without attempting any difficult manoeuvres, the Red player scores 10 victory points from strafing targets on the ground. **SET UP:** As diagram – map of any size but *do not* use a floating map.

TIME PERIOD: Any

NOTES: Fighter-bomber 'ramrod' missions are still quite common.



4.a. 'SCHNELLBOMBER' – BATTLE OF BRITAIN

FORCES: Pilot quality is Average unless stated. The German player starts with a Bf 109E and a Bf 110 at altitude 3. The British player starts with 2 X Spitfire Mk I Aces at altitude 3.

MISSION: The bombers must (or must not) get through!

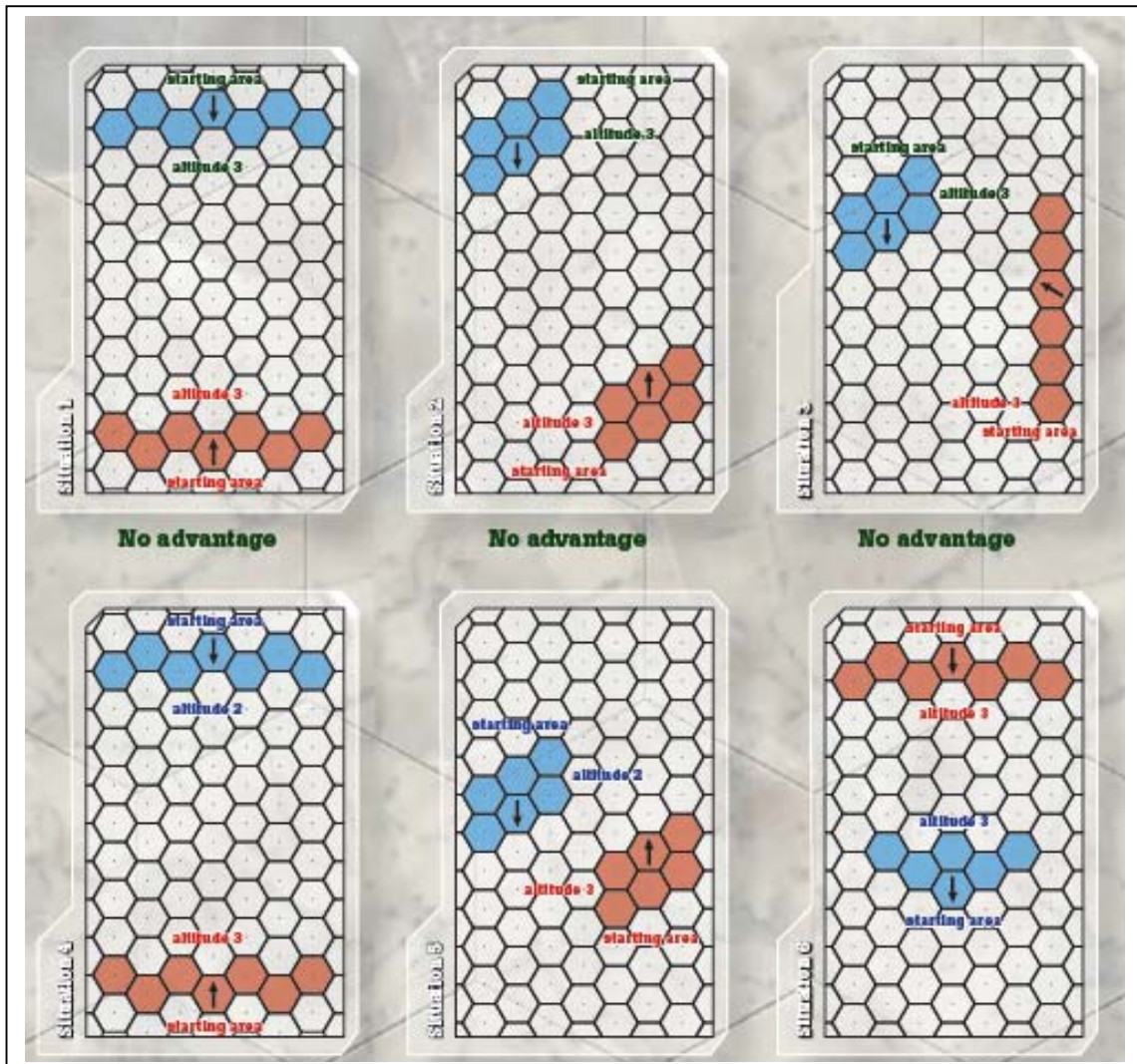
WINNING: The first player to score 60 victory points wins the scenario. At the end of each game turn where the Bf 110 ends at altitude 1 without attempting any difficult manoeuvres, the German player scores 10 victory points by strafing ground targets.

SET UP: As diagram – map of any size but *do not* use a floating map.

TIME PERIOD: 1940

NOTES: Early in the war, the twin-engine Bf 110 was quite successful fighting against countries that didn't have the most modern equipment, or when it struck with the advantage of surprise. However, the Germans didn't have much success using it as a fighter during the Battle of Britain. While the Bf 110 had excellent firepower, good range, and good speed, it lacked the manoeuvrability of the modern single-engine fighters. After the Germans discovered its vulnerability in dogfights, they employed the Bf 110 as a light attack aircraft in so-called 'Schnellbomber' (fast bomber) missions. It couldn't carry as much ordnance as the Heinkel He 111, but it was better able to defend itself against interceptors. Later, fitted with radar, the type would become a successful night-fighter.

5. AIR SUPERIORITY



FORCES: Build a Flight. One player creates a flight to agreed points ceiling. The other player creates an enemy flight that costs the same. Historical or hypothetical opponents can be used. Flights must have at least two aircraft, and can't (normally) have more than five.

MISSION: Air superiority!

WINNING: The first player to score 2/3 of the starting points wins the game. If both players reach this total in the same game turn, then the player who achieves the highest score wins. You score points for the following:-

- Whenever you destroy an enemy aircraft, you score victory points equal to its cost.
- Whenever an enemy aircraft disengages from the battle, you score victory points equal to half its cost.
- In three of the starting situations, the disadvantaged player (in the blue position) begins the game with bonus victory points. The game ends when one player wins, or when one player has no aircraft remaining. If neither player has reached 2/3 points by the time the game ends (usually because one player's aircraft retreated), then the player with the most aircraft remaining in the game wins.

SET UP: Use a 'floating' Battle Map and then roll a die to determine which player has the starting advantage. Next, roll for 'Starting Situation'. Roll a die and use the starting situation of that number; see the Starting Situations diagram (above). In scenarios 4, 5 and 6, one side begins with a better position than the other. The better position is marked as the red advantaged position. If you set up in the advantaged position, you're the advantaged player for the game. You need to score more victory points to win as the advantaged player than does the disadvantaged player. Next, Deploy Aircraft. The player *without* the starting advantage places his or her aircraft within the Blue setup area, facing in the marked direction. Then the player *with* the starting advantage places his or her aircraft within the Red set-up area, facing in the marked direction.

6. Start Playing! Follow the Sequence of Play (see 2.0.).

TIME PERIOD: Any

NOTES: This is likely to be the most popular 'scratch' scenario.

6. BOMBER ESCORT SCENARIO

FORCES: Both players have an agreed points ceiling to construct flights of fighters. In addition, the player escorting the bomber gets 2 X bombers.

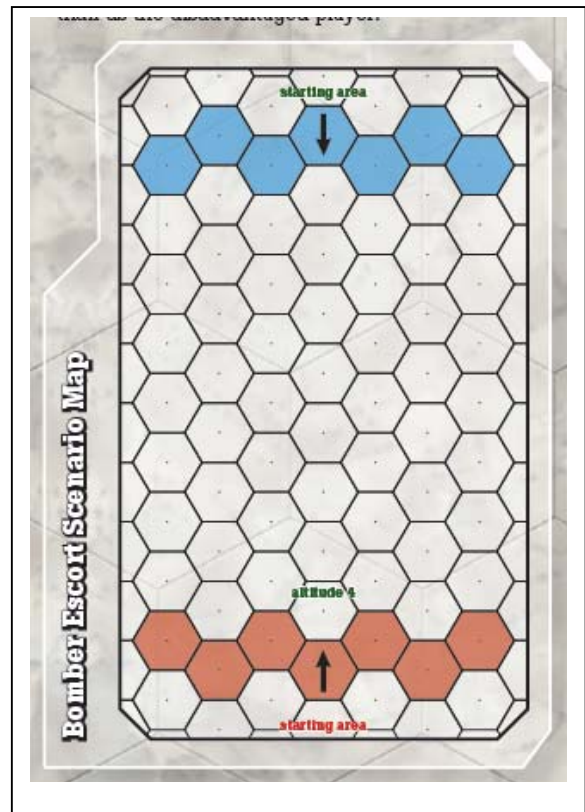
MISSION: The bomber must get through!

WINNING: You need to score more victory points to win as the advantaged player than as the disadvantaged player. If both bombers reach the opposite side of the fixed map, the escorting player wins. If neither reaches the opposite side, the intercepting player wins. If one bomber reaches the opposite side, then the player who destroys the highest point value of enemy fighters 'wins'.

SET-UP: The bombers can only turn or fly straight, and can't perform any other manoeuvres. The escorting player sets up first in the blue area. The bombers must be at least 3 hexes apart.

TIME PERIOD: Any

NOTES: The primary means for projecting airpower is the bomber. Any serious attack on enemy ground forces, infrastructure, or naval units requires the delivery of heavy bomb payloads. Enemy fighters often intercepted bomber missions, which were in turn protected by fighter escorts. In the Bomber Escort scenario, one player protects a large, slow bomber as it makes its way across the battle map, while the other player attempts to shoot it down.



'Sally G'

A 'Tristan Fanshawe' adventure... by Douglas Tempest.



It is the spring of 1944 – and the USAAF are having a spot of daylight bother over Germany, thanks to the Jerries' new ME 262 jet fighter. RAF fighter ace, Squadron Leader Tristan Fanshawe, is assigned by Fighter Command to assist – but quickly clashes with his gung-ho Yank C/O Colonel Trump's ideas of building a 'wall of fire', and Fanshawe's own feisty USAAF WAAC driver, Corporal Betty Kowalski.

Concluding he needs to get a look at these new Jerry crates first hand, Fanshawe boards the B17 'Sally G', on a mission to bomb the Nazi's crucial treacle factory at Swinehund, deep in enemy airspace. When the new drop-tanks fail on their long-range Mustang fighter escort, the crew of 'Sally G' must try to make it back to Blighty alone. And, worse, should he return, Fanshawe must reconcile the forbidden attraction he and Corporal Kowalski feel for each other with her romance to 'Sally G's' pilot, Captain James 'Buck' Rogers...

7. BOMBER NO ESCORT SCENARIO

FORCES: One player has an agreed points ceiling to construct flights of fighters; their opponent gets the same points total in bomber flights, *but has no fighter escort*.

MISSION: The bomber must get through!

WINNING: You need to score more victory points to 'win' than the opposing player. Each aircraft shot down counts as its points value – each bomber successfully crossing the map area also counts its points value.

SET-UP: The bombers can only turn or fly straight, and can't perform any other manoeuvres. The bombers must be at least 3 hexes apart. They start from one end of a *double length map*; the opposing fighters at the other end.

TIME PERIOD: Any

NOTES: The primary means for projecting airpower is the bomber. Any serious attack on enemy ground forces, infrastructure, or naval units requires the delivery of heavy bomb payloads. Enemy fighters often intercepted bomber missions, which if long range were often not protected by fighter escorts. The defending fighters must shoot down the bombers – whilst the bombers can gain points by both surviving *and* by shooting down enemy fighters.

7.a. BOMBER NO ESCORT SCENARIO – WORLD WAR II

FORCES: One player has an agreed points ceiling to construct flights of fighters; their opponent gets the same points total in bomber flights, *but has no fighter escort*.

MISSION: The bomber must get through!

WINNING: You need to score more victory points to 'win' than the opposing player. Each aircraft shot down counts as its points value – each bomber successfully crossing the map area also counts its points value.

SET-UP: The bombers can only turn or fly straight, and can't perform any other manoeuvres. *In daylight* the bombers may close up in 'box' formation 2 hexes apart, and may count an attack 'advantage' when firing at range 1, but a 'disadvantage' when firing at range 2. The bombers start from one end of a *double length map*; the opposing fighters at the other end.

TIME PERIOD: 1939-1945

NOTES: The primary means for projecting airpower is the bomber. Any serious attack on enemy ground forces, infrastructure, or naval units requires the delivery of heavy bomb payloads. In WWII long range were often not protected by fighter escorts and relied upon close flying and mutual fire support. The defending fighters must shoot down the bombers – whilst the bombers can gain points by both surviving *and* by shooting down enemy fighters.



8. 'OPERATION VENGEANCE' (Scenario by Sammy Grimes, shared on <https://www.facebook.com/groups/673251276374712/>)

Operation Vengeance

Solomon Islands, April 1943

Operation Vengeance was the mission to kill Admiral Isoroku Yamamoto, the Commander-in-Chief of the Japanese Combined Fleet and the architect of the attack on Pearl Harbor. Under the "Magic" program, U.S. Navy codebreakers revealed that Yamamoto would depart Rabaul on 18 April at 0800 and arrive at Balalae Airfield at 1000. To intercept, 16 USAAF P-38 Lightnings departed Kukum Field on Guadalcanal at 0725, flying 600 miles in radio silence at just 50 feet above the Solomon Sea. Four aircraft were to engage the target, with the remaining fighters providing top cover against the expected Japanese reaction from Kahili Air Field.



Imperial Japanese Navy Air Force

G4M1 Betty medium bombers (205th Kokutai Naval Air Unit) set up at Altitude 4 along the northern edge of the hex grid, 16 hexes from the southern edge. The A6M5 Zero escorts (204th Kokutai NAU) set up within three hexes of the Bettys at Altitude 4.

- Two G4M1 Betty bombers with Average Crews (secretly designate Yamamoto's plane)
- Two A6M5 Zero fighters with Ace Pilots
- Two A6M5 Zero fighters with Veteran Pilots
- Two A6M5 Zero fighters with Average Pilots

U.S. Army Air Force

P-38G Lightning fighters (339th Fighter Squadron of the 347th Fighter Group) set up second at Altitude 1 along the southern edge of the map.

- Two P-38G Lightning fighters with Veteran pilots
- Two P-38G Lightning fighters with Average Pilots

Special Rules

The Bettys move and fire first. They do not affect initiative or special abilities.

With total dedication to protecting their leader, the Japanese side receives a +2 bonus to initiative rolls for the entire scenario.

Victory Conditions

If the G4M1 Betty carrying Yamamoto is destroyed, the Allied side wins. If the G4M1 Betty carrying Yamamoto exits the southern edge of the map, the Japanese side wins.

9. CLOSE SUPPORT & GROUND TARGETS – ANY PERIOD

Missions can include the precision attack of ground targets. These could be supply dumps, vehicle parks, artillery batteries, troop concentrations, bridges, crossroads, built-up areas, Gestapo headquarters, heavy-water plants and so forth. For game purpose the exact nature of a target isn't important – that it is a 'target hex' *is!*

We recommend that one side defends the ground target, the other attacks it. Ground targets can also be defended by flak and/or SAM batteries. Simply place a 'ground target' marker in as many hexes as wished at the centre of any map. N.B. *Do not use a floating map.*

Each 'warload' landed on a ground target hex = 1 extra Victory Point towards total

Ground targets are 'bombed' during the Attack Phase as if a normal attack, and all restrictions to 'offensive' weapons apply (see 8.0. – obviously an attacking bomber will still be able fire its defensive MGs etc as it makes its run).

Note also the *additional* bonus if an aircraft is assigned the 'Close Support' Special Ability (see Appendix 1).

9.a. CLOSE SUPPORT & GROUND TARGETS – SOUTH PACIFIC

FORCES: The Japanese player ('red') starts with a Ki-43 'Oscar' and Ki61 'Tony' Ace at altitude 3. The US player starts with a P-39D Rookie at altitude 2 and a P38J Lightning Ace With 'Close Support' 'Special Ability' and 3 x 'bomb' warload, at altitude 4.

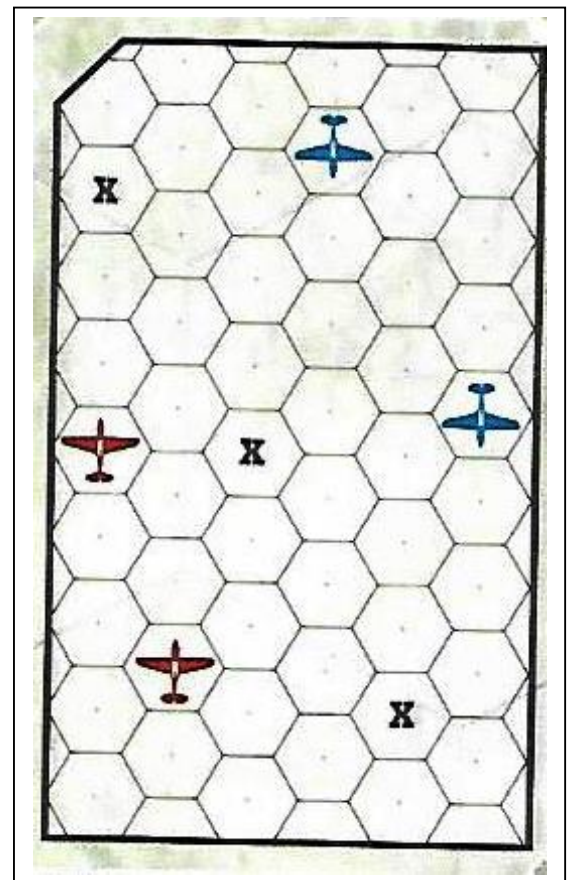
MISSION: Attack the three Japanese ground targets (marked 'X') and defending aircraft.

WINNING: The US Player wins by successfully attacking all three ground targets, *or* by destroying both Japanese aircraft. The Japanese player wins if the US player fails to accomplish either objective before turn 10.

SET-UP: Set up map sections as per the diagram. Place markers for the ground targets as shown. *Do not use a 'floating map'.*

TIME PERIOD: 1943

NOTES: During 1943 the focus of the air war in New Guinea shifted from the defence of Port Moresby to the allied push into the Japanese-held northern coast. The US Fifth Air Force began a punishing campaign against a string of Japanese airbases at Lae, Madang, Wewak and Hollandia, while providing ground support to Allied forces advancing against Japanese-held territory.



9.b. CLOSE SUPPORT & GROUND TARGETS – SOUTH PACIFIC - RABAUL SCRAMBLE

FORCES: The Japanese player ('red') starts with a Ki-43 'Oscar' and Ki61 'Tony' Ace and a A6M3 Zero Escort, all at altitude 2. The US player starts with a FM-1 Wildcat, a P38J Lightning Ace as well as 1 X medium bomber token, all at altitude 3. *The bomber token in this scenario represents a medium bomber such as a B-25 Mitchell or Douglas A-20 deemed capable of 'Close Support'. For those not wishing to use the generic bomber stats, see Appendix 3.*

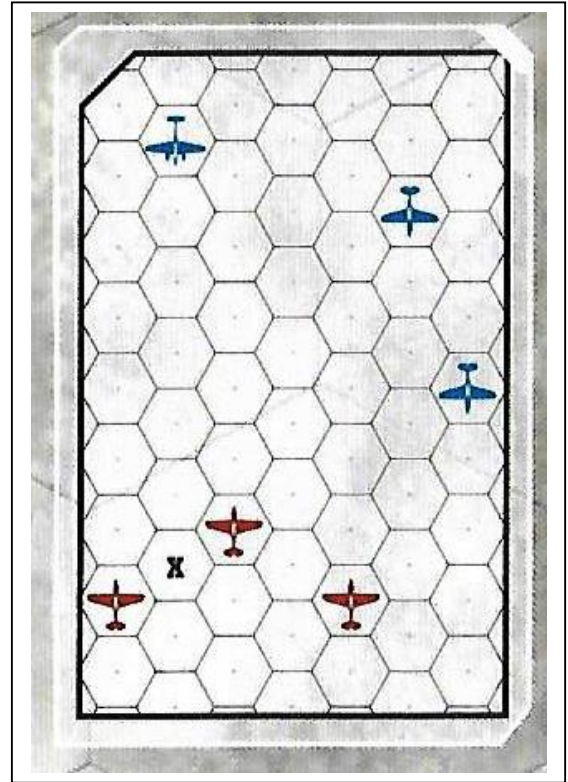
MISSION: Attack the Japanese ground target (marked 'X') and defending aircraft.

WINNING: The US Player wins by the bomber successfully attacking the target and surviving. Alternatively, the first player to shoot down two enemy planes wins. If neither player has 'won' by turn 8 the Japanese player has beaten off the attack, 'wins' and the game ends.

SET-UP: Set up map sections and deploy aircraft as per the diagram. Place marker for the ground target as shown. *Do not use a 'floating map'.*

TIME PERIOD: 1943

NOTES: By the end of 1943 the Allied noose was closing around the huge Japanese base at Rabaul. The US Army Air Force and Marine Corps hammered Rabaul from airbases in New Guinea and the upper Solomons, while the US Navy launched daring carrier raids against the enemy stronghold. Japanese strength was slowly ground into nothing in this war of aerial attrition.



DARE SQUADRON LEADER TRISTAN FANSHAWE SHOOT DOWN THE ESCAPING SOVIET BOMBER CARRYING THE STOLEN NUCLEAR PLANS – KNOWING TO DO SO WILL KILL THE ABDUCTED FLIGHT OFFICER SUSAN REYNOLDS – THE WOMAN HE IS ENGAGED TO MARRY?

APPENDIX 1 – SPECIAL ABILITIES

Here is a list of 'Special Abilities' that can be bestowed upon aircraft:-

Accurate Fire – Once per game, this aircraft can reroll an attack.

Agile – This aircraft can attempt two difficult manoeuvres per move, in the same or in different hexes. (VTOL AND HELICOPTERS ONLY)

Afterburner – When this aircraft ends its move, it can move straight 1 extra hex (2 hexes if supersonic capable) (JET FIGHTERS ONLY)

Bait And Strike – This aircraft rolls two extra attack dice when attacking an enemy target that attacked a friendly aircraft this game turn

Biplane Manoeuvrable – once per game, when this aircraft begins an attack, it can turn one hex side in its current hex. (BIPLANE & TRIPLANE FIGHTERS ONLY)

Boom And Zoom – This aircraft can attempt two difficult manoeuvres per move if the first one is a power dive and the second one is a climb (not in the same hex)

Bounce – Whenever you win initiative while this aircraft is in Diving Status, it attacks before any enemy aircraft during the Attack phase.

Bring 'Em Home Alive – the first time this aircraft would be destroyed during the game, roll a die. On a 5 or more it remains in the game 'crippled' with 1 hit point left instead.

Close Support – Gain an extra victory point when attacking a ground target.

Cover The Leader – Whenever this aircraft attacks an enemy fighter, that fighter gets -1 on each attack die when attacking targets, other than this aircraft, that game turn

Defensive Weave – once per game, at the beginning of the Attack phase, if an enemy aircraft within 3 hexes of this aircraft is tailing a friendly plane, this aircraft can turn one hex side in its current hex towards that enemy aircraft

Escort – Enemy fighters within 3 hexes of this aircraft get -1 on each die attack when attacking bombers

Evasion – Whenever this aircraft is attacked it can change its Status to Evading left or right

Expert Dogfighter – enemy aircraft with Average quality pilots (or lower) get -1 on each attack die when attacking this aircraft.

Expert Evasion – This aircraft doesn't suffer the attack penalty for Evading Status. Also, whenever this aircraft is attacked, it can change its Status to Evading, left or right.

Expert Flier – This aircraft can attempt two difficult manoeuvres per move, but in different hexes.

Fast Dive 1 – Whenever this aircraft begins its move in Diving Status, it can move straight up to 1 hex *before its normal move*

Fast Dive 2 – Whenever this aircraft begins its move in Diving Status, it can move straight up to 2 hexes *before its normal move*

Fast Roll – This aircraft gets +1 on Break manoeuvre checks

Fighter Sweep – As long as enemy aircraft don't outnumber friendly aircraft, add +2 to initiative roll

Flight Leader – as long as you control at least two other fighters add +1 to your initiative rolls

Full Power – Whenever you win initiative, this aircraft can move at high speed +1 hex this game turn

Hard Break – can attempt two difficult manoeuvres a turn, as long as one is a break, but only one per hex.

Hard-Won Experience – This aircraft can be attacked only once each Attack phase

High Scorer – As long as this aircraft has damaged or destroyed an enemy aircraft this game, this aircraft rolls two extra attack dice when attacking enemy targets (ACES ONLY)

Inexperience – While at high speed, this aircraft can't attempt difficult manoeuvres (POOR PILOTS ONLY)

Killer Instinct – the aircraft rolls one extra die when attacking a damaged target.

Lack Of Aggression – During the Attack phase, attack with this aircraft after attacking with all your aircraft that don't have 'lack of aggression' (POOR PILOTS ONLY)

Limited Ammo - Whenever this aircraft attacks, roll a die after the attack. On a 1, this aircraft rolls one less attack die when attacking enemy aircraft for the rest of the game (APPLIES TO GUNS ONLY)

Limited Agility – During the movement phase, move this aircraft before moving any aircraft that don't have Limited Agility

Long Odds – As long as enemy aircraft outnumber friendly aircraft add +1 to your initiative rolls.

Long Range 4 – This aircraft can make range 4 attacks using its range 3 attack value.

Offensive tactics – Once per game, if you have a friendly fighter within 3 hexes of this aircraft, re-roll an attack.

Methanol Boost – Once per game, when this aircraft ends its move, it can move straight 1 extra hex (PROPELLOR AIRCRAFT ONLY)

Night Fighter – Can freely attack in darkness, being a specialist night-fighter

Panic – When this aircraft is damaged for the first time of the game, it can't attack or attempt difficult manoeuvres until after the next game turn (POOR PILOTS ONLY)

Point Blank – This aircraft can make range 0 attacks using its range 1 attack value. Determine the target aspect as if this aircraft were in the last hex it occupied before moving into its current hex.

Poor At Altitude – while at altitude 5 or 6, this aircraft gets -2 on climb rolls and turn manoeuvre checks

Powered Roll – this aircraft gets +1 on Split S manoeuvre checks

Practiced Turn – This aircraft gets +1 on Tight Turn manoeuvre checks

Press the Advantage – This aircraft rolls one extra attack die when attacking enemy targets from a tailing position.

Quick Turn – once per game, when this aircraft begins an attack, it can turn one hex side in its current hex.

Raw Flier – Whenever this aircraft gets a result of 7 or less on a Roll or Turn manoeuvre check, it's destroyed if at altitude 1. Otherwise it can't attack during this game turn and ends its move in Diving Status (POOR PILOTS ONLY)

Rear Gun – Whenever an enemy aircraft attacks from a tailing position and / or 4 o'clock to 8 o'clock position, roll a die. On a 6 the attacking aircraft takes one point of damage after the attack.

Redline – Once per game this aircraft can re-roll a manoeuvre check. If the re-roll fails, this aircraft gets -2 on manoeuvre checks for the rest of the game.

Rugged – Whenever an attack against this aircraft equals its vital armour, roll a die. On a 4 or higher the attack deals 1 point of damage to this aircraft instead of destroying it outright

Skilled Flier – Whenever you win initiative, this aircraft can attempt two difficult manoeuvres per move, but in different hexes.

Skilled Attack – This aircraft rolls one extra attack die when attacking enemy aircraft that have poor quality pilots

Steady Shooter – Add 1 extra attack die if no difficult manoeuvres attempted that turn.

Stealthy – Aircraft ECM scores add a further +1 (STEALTH JETS ONLY)

Strafing – Add one extra die at level 1

Sturdy – Whenever an attack against this aircraft equals its armour, roll a die. On a 4 or higher the attack does no damage to the aircraft

Superior Turning – while at normal speed, this aircraft can attempt two difficult manoeuvres per move, as long as one of them is a tight turn (manoeuvres must be in different hexes)

Swarm Tactics – As long as this aircraft is within 2 hexes of a friendly fighter that also has Swarm tactics, this aircraft rolls one extra die when attacking enemy targets

Swing Wing – Add 1 to all special manoeuvre rolls (SWING-WING JETS ONLY)

Tally Ho – As long as a friendly aircraft hasn't been damaged or destroyed this game, add +2 to initiative rolls

Top Gun – Add 1 to all missile lock-on dice rolls. (JET ACES ONLY)

Turret – This aircraft can shoot in any direction at the same or 1 altitude above, counting the higher altitude as one extra hex away.

Vivving – The aircraft can change from hi-speed to normal speed in the same turn (VTOL and vectored thrust aircraft only)



APPENDIX 2 – ‘PER ARDUA AD ASTRA’

APP 2.1. As the motto of the Royal Air Force indicates, these rules would work equally well for space combat, for universes such as ‘*Star Wars*’, ‘*Battlestar Galactica*’, and alien invasions like ‘*Independence Day*’ where ‘fighter’ types are used. Just a thought, ‘633 Squadron’ notwithstanding...

APP.2.2. *STATS – GENERIC ALIEN SPACEFIGHTER*

Veteran Pilot. Cost 80.

Speed: 3-6 High Speed: 7-15 (10 maximum within atmosphere)

Attack: 1: 10 2: 8 3: 6

Armour: 6. Vital Armour 7. Hit Points 6.

Turn: 6 (5 in atmosphere)

Roll: 6 (5 in atmosphere)

Climb: 6 (4 in atmosphere)

Dive: 6 (7 in atmosphere)

Warload: 2

Inherent ECM: 1

NOTES: Agile, Superior Training, Stealth Tech

Players will need to devise their own appropriate stats for the universe they’re gaming. There are no ‘climbs’ in space; only ‘power dives’ up or down.

APP.2.3. *ADDITIONAL RULES*

- 1) If the fighter has ‘shields’ (i.e. forcefields) deduct a dice from an opponent’s dice rolls – vary/increase depending upon shield strength.
- 2) In space, beam weapon attacks can be made at a further hex distance, Therefore Attack 1 becomes hex range 1 and 2; Attack 2 hex range 3; and Attack 3 hex range 4.



APPENDIX 3 – GUIDELINE STATS

APP 3.1. When devising stats for aircraft; here are some guideline parameters. Pilot difference is best expressed via 'Special Abilities'; but not always. If interested in our 'take' – email.

SINGLE-SEAT PISTON ENGINED BIPLANE FIGHTER (WWI era)

Speed: 1-2; Hi Speed: 3
ATK 1: 1-3; ATK 2: 1-2; ATK 3: 0-1
Arm: 1-3; Vital: 3-4; Hits: 2-3
Turn: 4-6; Roll: 3-6; Climb: 2-5; Dive: 2-5
Warload: 0 ECM: 2

TWO-SEAT PISTON ENGINED BIPLANE FIGHTER BOMBER (WWI era)

Speed: 1-2; Hi Speed: 3
ATK 1: 1-2; ATK 2: 1; ATK 3: 0
Arm: 1-3; Vital: 3-4; Hits: 2-3
Turn: 4-5; Roll: 3-5; Climb: 2-4; Dive: 2-4
Warload: 1 ECM: 2 Invariably has 'Rear Gun' special ability.

SINGLE-SEAT PISTON ENGINED MONOPLANE FIGHTER (WWII era)

Speed: 2-4; Hi Speed: 4-7
ATK 1: 5-9; ATK 2: 3-7; ATK 3: 2-5
Arm: 2-4; Vital: 6-7; Hits: 3-4
Turn: 4-6; Roll: 3-6; Climb: 2-5; Dive: 2-5
Warload: 1 ECM: 2

TWO-SEAT PISTON ENGINED MONOPLANE FIGHTER BOMBER (WWII era)

Speed: 2-4; Hi Speed: 4-6
ATK 1: 5-9; ATK 2: 3-7; ATK 3: 2-5
Arm: 2-4; Vital: 5-8; Hits: 3-4
Turn: 1-5; Roll: 2-5; Climb: 2-5; Dive: 2-5
Warload: 2-3 ECM: 2

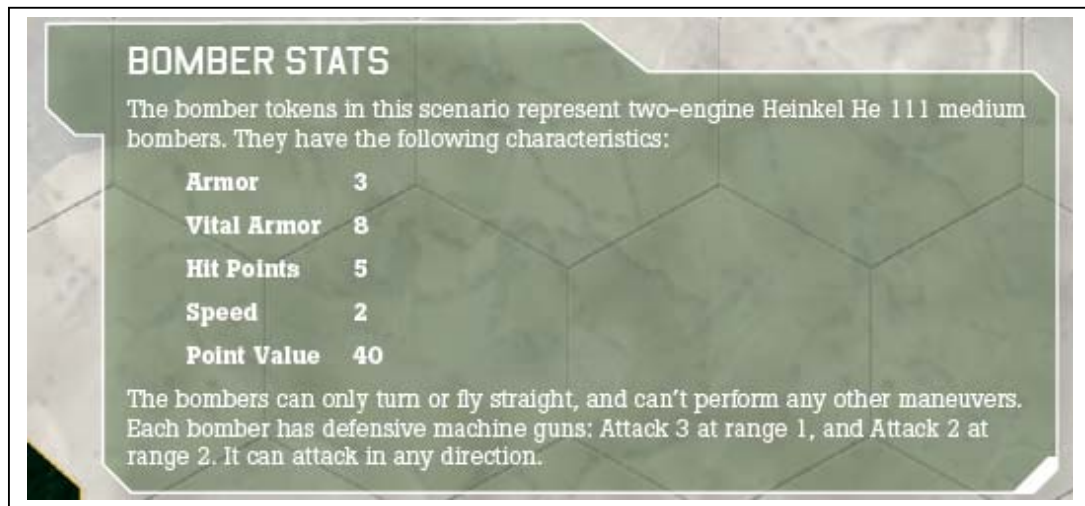
TWO-SEAT PISTON ENGINED MONOPLANE LIGHT BOMBER (WWII era)

Speed: 2-3; Hi Speed: 4
ATK 1: 3-4; ATK 2: 1; ATK 3: 0-1
Arm: 2-3; Vital: 3-5; Hits: 3-5
Turn: 4-5; Roll: 3-4; Climb: 2-3; Dive: 2-4 (5-6 if specialist dive bomber)
Warload: 3 ECM: 2 Invariably has 'Rear Gun' special ability.



BOMBER STATS

Generic stats for slow, medium, WWII era bombers (Bomber Stats #1) like the Heinkel HE 111, Wellington or Savoia are:-



The 'passive bomber' flying a straight course is something of a myth. OPTIONALLY the above can be deemed to manoeuvre as:-

TURN 1 ROLL N/A CLIMB 1 DIVE 2

The stats for medium sized, two-engine 'agile' bombers such as the B-25 Mitchell, Douglas A-20, G4M 'Betty', or Junkers Ju 88 have the following general characteristics (Bomber Stats #2):

Armour 4; Vital Armour 8-9; Hit Points 5; Speed 2-3. These bombers can only turn or fly straight, and can't perform any other manoeuvres. Each bomber has defensive machine guns: Attack 3 at range 1, and Attack 2 at range 2. They can fire in any direction. 50 points.

OPTIONALLY the above can be deemed to manoeuvre as:-

TURN 2 ROLL 2 CLIMB 2 DIVE 2

The stats for heavy sized, four-engine bombers such as the Lancaster and Liberator will have the following general characteristics (Bomber Stats #3):

Armour 4; Vital Armour 10; Hit Points 6; Speed 2. These bombers can only turn or fly straight, and can't perform any other manoeuvres. Each bomber has defensive machine guns: Attack 3 at range 1, and Attack 2 at range 2. They can fire in any direction. 60 points.

OPTIONALLY the above can be deemed to manoeuvre as:-

TURN 1 ROLL N/A CLIMB 1 DIVE 1

The stats for heavy sized, four-engine bombers, heavily armoured and gunned such as the B17 'Flying Fortress' and B29 'Superfortress', will have the following general characteristics (Bomber Stats #4):

Armour 5; Vital Armour 12; Hit Points 7; Speed 2. These bombers can only turn or fly straight, and can't perform any other manoeuvres. Each bomber has defensive machine guns: Attack 5 at range 1, and Attack 4 at range 2. They can fire in any direction. 65 points.

OPTIONALLY the above can be deemed to manoeuvre as:-

TURN 1 ROLL N/A CLIMB 1 DIVE 1

The stats for fast jet engined bombers such as the Canberra or Vulcan will have the following general characteristics (Bomber Stats #5):

Armour 5; Vital Armour 8; Hit Points 5; Speed 2-4, High Speed 5. These bombers can only turn or fly straight, and can't perform any other manoeuvres. Most do not carry defensive machine guns; but they will usually carry built-in ECM and chaff pods. 70 points.

OPTIONALLY the above can be deemed to manoeuvre as:-

TURN 2 ROLL 1 CLIMB 3 DIVE 3

Players may wish to modify these stats for transports – who will be much more lightly gunned and armoured than bombers; but have a comparable flight performance.

SUBSONIC JET FIGHTERS / MULTI ROLE (WWII early Cold War era, e.g. MIG 15)

Speed: 3-5; Hi Speed: 5-8

ATK 1: 6-9; ATK 2: 5-7; ATK 3: 4-5

Arm: 4-5; Vital: 6-7; Hits: 3-5

Turn: 5-6; Roll: 4-6; Climb: 4-6; Dive: 4-6

Warload: 3-6 ECM: 0-1

SUPERSONIC JET FIGHTERS / MULTI ROLE (mid to late Cold War era, e.g. Phantom, MIG 21)

Speed: 3-5; Hi Speed: 6-10

ATK 1: 6-7; ATK 2: 4-6; ATK 3: 3-4

Arm: 4-5; Vital: 6-7; Hits: 4-5

Turn: 5-6; Roll: 4-6; Climb: 4-6; Dive: 4-6

Warload: 4-8 ECM: 1-2

VTOL MULTI ROLE (Cold War era and later, e.g. Harrier)

Speed: 1-3; Hi Speed: 4-8

ATK 1: 6-7; ATK 2: 4-5; ATK 3: 3-4

Arm: 4-5; Vital: 6-7; Hits: 4-5

Turn: 7; Roll: 6; Climb: 5; Dive: 5

Warload: 3-6 ECM: 2-3 These have special rule capabilities and invariably the 'Agile' and 'Vivving' Special Abilities.

SUPERSONIC JET MULTI ROLE (late Cold War era and later, e.g. Eagle, Foxbat)

Speed: 3-5; Hi Speed: 6-10

ATK 1: 5-6; ATK 2: 3-4; ATK 3: 2-3

Arm: 5; Vital: 6-7; Hits: 4-5

Turn: 5-6; Roll: 4-6; Climb: 4-6; Dive: 4-6

Warload: 6-8 ECM: 2

ATTACK HELICOPTER (e.g. Hind, Apache)

Speed: 1-2; Hi Speed: 3

ATK 1: 10; ATK 2: 8; ATK 3: 6

Arm: 4; Vital: 4-5; Hits: 4

Turn: 2; Roll: 5; Climb: 2; Dive: 3-4

Warload: 8 ECM: 1

'MEET THE FANSHAWES !'

Some evolutionary examples might help.

Squadron Leader Tristan Fanshawe joined the RFC in 1916, transferred to the new RAF in 1918, and survived the Great War. He flew a Sopwith Camel 'scout'; duelling German pilots on the Western Front and strafing and bombing, became an 'Ace' and learnt the skills of survival:-

SOPWITH CAMEL Cost 12

Speed: 1-2; Hi Speed: 3

ATK 1: 3; ATK 2: 1; ATK 3: 0

Arm: 3; Vital: 3; Hits: 2

Turn: 5; Roll: 5; Climb: 4; Dive: 4

Warload: 1 ECM: 2

Special Abilities: 'Ace pilot'



Sadly war broke out again in 1939, by which time his son – also called Tristan – was dashing flying 'interceptor' Spitfires in The Battle Of Britain:-

SPITFIRE MK 1 Cost 46

Speed: 2-4; Hi Speed: 5

ATK 1: 6; ATK 2: 4; ATK 3: 2

Arm: 3; Vital: 6; Hits: 3

Turn: 5; Roll: 4; Climb: 4; Dive: 4

Warload: 1 (but none carried) ECM: 2

Special Abilities: 'Ace pilot'; Tally Ho;

Expert Flier



As the war progressed Fanshawe's squadron received the new improved Spitfire V for 'ramrod' raids over occupied France. His earlier *elan* has been tempered by the ability to survive through caution:-

SPITFIRE MK V Cost 45
 Speed: 2-4; Hi Speed: 5-6
 ATK 1: 7; ATK 2: 5; ATK 3: 3
 Arm: 4; Vital: 6; Hits: 4
 Turn: 5; Roll: 4; Climb: 5; Dive: 5
 Warload: 1 (bombs) ECM: 2
 Special Abilities: Expert Flier



Towards the end of WWII Fanshawe transferred to the new jet aircraft of the RAF, shooting down Hitler's 'V1' cruise missiles:-

GLOSTER METEOR Cost 50
 Speed: 3-4; Hi Speed: 5-7
 ATK 1: 8; ATK 2: 6; ATK 3: 4
 Arm: 5; Vital: 7; Hits: 5
 Turn: 6; Roll: 5; Climb: 5; Dive: 5
 Warload: 1 (but none carried) ECM: 0
 Special Abilities: Bounce; Rugged



Sadly WWII morphed into The Cold War – and a new generation of Fanshawes stepped into the breach. Tristan Fanshawe – grandson of the first – flew supersonic interceptors to turn back intruding Soviet aircraft intruding over UK airspace:-

ENGLISH ELECTRIC LIGHTNING Cost 60
 Speed: 3-5; Hi Speed: 6-10
 ATK 1: 6; ATK 2: 5; ATK 3: 4
 Arm: 4; Vital: 7; Hits: 4
 Turn: 6; Roll: 4; Climb: 5; Dive: 5
 Warload: 4 (guided missiles) ECM: 1 (built-in)
 Special Abilities: None.



At the end of his career Fanshawe flew the swing-wing Tornado multi-role jet, able to carry a multitude of warloads:-

GR1 'TORNADO' Cost 70
 Speed: 3-5; Hi Speed: 6-10
 ATK 1: 6; ATK 2: 4; ATK 3: 3
 Arm: 5; Vital: 7; Hits: 5
 Turn: 5; Roll: 5; Climb: 5; Dive: 5
 Warload: 10 (guided missiles, bombs, air-to-ground missiles, ECM pods) ECM: 0
 Special Abilities: Swing-wing



And so into the 21st century. Squadron Leader Tristiane Fanshawe is the great-granddaughter of the first Fanshawe; flying in an equal-opportunity RAF:-

EUROFIGHTER 'TYPHOON' Cost 70
Speed: 3-5; Hi Speed: 6-10
ATK 1: 5; ATK 3: 4; ATK 3: 2
Arm: 5; Vital: 7; Hits: 5
Turn: 6; Roll: 5; Climb: 4; Dive: 6
Warload: 7 (guided missiles, bombs, air-to-ground missiles, ECM pods)
ECM: 1 (built-in)
Special Abilities: Agile; Superior Training

