

WORLD #1 AVIATION MAGAZINE FOR BOARD AND WAR GAMERS

Pocket!
AIR WAR
DEFINITIVE EDITION

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Approved by the Smiling Pilots Association of Charlotte, NC

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GAME OVERVIEW

Pocket Air War is a fast-paced game of aerial combat in WWII that you can play anywhere you want. Before each game, players can choose between a quick battle, a scenario, or a campaign, and then select the plane (or the planes) they want to control.

COMPONENTS LIST

- 166 Counters
- 70 Plane Dashboards
- 3 Machinegun Range Templates
- 74 Yellow Energy tokens
- 8 Red Low Altitude discs
- 15 White High Altitude discs
- 1 20-sided die (1d20)
- 1 Rulebook

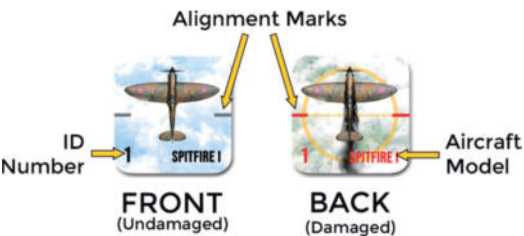
CORE CONCEPTS

PLANES

Planes are the core of the game: they fly and fight until one side reaches its mission objectives!

Each plane is represented by a counter, which is used to track the plane's position and orientation.

The counters are double-sided: the back side is used when the plane is damaged.



ENERGY

Each plane has a value of Energy, which represents its potential of Movement: with a lot of Energy, you can go far or you can go high!

Contrary to other values, like Acceleration or Defense, Energy changes often, even several times during a single turn! Indeed, the plane will gain or lose Energy as it evolves in the sky.

To keep track of the Energy, you use yellow Energy tokens, that you keep in separate piles (one for each plane) next to you. Simply add or remove tokens as the Energy is gained or lost.

Beware, a plane without any Energy will stall at the beginning of its round (see page 7).

A plane can't have more than a certain value of Energy (otherwise, it would eventually turn into a fireball!). It is called the max Energy, and each plane has two values of max Energy: one as long as the plane is undamaged, and another one as soon as it is damaged.

However, the max Energy of planes carrying bombs, rockets, and/or torpedoes (see pages 10 and 12) is the damaged value (whether they are damaged or not) until they have gotten rid of all their loads.

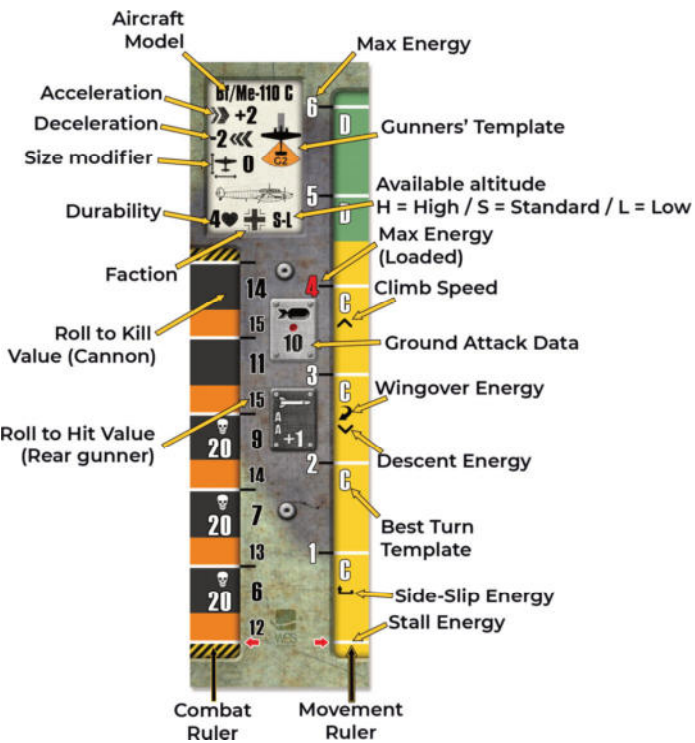
AIRCRAFT DASHBOARDS

Each plane comes with a specific Dashboard. It is the core tool for playing a plane because you can find all the needed information on it. You can also use it to measure distances during Movement and Combat.

The information on the Dashboard are:

- Acceleration: the plane's ability to gain Energy.
- Deceleration: the plane's ability to lose Energy.
- Size: the plane size as a target.
- Defense: the plane's ability to sustain damage.
- Max Energy: the plane's highest values of Energy possible when undamaged (black) and damaged (red)
- Best turning value: the plane's ability to turn for each speed value. The letter refers to a specific Turning template (from A to E).
- Roll to hit: the minimum value the plane needs to roll on the black d20 to hit its target

One additional Dashboard is provided for Flak and AAA.



ALTITUDE (OPTIONAL)

A game of Pocket Air War is played on a flat, two-dimensional surface. However, real-life planes use the third dimension as well.

To represent the third dimension, the game uses a simple Altitude system: a plane can be at Low, Standard, or High Altitude.

Low Altitude is mainly used to attack ground targets with guns, rockets, or torpedoes. Standard Altitude is the main flight level of the game, where any normal operation takes place. High Altitude is mainly used by strategic bombers, and fighters trying to intercept them. Moving between Altitude is also a way to gain an advantage over enemy planes.

A damaged plane can't fly as high as it would normally (see page 6).

To represent at which Altitude a plane is, put a red disc next to its counter at Low Altitude and a white disc at High Altitude.

Since Altitude can add too much complexity while learning the game, or even for some players no matter how experienced they are, it is an optional rule.

If you decide to play without the Altitude rules, the changes are:

- Climb and Descent are unavailable (see page 6)
- A plane which Stalls is destroyed (see page 7)
- An action available “only at [Low/High] Altitude” is always available

CREW SKILLS (OPTIONAL)

Each plane has a crew, and its experience can make a great difference during the fights. Not only an experienced pilot can make the most of his plane's ability, but also reacts quicker and better in battle.

There are 3 levels of crew skill: Rookie, Trained, Ace. To keep track of the skill level of each plane, use the relevant markers. There are no “Trained” marker because that's the default crew skill.



Crew skills is very important in Solo play (see page 21) because it influences the AI ability.

A Skill marker features two values used in the Multiplayer mode: the crosshair and the Speed Token one. The crosshair value modifies the result of the Roll to hit die: For example, if a player rolls a 12 as a Rookie pilot, it is

modified to 14. The Speed Token modifier requires to add (+1) or subtract (-1) 1 Speed Token from the max available Energy Tokens pool for a given plane, depending on the pilot skill.

Because it adds complexity and more bookkeeping, crew skills and all associated rules are optional.

MOVEMENT

Using its Movement points, a plane can move on the board in various ways, called maneuvers, which are explained in this section.

MOVEMENT POINTS

Movement points are used to move the plane.

A plane movement allowance for a round is equal to the number of Energy tokens in the player's hand at the beginning of that round.

However, a plane can increase or decrease its current Energy accordingly to its Acceleration or Deceleration value, before moving. Since this occurs at the very beginning of a plane round, it impacts the Movement allowance.

If the plane gains or loses Energy during its round due to its maneuvers, it doesn't affect its Movement points for its current round.

The Movement points are spent to move the plane in various ways (see below)

The plane must spend its entire Movement allowance during its round.

GENERAL PROCEDURE

When Moving, a plane can use either the Movement ruler on the Dashboard or a Turning template. For ease of use, Dashboards and Turning templates have the same information printed on their reverse side. This mirroring allows you to align the plane on either the right or left side, depending on whether you're turning left or right or if one side of the plane is obstructed by other game elements.

In both cases, start by aligning the plane's side mark with the first mark on the ruler/template (indicated by an arrow). Then move the plane to align its mark with the next mark. That's called a “step”. Repeat as long as you want and can (each step costs 1 Movement point).

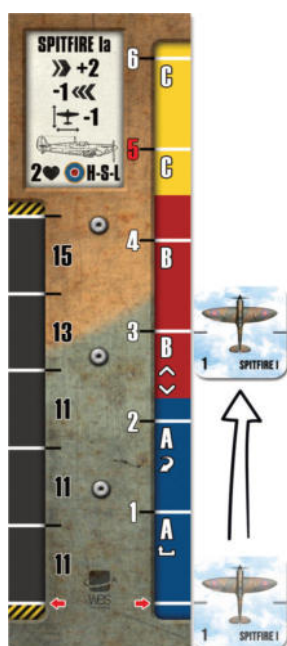
A plane can combine different maneuvers during its turn without any condition or restriction, as long as it has Movement points to spend. Use the Energy tokens to keep track of the Movement points **spent** and the changes of Energy as the maneuvers go on.

Mind that whenever you **lose** energy you must discard Energy tokens from your pile; anytime you **gain** energy, you must add Energy tokens to your pile. However, these Energy variations will affect next round and not the current movement allowance.

If a plane already has as many Energy tokens as its max Energy and intends to perform a maneuver during which it would gain Energy, it can still perform that maneuver but doesn't gain more Energy.

However, if the plane intends to perform a maneuver during which it would lose more Energy than it has, it can't perform that maneuver, unless the pilot intentionally wants to stall the plane (see page 7).

LEVEL FLIGHT



Level flight consists of flying in a straight line.

Move the plane any number of steps you want.

Each step costs 1 Movement point.

TURNING

Turning consists of flying following a curved trajectory.

You can choose any Turning template whose letter isn't smaller (e.g. A is smaller than B) than the letter written on your Movement ruler next to your current Energy. For example, if the letter next to your current energy is C, you may choose the C, D, or E template.

Move the plane any number of steps you want.

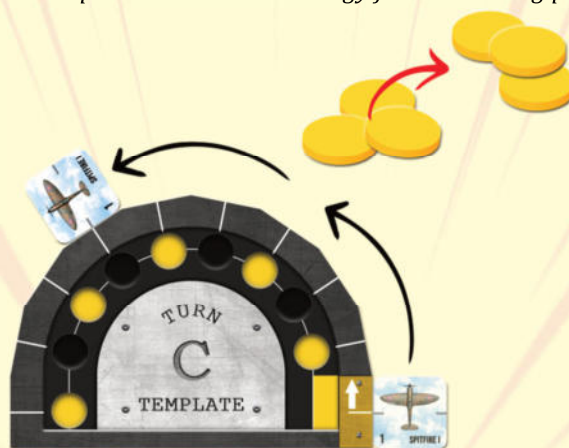
Each step costs 1 Movement point.

The plane loses 1 Energy each time it reaches or goes beyond a mark with a yellow circle. In general, tighter turns (smaller letters) cost more Energy.

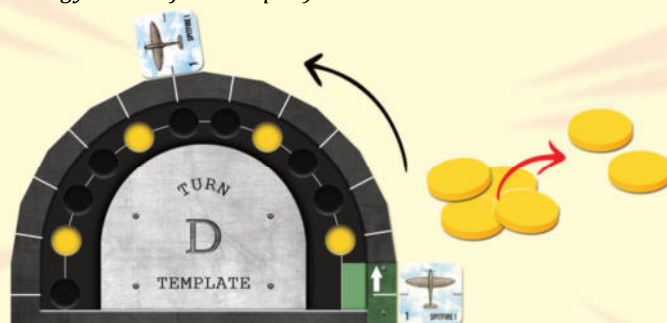
Examples of Turning

A Spitfire starts its round with a Movement allowance of 6. Since it currently has 6 Energy, its tightest turning template is C. He considers different ways to use its Movement points:

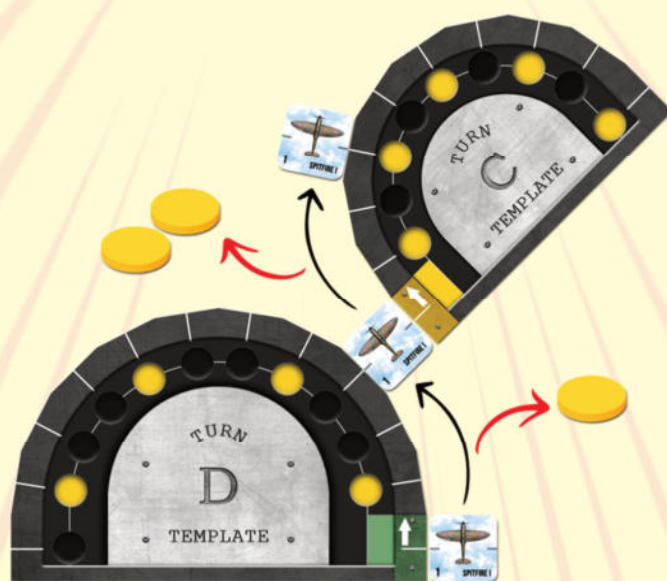
1) Use the Turning template C and spend all his Movement points. His plane would lose 2 Energy from its starting pile.



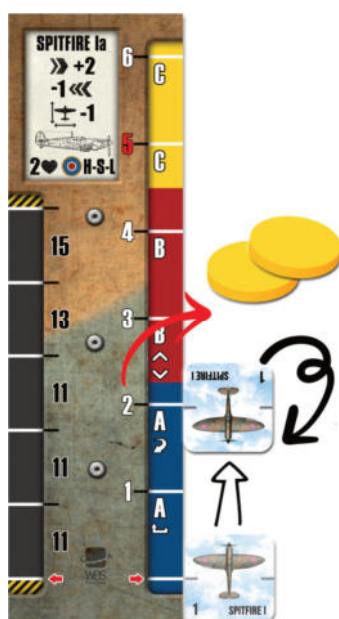
2) Use the Turning template D, to make a wider turn and waste less Energy. That would cost 2 Energy (remove 2 Energy tokens from its pile).



3) Turn left, using the Turning template D, spending 3 Movement points and losing 1 Energy, then Turn right, using the Turning template C, spending 3 Movement points and losing 2 Energy, for a total of 3 Energy tokens lost.



WINGOVER



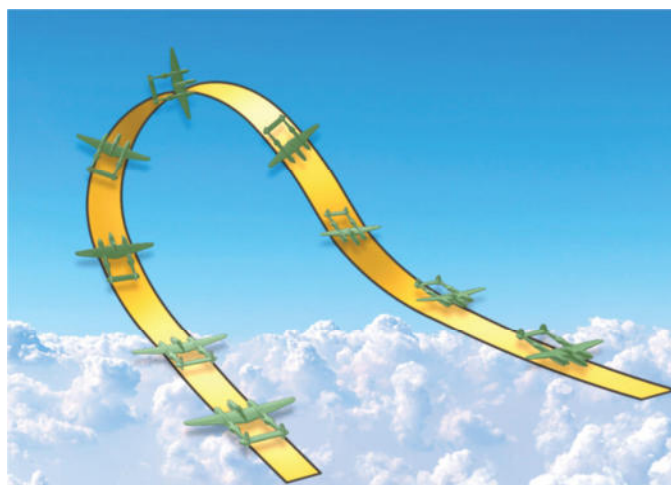
A Wingover consists of quickly turning around.

Move the plane in a straight line at least until you reach the mark indicated by , then rotate the counter 180°.

Each step costs 1 Movement point, the rotation is free.

The plane loses as much Energy as the value next to the mark indicated by .

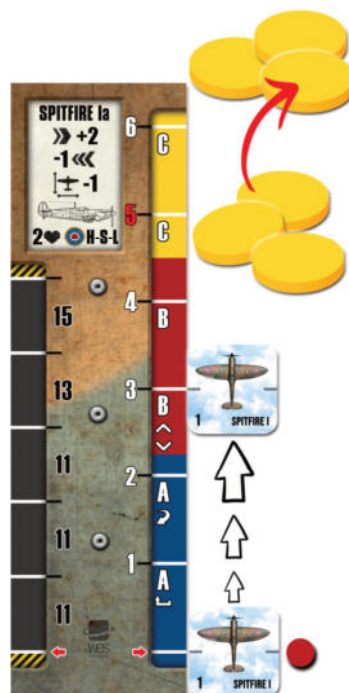
If the plane is damaged and can't reach the  icon or there is no relevant icon on its Dashboard, it can't perform a Wingover.



MOVEMENT BETWEEN ALTITUDE LEVELS

If you play without Altitude, skip this section: you can't (and don't need) to use these maneuvers.

CLIMB



A Climb consists of moving the plane to the next Altitude level above.

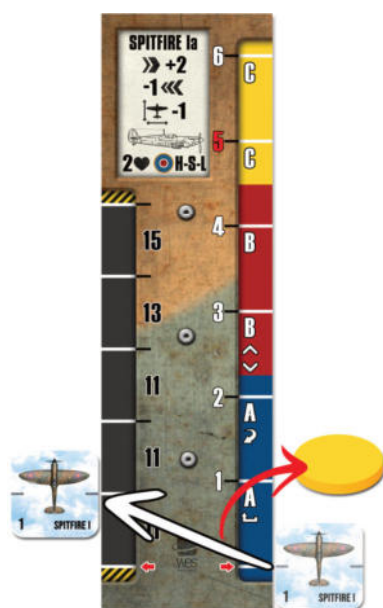
Move the plane in a straight line at least until you reach the mark indicated by , then place or remove the relevant altitude disc accordingly. It is allowed to replace the last step of straight line by one step of any Turning template.

The plane loses as much Energy as the value next to the mark indicated by .

Example of Climb.

A Spitfire starts its Movement phase at Low Altitude with a movement allowance of 5. To climb at Standard Altitude, it moves 3 steps straight and loses 3 Energy. The player removes the Low Altitude disc. It still has 2 remaining Movement points to spend.

SIDE-SLIP

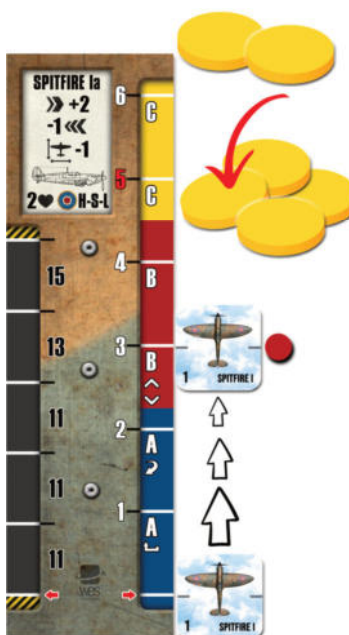


A Side-slip consists of drifting left or right.

Move the plane in a straight line at least until you reach the mark indicated by , then move the plane from a step on the movement ruler to the closest step ahead on the combat ruler.

The plane loses as much Energy as the value next to the mark indicated by .

DESCENT



A Descent consists of moving the plane to the next Altitude level below.

Move the plane in a straight line at least until you reach the mark indicated by , then place or remove the relevant altitude disc accordingly. It is allowed to replace the last step of straight line by one step of any Turning template.

The plane gains Energy up to its max Energy.

Example of Descent.

A Spitfire starts its Movement phase at High Altitude with a movement allowance of 5. To descend at Standard Altitude, it has to move at least 3 steps(▼). It moves 2 steps straight and 1 step performing an A turn.

The player removes the High Altitude disc. The next turn's movement allowance is 6.

STALL

The stall happens if the plane has 0 Energy at the beginning of its round. It doesn't matter if the Energy was lost intentionally or not.

If you play without the Altitude rules, the plane is destroyed and the crew is killed as it crashes.

If you play with the Altitude rules, the plane moves to the next Altitude level below (adjust the Altitude disc accordingly), but its counter doesn't move. If it was already at Low Altitude, it crashes on the ground.

Then, if not crashed, the plane gains half its max Energy (rounded down) and its round ends.

A plane that stalled during its Movement Phase can't do anything during the Combat Phase (see page 15).

Stall can be voluntarily induced to shake an opponent off your tail, given you are playing with altitude and you are not flying at low altitude.

COMBAT

Every round, planes have the opportunity to attack and be attacked by other planes, as well as various ground targets or ships. This section describes how these attacks work.

There are 3 kinds of targets:

- **Planes**, which can be attacked with Guns, Gunners and Air-to-air rockets.
- **Ground targets**, which can be anything from a tank to a bridge. They can be attacked with Guns, Bombs, and Air-to-Ground rockets.
- **Ships**, which are similar to ground targets, but can also be attacked with torpedoes.

A core tool for attacking is the Combat ruler, which is the left part of the Dashboard (see page 3). All the information needed for attacking is there.

Golden rule: each weapon the plane has (guns, gunners, bombs,...) can only attack one target per round, even if multiple targets are in range. You can choose freely which target to attack with each weapon. You don't have to attack the same target with different weapons, but you can.

Mind also that a roll of 1 or 20 can never be modified.

GUNS

Most planes are equipped with one or several gun(s) and/or cannon(s) (from hereafter, "guns"). These are mounted in the plane and can't pivot. Therefore, they shoot straight ahead.

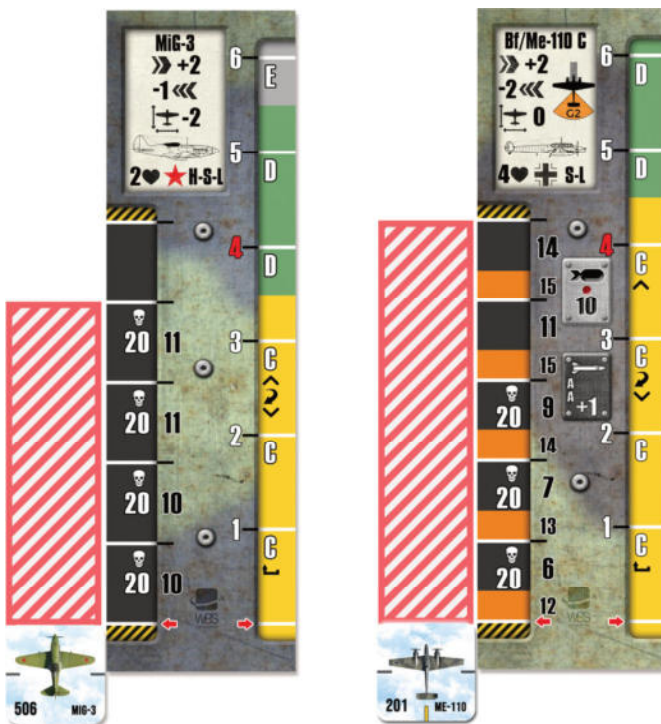
A plane has guns if its Combat ruler is grey (even partially). Be sure to look only at the Combat ruler, not the Movement ruler, or any other part of the Dashboard.

Acquiring the target

You can attack planes and ground targets with your guns. If you attack a ground target, it's called Strafing and it has minor differences, which are clearly indicated.

To shoot an aerial target with guns, put the Combat ruler next to your plane, aligning the red arrow with the upper edge of the counter. The rectangle defined by the upper edge of the plane counter and the Combat Ruler upper limit (see the red striped rectangles on the picture below) is the shooting area. If the target is at the same Altitude as the shooting plane and has **any** part of its counter within the shooting area, then you can shoot at it.

Strafing exception: You can only Strafe at Low Altitude.



Shooting at the target

If the plane has a target within its guns' range, measure the distance between them with the Combat ruler. It is the distance between the plane counter and the projection on the Combat ruler of the closest part of the target counter (see the examples of combat, below).

The black value next to the grey box of the Combat ruler for this distance is the Roll to Hit Threshold.

Roll 1d20, then add to the die result the Size value of the target (printed on target's Dashboard), as well as any other optional combat modifiers (see below.). If this modified result is equal to or higher than the Roll to Hit Threshold, you hit and damage your target! Otherwise, you miss it.

Strafing exception: Instead of applying the Size value of the target, modify the die result by its Defense value (see below).



Note: modifiers are always applied to the die result and not to the Roll To Hit Threshold.

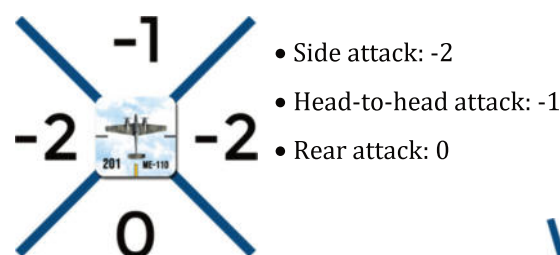
Planes equipped with cannons feature a Roll to Kill threshold on the Combat ruler, next to the Roll to Hit threshold.

If the result is equal to or higher than the Roll to Kill Threshold (if the plane has one), then the target is immediately destroyed, no matter the damage model used (see below) or its Durability (see page 3).

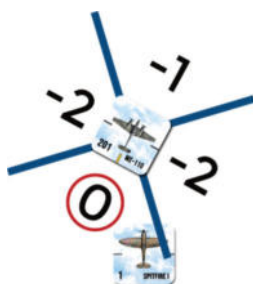
Air-to Air Guns combat modifiers (OPTIONAL)

Target's aspect

Engaging targets from the side or head-to-head is more difficult than shooting them from the rear. If you want a more realistic, but more complex and longer gameplay, add the following modifier to the dice result:



To define the target aspect, refer to the corners of the target's counter. If the attacker is positioned between two aspects, check which sector contains the majority of the attacker's counter. If it's still unclear, use the side aspect modifier.



Dive attack

If the plane performed a descent during the current round, add 2 to the dice result.

Crew Skill

Apply the Crosshair modifier printed on the Crew skill token of the firing plane.

DAMAGE ASSESSMENT

General rules

If the result is equal to or higher than the Roll to Hit Threshold, then the target is damaged. The consequences depend on the damage model you chose and are explained below.

Strafing exception: anytime a ground target is hit, it's destroyed, no matter the damage model used.

Basic damage model

The basic damage model is great at keeping the game simple, fast, and destroying planes faster.

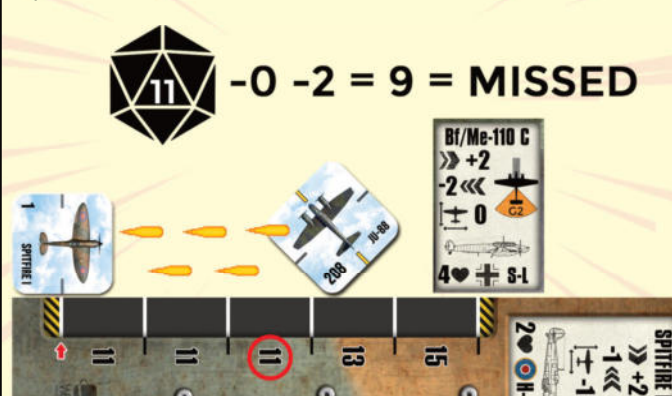
When using this damage model, when a plane is damaged, apply the following rules: if the target is already on its Damaged side, the target is destroyed. Otherwise, flip it to its Damaged side.

Damaged planes:

- Halve their Acceleration value (rounded up)
- Can't fly at High Altitude. If a plane was flying at High Altitude when it was damaged, it must reach an allowed Altitude within its next turn. Otherwise, it will lose all its Energy and stall. (see page 7).
- Their max Energy for a turn equals the Max Energy when loaded value (red digit on the movement ruler).

Example of Combat using the Easy damage model

A Spitfire I attacks a German Me-110 during the Battle of Britain. The target is acquired, since it is in front of the Spitfire. At this distance, the Hit Threshold is 11. The Briton rolls 1D20 and gets a 11, not enough to hit the German because, although the 110 Size is 0, the -2 aspect modifier reduces the result to 9. The Spitfire had to roll at least 13 to hit!



If the Briton had rolled a 13, damaging the Me-110, the German player had to flip his plane to its damaged side.

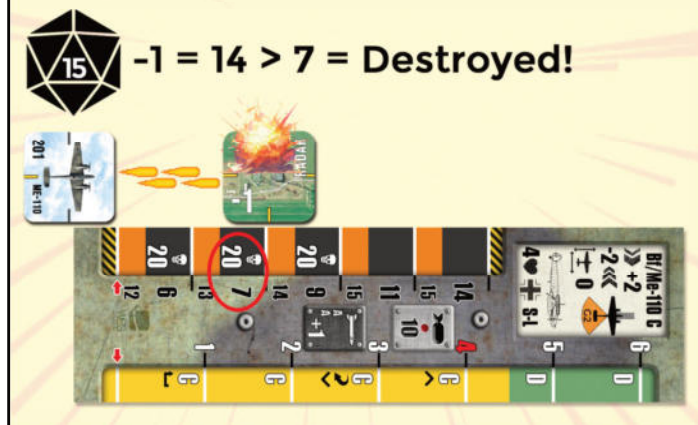


If the positions were reversed, with a roll of 7+ the Me-110 would have damaged the Spitfire as well, but with a roll of 20 the Spitfire would have been shot down right away, since a roll of 20 cannot be modified.



Example of Strafing.

An Me-110 strafes Foreness radar station near Dover. At this distance, the Hit Threshold is 7. The German rolls 1D20 and gets a 15. Even applying the radar station Defense value of -1, the roll is higher than 7, destroying the ground target. While strafing any scored hit is treated as a destroyed result.



ADVANCED DAMAGE MODEL (OPTIONAL)

The advanced damage model is great at making the fights more realistic: sometimes, the first hit could be critical, while other times, a plane could be hit many times and still fly. Moreover, the hit location would cause different kinds of failures or limitations, which the advanced damage model simulates.



Each time a plane is damaged, flip its counter and check the aspect of the target plane (i.e. "where do the bullets come from").

Draw randomly one damage marker from the corresponding category: front (F), side (S) or back (B). These markers have one generic front side, indicating to which aspect they belong to and, on the back side, is indicated which component of the plane has been damaged. The effects of the damage are specified by icons which are explained below.

Keep the drawn damage markers close to the plane's energy tokens pile, to remind the penalty the plane is suffering. Damage can't be repaired during the game and they are cumulative. Each damage token features a number of heart icons: when the sum of these icons exceeds the aircraft durability value (printed on its dashboard), the plane is destroyed and the tokens are returned to their respective bag/cup/pile.

Effects are cumulative. If the same component is hit multiple times, the effects are combined. For example, if the aileron is hit twice and the first effect is right turn is no longer available, and the second effect is left turn is no longer available, the plane can no longer perform any turns on either side.

Below some effects icon examples:

- Climb is no longer available.
- Wingover is no longer available.
- Acceleration is reduced by the indicated value.
- Right Side-Slip is no longer available.
- Left turn is no longer available.
- Roll to hit is modified as indicated.
- Gunners are affected.
- The plane can't fly at high altitude anymore.
- The tightest available turn is D, no matter the speed range.
- The maximum amount of Energy token is modified as indicated. It can never fall below 0.

GUNNERS

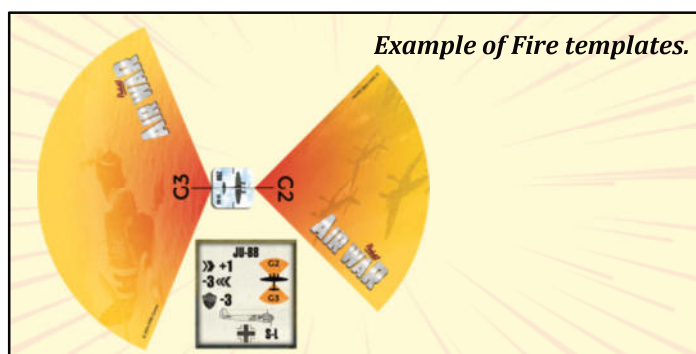
Some planes have gunners, which are dedicated crew members manning machine guns able to pivot to attack enemy planes in a large area around the plane.

A plane has gunners if its Combat ruler is orange (even partially). Be sure to look only at the Combat ruler, not the Movement ruler, or any other part of the Dashboard.

Acquiring the target

To shoot at an enemy plane with gunners, check the type and position of the Fire templates. It can be found on the plane's Dashboard. To help you identify the type, you can refer to the letter G1, G2, or G3 printed on it.

Place the relevant Fire template at its position: align the mark on the plane's counter and the Fire template. If the target is at the same Altitude as the shooting plane and has any part of its counter within the Fire template, then you can shoot at it.



Shooting at the target

If the plane has a target for its gunners, measure the distance between them with the Combat ruler. It is the distance between the mark on the plane's counter from which the gunner put its Fire template and the closest part of the target counter.

The black value next to the **orange** box of the Combat ruler for this distance is the Roll to Hit Threshold.

Roll 1d20, then add the Size value of the target to the die result (along any optional modifier). If this modified result is equal to or higher than the Hit Threshold, you hit the target! Otherwise, it was missed.



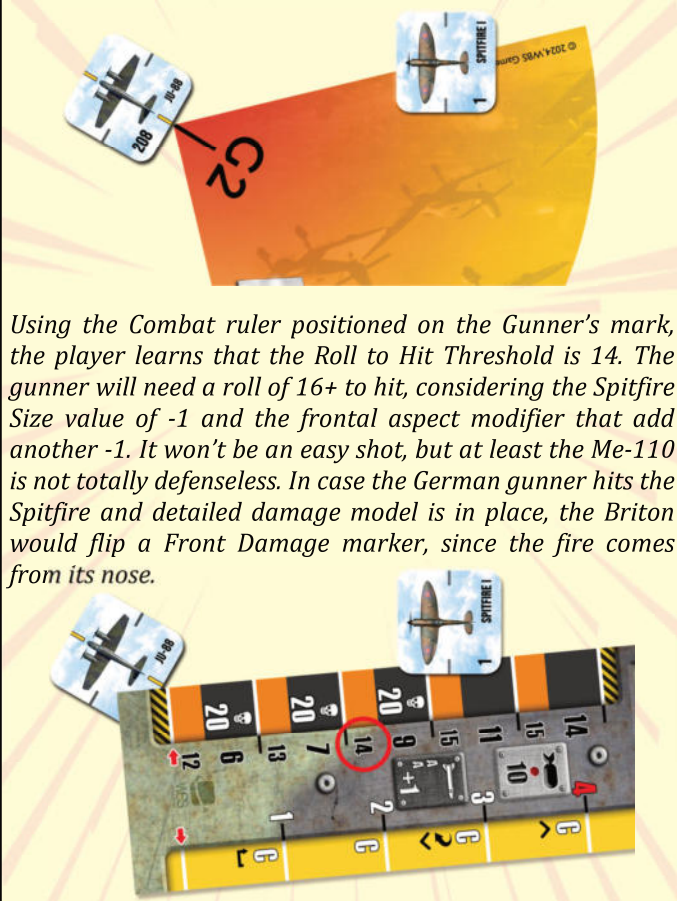
Damage assessment

The Damage assessment for Gunners is the same as for Guns. See page **Errore. Il segnalibro non è definito..**

Example of Combat with Gunners and detailed damage

The German Me-110 has guns firing forward (as indicated by the grey strip on the Combat ruler) and a rear gunner, as indicated by the orange strip on the Combat ruler: it covers the rear sector with a Fire template G2.

As a British Spitfire tries to attack the German from behind, it ends up in the Gunner's Fire template.



Using the Combat ruler positioned on the Gunner's mark, the player learns that the Roll to Hit Threshold is 14. The gunner will need a roll of 16+ to hit, considering the Spitfire Size value of -1 and the frontal aspect modifier that add another -1. It won't be an easy shot, but at least the Me-110 is not totally defenseless. In case the German gunner hits the Spitfire and detailed damage model is in place, the Briton would flip a Front Damage marker, since the fire comes from its nose.

ORDNANCE



Dashboards show the ordnance carried by each plane. It can be rockets (either Air-to-Air or Air-to-Ground), bombs and torpedoes. Planes can carry only one ordnance at time, with the exception of the Heinkel 111 that can carry 2 torpedoes.

Planes carrying ordnance are "loaded" and their max Energy can't exceed the red value on their Movement ruler as long they don't release the ordnance.

Players collect the relevant Ordnance marker during the setup and discard it when they release their ordnance.

Rockets



Planes featuring on their Dashboard a dark plate, marked with "AA" and the rocket icon , can carry Air-to-Air rockets (or A-A rockets), used to attack aerial targets.



Planes with the  icon on a light plate marked with "AG" can carry Air-to-Ground rockets (or A-G rockets), used to attack ground targets.

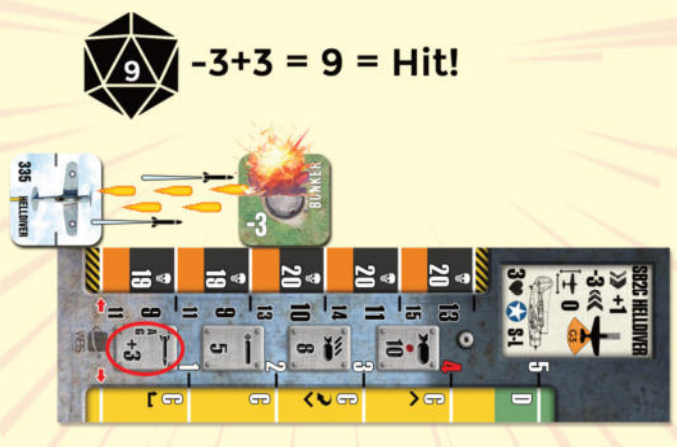
A plane can carry either A-A or A-G rockets, but not both: players have to select the correct ordnance before the flight, collecting the relevant Ordnance marker. They may also start without rockets.

Players can use rockets when attacking aerial targets with guns or strafing to get the bonus printed on the relevant plate both on their Roll to Hit and Roll to Damage. The use of rockets must be declared before resolving an attack.

A plane can shoot its rockets only once per game. When it does, discard its Rockets marker to keep track of it.

Example of Strafing with Rockets.

A USN Helldiver loaded with A-G rockets strafes a bunker in Ryukyu Islands. At this distance, the Hit Threshold is 9. The Helldiver is determined to destroy this bunker, so it uses its rockets to balance the Defensive modifier of the target. It rolls 1D20 and gets a 9. The rockets' modifier is +3, balancing the bunker's Defense of -3. 9 is enough to hit the bunker and destroy it.



BOMBS

Some planes have bombs, used to attack ground targets.

Only planes with this icon  or this icon  on their Dashboard can carry bombs. However, depending on the scenario, they may start without bombs.

The icon  represents a dive bomber. It works similarly to a regular bomber, but one exception detailed below.

The black values below the bomb icon are the Roll to Hit Threshold. There is no Roll to Damage Threshold: if a ground target is hit, it is also destroyed.

Dropping bombs

A bomber must be at a specific Altitude to drop its bombs. Check above the Roll to Hit Threshold values:

- If there is a white dot, it's High Altitude
- If there is no dot at all, it's Standard Altitude
- If there is a red dot, it's Low Altitude

To bomb a target, the plane must cross any part of the target's counter while level flying at the correct altitude.

Roll 1d20, then add the Defense value of the target to the die result. If this modified result is equal to or higher than the Roll to Hit Threshold, the bombs hit and destroy the target.

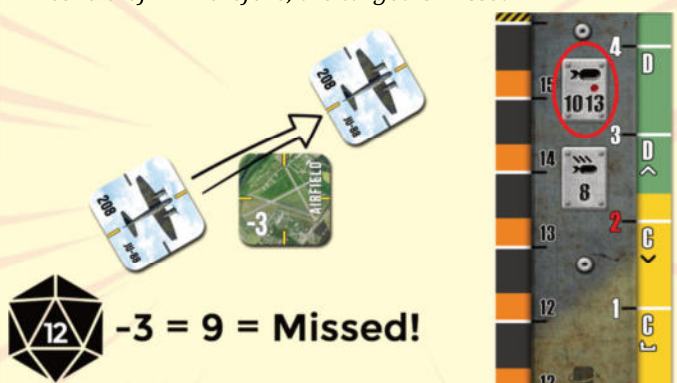
Dive bombers exception: dive bombing allows better chances to hit. To dive bomb, a plane must cross any part of the target counter while performing a descent (see page 6). Then resolve the attack as for level bombing.

A plane can drop its bombs only once per game. When it does, discard its Bombs marker to keep track of it.

Example of Bombing.

A German Ju-88 level bombs a RAF airfield at Standard Altitude.

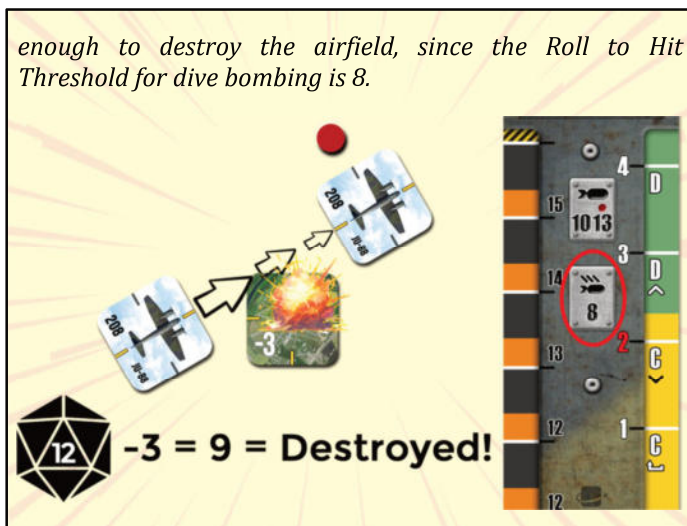
It crosses the target's counter in a level flight at Standard Altitude, dropping its bombs. It rolls 1d20 to see if it hits. The die result is 9, to which he adds the Defense value of the target which is -3. The final result is 6, lower than the Hit Threshold of 7. Therefore, the target is missed!



If the same plane attempted a dive bombing, things would have unfolded in a very different way.

It descends from Standard Altitude and crosses the Airfield counter. At the end of the descent, the player puts a Low Altitude disc next to the Ju-88 counter and he resolves the attack. The same result as above, 9, this time it would be

enough to destroy the airfield, since the Roll to Hit Threshold for dive bombing is 8.



TORPEDOES

You can use Torpedoes to attack ships.

Only planes with the  icon on their Dashboard can carry torpedoes. However, depending on the scenario, they may start without torpedoes.

Releasing torpedoes

To attack a ship with a torpedo, the plane has to release the torpedo and then the torpedo has to intercept the target, running straight ahead. Thus the torpedo must be aimed at the target considering its course.

To release a torpedo, a plane has to spend its entire Movement Allowance in level flight at Low Altitude. Then, place a torpedo counter right in front of the plane. If the torpedo counter overlaps a ship at the moment it is released, remove it from the game without effect: it hadn't had enough time to arm itself.

From there, the torpedo is independent of the plane.

With the only exception of the He-111, a plane can release its torpedoes only once per game. When it does, discard its Torpedoes marker to keep track of it.

Torpedo movement

When a torpedo moves (see page 15), it moves 1 step straight ahead.

If a torpedo counter overlaps a ship counter while moving, resolve the impact (see below). Otherwise, the torpedo stays on the board and will move during the next round, until it hits a ship or exits the play area.

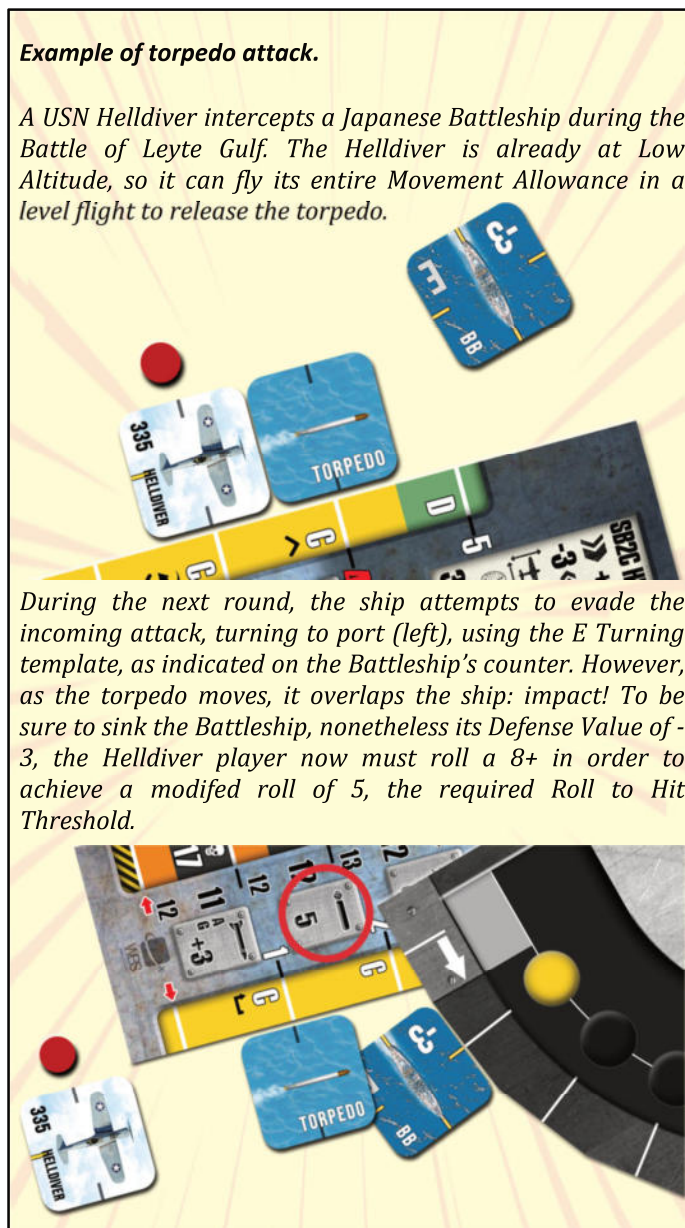
Torpedo impacts a ship

The black number below the torpedo icon on the Dashboard is the Roll to Hit Threshold.

Whenever the torpedo counter overlaps a ship counter while moving, roll 1d20, then add the Defense value of the target to the die result. If this modified result is equal to or higher than the Hit Threshold, the torpedo hits the ship and sinks it. Remove the torpedo counter, no matter the result of the attack.

Example of torpedo attack.

A USN Helldiver intercepts a Japanese Battleship during the Battle of Leyte Gulf. The Helldiver is already at Low Altitude, so it can fly its entire Movement Allowance in a level flight to release the torpedo.



During the next round, the ship attempts to evade the incoming attack, turning to port (left), using the E Turning template, as indicated on the Battleship's counter. However, as the torpedo moves, it overlaps the ship: impact! To be sure to sink the Battleship, nonetheless its Defense Value of -3, the Helldiver player now must roll a 8+ in order to achieve a modified roll of 5, the required Roll to Hit Threshold.

AAA

Anti-Aircraft Artillery, hereafter AAA, are weapons designed to attack planes from the ground. They can be stationary guns, mounted on vehicles, or attached to another ground or naval counter.

When the AAA wants to attack a plane, it behaves exactly like a plane's Gunner (see page 9). The only difference is that the target must be flying at Low Altitude.

A AAA Dashboard is provided for all the stats and references: note that on the left is provided the combat ruler for Troop counters and on the right the combat ruler for all the others armed counters.

FLAK

Flak represents heavy anti-aircraft artillery. It was based on predicting where the target would be when the rounds exploded in the sky. Two techniques are implemented in the game: Continuously pointed fire and Barrage. This latter is suggested for basic gameplay.

Barrage

This was the least accurate and deadly technique for flak and consisted in filling an area of the sky with shell burst.

When indicated by the scenario, the defending faction can deploy Flak counters in the specified area of the map, during the last subphase of Combat phase of a round (see 15). With Barrage, use the basic Flak counters and arrange them to identify a square area. Be sure their mutual lateral distance is always the same and never greater than the distance indicated on the Flak Ruler. Any plane within this area will be attacked during the Combat Phase of the game (see below).

Flak counters must be marked with a white disc or a red disc depending whether they are placed at High or Low altitude. Counters at Standard altitude need no discs.

Flak counters can never be moved, but only retrieved from the map during the Resolution Phase of a round, to be placed again on the map on the same phase of a subsequent round.

Mind that the larger the area, the lesser will be the chances to hit a target, as indicated on the Flak dashboard.

Continuously pointed fire (OPTIONAL)

This was the most accurate and deadly technique for flak, based on continuously predicting the target position round after round.

Since Continuously pointed fire (or CPF) requires more upkeep, it is recommended for advanced players.

When indicated by the scenario, the defending faction can deploy Flak counters within the specified area of the map, during the Resolution Phase of a round (see 15). Use the CPF Flak counters.

Flak counters must be marked with a white disc or a red disc depending whether they are placed at High or Low altitude. Counters at Standard altitude need no discs.

During the last subphase of Combat phase of a round, the owning faction can move Flak counters up to 2 steps in any direction, or change their altitude by 1 level, or retrieve them from the map, to place them again on the map on the same phase of a subsequent round.

Unlike barrage, each CPG counter has a blast radius of 3 steps as indicated on the Flak dashboard. Any plane

within the blast radius of a counter will be attacked during the Combat phase of a round (see below).

Players can either use Barrage or CPF, but not both.

Flak attack procedure

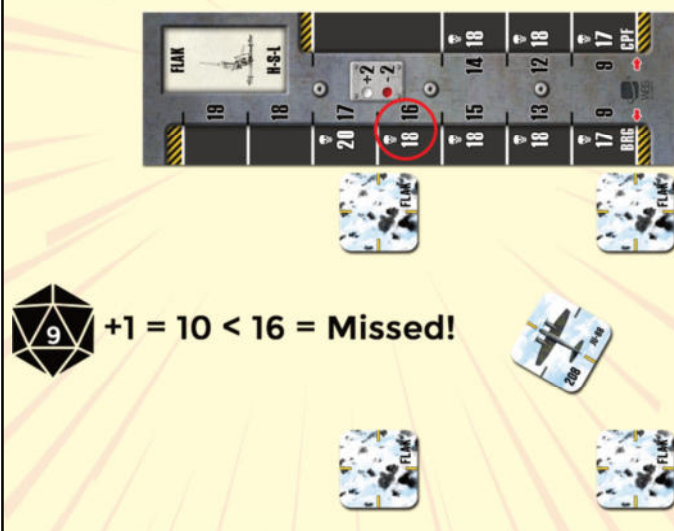
During the Combat phase (see page 15), attack all planes (friendly planes included) at the relevant altitude, within the barrage area –in case of barrage- or within counters' blast radius –in case of CPF.

The relevant combat rulers on the Flak dashboard provide both the Roll to Hit and Roll to Damage Thresholds for each Flak technique.

For barrage you have to measure the distance between 2 Flak markers; for CPF you have to measure the distance between the flak marker and any target plane.

Example of a Flak attack - Barrage.

A German He-111 is participating in a large attack over London. It ends its movement within a barrage area designated by Flak markers. At the beginning of the Combat phase, the Flak owning player will resolve an attack against the He-111. He **measures the distance between the Flak markers** and check the Roll to Hit threshold: 16. The British player toss 1d20 and rolls 9. Even with the size modifier of the Ju-88 (+1) the flak can't hit the German bomber.



STRUCTURE OF A GAME

A game of Pocket Air War is divided into **rounds**. Each round is made of two phases: the Movement phase and the Combat phase.

INITIATIVE

The order of Initiative determines who moves first during the Movement phase (see below).

To determine the plane that has the highest Initiative (therefore moves first), check the following conditions from top to bottom. When two planes are tied for a condition, check the following one.

1. The least Energy.
2. The lowest Altitude.
3. The plane of the faction with more planes.
4. Lowest result from a 1d20 roll.

Exception: if a plane starts the round with an enemy plane in its front sector, within firing range from it, at the same Altitude and in the enemy's rear quarters, then it is tailing it. The tailing plane moves directly after the tailed plane, ignoring its normal Initiative order.

MOVEMENT PHASE

The first phase of a round is the Movement phase. One by one, each plane moves in order of Initiative. Ground targets' owner side, can move its moving targets at the end of the Movement phase, one time per round (see page 15).

When it's a plane's turn to move, before moving (after having selected the maneuver for AI planes, see page 32), it **can** gain or lose Energy, up to its Acceleration/Deceleration value.

After doing it, check if the plane stalls (see page 7). If not, determine its Movement Allowance for this round (see page 4).

Then, the plane has to use all its Movement points, combining maneuvers freely (see page 4).

If the plane drops bombs (see page 11), resolve it at the end of the corresponding maneuver.

When it has spent all its Movement points and resolved the bombing, if any, its round is over, and the next plane in order of Initiative takes its round.

When all planes have taken their round, the Movement Phase ends and the Combat phase begins.

If two or more planes overlap after they both move, there is a collision and they are both destroyed.

Example of a Flak attack – Continuous Pointe Fire.

A British battery of coastal flak is aiming its Continuous Pointed Fire against a lone Ju-88. At the beginning of the combat phase the flak attack is resolved measuring the distance between the CPF Flak marker and any plane within its blast radius. However, the German bomber is outside the attack range of the CPF Flak marker. Unfortunately, a reckless Spitfire ends in the blast radius of the flak: with a roll of 19, not only the Spit is hit, but it is even destroyed by flak friendly fire!



GAMEPLAY

SETUP

A game of Pocket Air War takes place on a play area, which is any flat surface you want! For your convenience, we provide on our website www.gameshop.wbsgames.com 4 different play mats specifically designed for Pocket Air War.

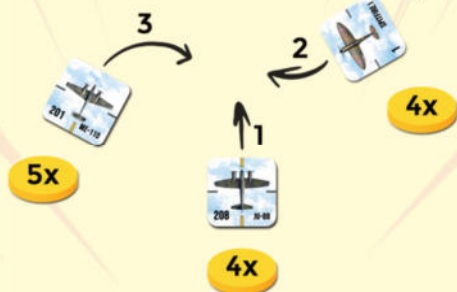
Even though a very small play area may not be fit for all kinds of missions (a long-range bombing where the ground target is one round away from the bomber's starting position for example), you can always have fun with Pocket Air War, even on the corner of a table!

Each player chooses one or several planes, depending on the kind of mission you want to plan, and takes:

- The chosen plane(s) counter(s)
- The chosen plane(s) Dashboard(s)
- Enough Energy tokens for the planes, i.e. as many tokens as the total of Max Energy of all planes
- 1 red and 1 white Altitude disc per plane (if you play with the Altitude rules).

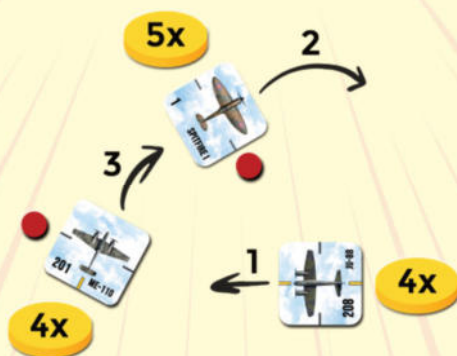
Example regarding Initiative.

During the Battle of Britain, a German Me-110, a Ju-88 and a British Spitfire are engaged in a dogfight. They have respectively 5, 4, and 4 Energy, and are all at Standard Altitude. Therefore one between the Spitfire and the Ju-88 should move first. Having the Germans more planes in flight than the British, the Ju-88 will move first, followed by the Spitfire. The Me-110 will move last, having the highest Energy.



However, if the Spitfire was flying at a Low Altitude, it would have moved first, since altitude has a higher priority than factions' number of planes.

In an alternative scenario, the Spitfire is flying faster at Low Altitude tailed by a slower Me-110. Either the Ju-88 and the Me-110 should move first, having the least energy, with the 110 going first being at lower altitude. However, since it's tailing the Spitfire, no matter its Energy, the Spit must go before the 110. Check below the correct order:



COMBAT PHASE

During the Combat phase, all the *planes* can use their weapons to attack each other.

There are 3 subphases of Combat, which occur in a defined order. Resolve all the attacks from one subphase before resolving the next. It means that a *plane* destroyed during a subphase cannot attack in a subsequent subphase.

However, within one of these categories, all attacks are simultaneous.

The subphases are:

1. Attacks from AAA and Flak (see page 12).
2. Air-to-air and air-to-ground attacks (see page 7).
3. Torpedoes and Flak movement (see page 12).

When all the torpedoes movements are done and the impact resolves, the round ends and another one begins.

GROUND TARGET MOVEMENT

Some ground targets are stationary (like a bridge), and some can move. Only targets with the  icon on their counter can move.

The owner of the ground targets **can** move in the order of his choice every non-stationary ground target. Ships **must** move.

When a ground target moves, the player who owns it can move it 1 step either straight ahead or turning. To know which Turning template to use, follow the same rule as for planes (see page 4), based on the letter printed on the counter.

TIME FREEZING (OPTIONAL)

Time Freezing is an optional advanced set of rules that allows for opportunity fire during the movement phase, momentarily switching from the basic I-go-you-go system to an impulse mechanics.

When a player anticipates that a fire opportunity may arise during his or an opponent's movement, he can call a Time freeze to move together with the opponent, hoping that the anticipated fire opportunity materializes.

When the plane is in a position to fire, it resolves the combat.

All the planes that can potentially engage in combat with the one who called the Time freeze must adhere to it.

To perform a Time freeze, each plane moves in the usual initiative order, but instead of completing its movement, it will move one step a time, as instructed by the Time freeze table (available at the end of the present rulebook): moving along the relevant Starting energy line of the table, you see when to move your first, second, etc. step of your movement. For example, a plane with a starting energy of 7 will fly 3 steps (column d) while a plane with a starting energy of 2 will move his first step only when reaching the column (or phase) e of the table.

If you find a blank space, your plane won't move in that specific phase.

In case a firing opportunity arises during a phase of the Time freeze, resolve the combat. However, each position of fire (pilot or a gunner) can fire only once per round.

Time Freeze ends when all the involved planes complete their movement.

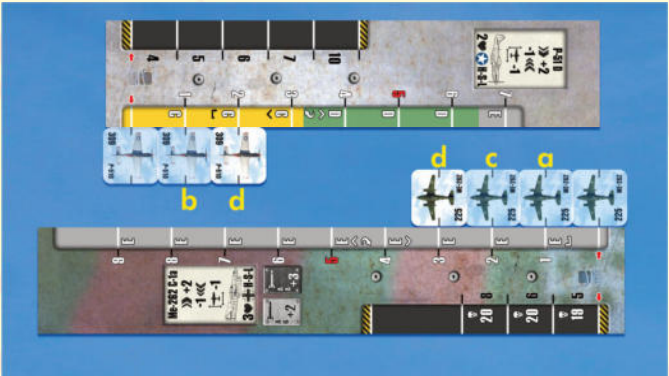
A plane cannot be involved in a Time freeze more than once per round. Likewise, a plane that has already finished its movement cannot be involved in a Time freeze.

Example of Time freezing.

An Me-262 and a P-51D are flying head-on. The American pilot anticipates he might find a fire solution against the German, before ending his movement within the deadly range of fire of the Me-262. The energy of the P-51 is 5, while the Me-110's energy is 8. The American pilot calls for a Time Freeze.

Following the standard initiative, during phase a (column a) only the 262 moves one step. In phase b, the P-51 moves its first step and the German stands still, to move his second step on phase c. On phase d, both planes move, following the initiative: the P-51 flies its second step and the Me-262 its third.

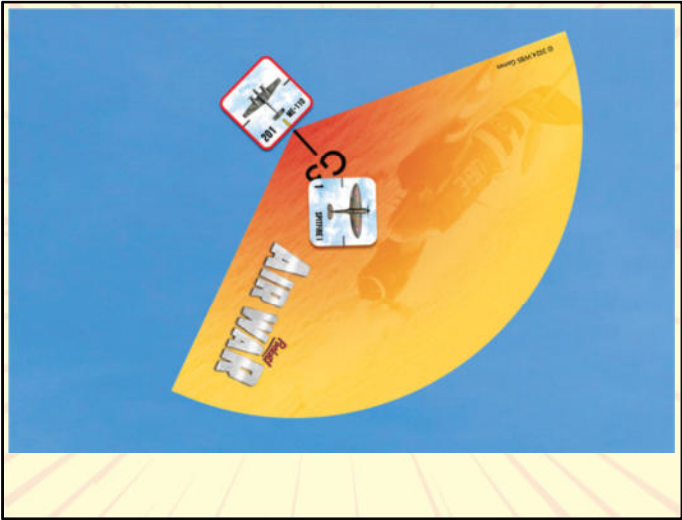
	a	b	c	d	e	f	g	h	i	j	k	STARTING ENERGY
1												1
2					1							2
3												3
4			1		2							4
5		1	2		3							5
6				2		3						6
7	1						4					7
8		1		2	3	4	5			6		8
9	1	2	3	4	5	6	7	8				9
10	1	2	3	4	5	6	7	8	9	10		10
	a	b	c	d	e	f	g	h	i	j	k	ENDING ENERGY



At this distance, the Me-262 is within the shooting range of the P-51, but not vice-versa: the American pilot resolves the attack against the German, but misses.

Now, the two planes complete their movements: the P-51 has to move out the guns scope of the 262 as soon as possible. Too bad that on phase e only the German moves, closing enough to open fire against the P-51, unable to fire back, having already fired on the previous phase. The result is a 2 hits damage for the P-51 and the pilot is forced to bail out. Having no counterparts for the Me-262, the Time Freeze is over and the German plane can complete its movement spending the remaining movement points as usual.

During the next Combat phase, the Me-262 will not be allowed to open fire. However, if it carried a gunner who didn't fire during the Time Freeze, he would be allowed to fire during the Combat phase.



MISSION GENERATOR INTRODUCTION

The mission generator allows you to create random scenarios to add excitement and longevity to the game. It can be used as a standalone option for a single mission or to generate random missions throughout a campaign (see page 19).

Players will define in order:

- 1. Mission type
- 2. Planes selection
- 3. General Setup

MISSION TYPE

You can select missions based on historical campaigns or create a totally random mission. For the former, refer to the relevant Mission type table for the campaign of your choice and roll on it; for the latter, simply roll on the table to the side.

MISSION TYPE	
Roll	Mission
1 - 6	Close Air Support
7 - 15	Strategic Bombing
16 - 20	Fighter Sweep

PLANES SELECTIONS

Players can choose their planes using the Planes Availability Chart, which is organized by Theater of Operations (see page 19). To ensure a balanced gameplay experience, players should sum the Victory Points (VP) values of all the attacking planes and defending planes, aiming to get the two values as close as possible.

If players prefer a more realistic experience, they can choose planes by rolling in the Planes Availability Chart, but this may result in an unbalanced match due to the potential for biased distribution of planes between attacking and defending sides.

N.KOREA AVAILABILITY			
Roll	Role	Plane	Points
1-2	Fighter	La-7 (as La-9)	50
3-10	Fighter	Mig-15	83
11-20	Fighter	Yak-9	63
	Fighter-Bomber	Il-2 (as Il-10)	27
	Bomber	Il-2 (as Il-10)	27

S.KOREA AVAILABILITY			
Roll	Role	Plane	Points
1	Fighter	Meteor	70
2-4	Fighter	F-84	77
5-8	Fighter	P-51 D	50
9-14	Fighter	F-80	70
15-20	Fighter	F-86	87
1 or 20	Fighter-bomber	F-86	87
2-4	Fighter-bomber	P-51 D	50
5-8	Fighter-bomber	F4U Corsair	33
9-15	Fighter-bomber	F-84	77
16-19	Fighter-bomber	F-80	70
1-12	Bomber	B-29	70
13-20	Bomber	A-26	57



SOLO AND COOP MODE

Pocket Air War can be played against planes flown by AI pilots. It is possible to play Solo, or in cooperative mode, against one or more aircraft managed by the game system.



AI PLANES

This system is neither a simple automaton nor a bot. The AI pilots make decisions based on the tactical situation and their mission objective. Moreover, you can't predict what they are going to do, making it impossible to exploit the system.

From now on, a plane that is controlled by the system is referred to as an **AI plane**.

Of course, a human player has to roll the dice for them, as well as move their counters and perform other minor tasks.

AI SYSTEM

To use the AI system, we first need to explain some core concepts of this system: focal point and relative positioning.

FOCAL POINT

The **focal point** is the center of attention of the AI plane, where its pilot "looks", or at least where its focus is.

The focal point of an AI plane is determined by the AI table, based on its mission and the condition of the plane, given its mission and the condition of the plane.

The general rule is that an AI plane must point its nose toward the focal point, or at least attempt to do so.

RELATIVE POSITIONING

The **relative positioning** of the plane from its focal point is determined by three parameters:

- *The distance to the focal point.* It can be either **within one ruler's length** or **farther than one ruler's length**.
- *The relative horizontal position.* The focal point is either **in front** of the plane, on its **side** or **behind** it. Use the reference schematics at page 9.
- *The relative vertical altitude.* The focal point is either **above**, **below**, or at the **same level** as the plane.

DETERMINE THE AI PLANE MANEUVER

When it's an AI plane's round, a player has to determine the maneuver it has to perform: roll a dice and move 2 rows up if the AI Crew is an Ace, or 2 rows down if the Crew is a Rookie.

Then, check the AI table, using the parameters of the relative positioning to determine the relevant column and the modified result of the dice to determine the row.

Once the maneuver to perform has been selected, a human player will have to adjust the AI plane energy

(accelerating or decelerating) according to the following guidelines:

1. Make sure the AI plane can perform the selected maneuver without stalling. If this is not possible, shift one row down and select another maneuver.
2. If engaged in combat, keep as much energy as needed to perform the tightest turn of the plane, at the highest energy level for that given turn (*e.g. energy 4 to perform a B-turn for an Me-110*).
3. Make sure the AI plane does not overshoot its target.

However, in some cases, you are forced to shift one row down on the table to select a viable maneuver:

- If the maneuver would result in a crash, also as a consequence of a stall.
- If the maneuver is not allowed (e.g., "Climb" while you are already at High altitude).

AI ROUND

AI planes follow the same round structure as human players, in terms of initiative, movement and combat phase.

Concerning the combat, an AI plane will always target the nearest focal point, on the base of the hierarchy indicated on the AI table, using the most effective weapon suitable for the given target, ordnance included. For example, if an Me-262 equipped with A-A Rockets engages an aerial target, it will use the rockets first and then it will use the guns on the subsequent attack.

AI MANEUVERS

In this section, all the possible maneuvers an AI plane can do are explained in detail. Mind that AI pilots never collides, even if they overlap another plane's counter.

FORWARD

- **Level:** The AI plane must fly straight maintaining its current altitude.
- **Climb:** The AI plane must fly straight, performing a climb to the next altitude level above.
- **Dive:** The plane must fly straight, performing a descent to the next altitude level below.

TURN & ALT.CHANGE

The AI plane must change altitude and use the one-step turn opportunity (see page 6). Specifically:

- If the focal point is above or at the same level, the AI plane must perform a climb.
- If the focal point is below, the AI plane must perform a descent.
- If the focal point is at the same level, move one row down on the table.

The player must choose which turning template to use, in order to allow the AI plane to point its nose as much as possible to its focal point.

C TURN/E TURN

The AI plane must perform a turn, using the C or E turn template, as indicated. If instructed to do a C turn but it's not available with its current Energy, use the tightest turning template available. Stop turning as soon as one of these conditions is met:

- The AI plane has no movement points left.
- The AI plane nose points towards its focal point (or as close as possible, since the plane has to perform full steps on the turning template)

If the plane has movement points left at this point, spend them with a level flight.

HARDEST TURN

The AI plane must perform a turn, using the tightest turn template possible (according to its current Energy). Stop turning as soon as one of these conditions is met:

- The AI plane has no movement points left.
- The AI plane nose points towards its focal point (or as close as possible, since the plane has to perform full steps on the turning template).

If the plane has movement points left at this point, spend them with a level flight.

SIDE SLIP

The AI plane level flights and performs a Side slip after half of its movement allowance (round up).

The player must choose at which point to perform the Side Slip and also if performing it to the right or to the left, in order to give the AI plane the best opportunities.

WINGOVER

The AI plane must perform a Wingover. If the AI plane has more than the mandatory movement points, it must level flight before and/or after.

The player must choose at which point to perform the Wingover. The choice must be made to give the AI plane the best opportunities.

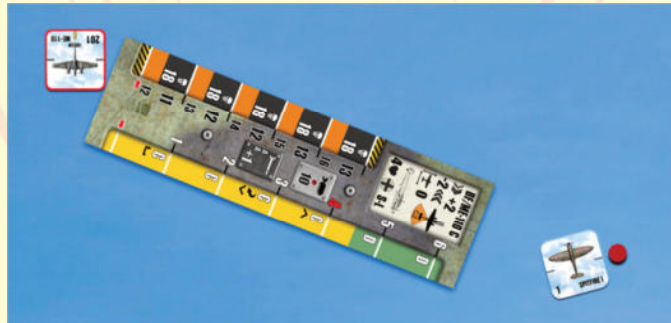
AI COMBAT

AI planes follow the same rules as the human players, with the following exceptions:

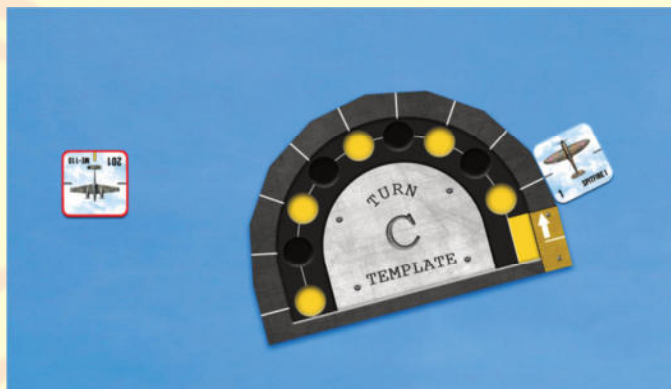
- AI planes open fire at any possible chance and distance, as long as they are within their firing range, even if the opponent plane hasn't moved yet, like they were in Time Freeze (see page 15).
- Combat is solved immediately as a chance arises and in the Combat phase of the round.

Example of AI Combat (written rolling in real time)

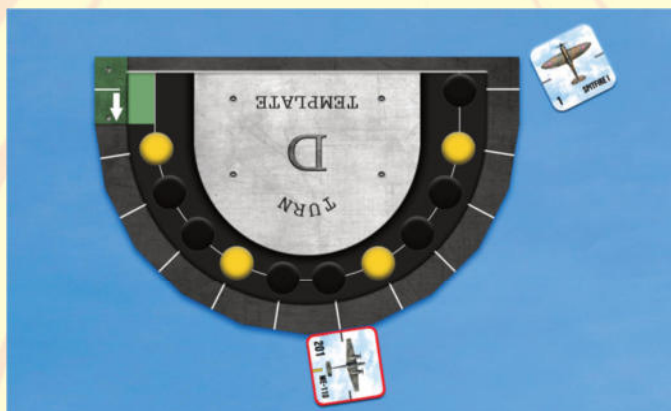
Round 1. An Ace AI pilot on a Me-110 (in red) and an Expert human on a Spitfire I are closing each other. Since the Me-110 is operating a Fighter Sweep, its Focal point is the closest, unengaged enemy plane, as instructed by the AI Table. The distance is greater than the length of a ruler and the relative positioning is on the side, with the Spit lower than the 110.



Since the two planes start with the same energy, the Spit will go first, being at lower altitude. The human player performs a climb and a C-turn, the tightest for his initial energy of 6. The Briton ends its movement within 1 dashboard from the 110, on its side.



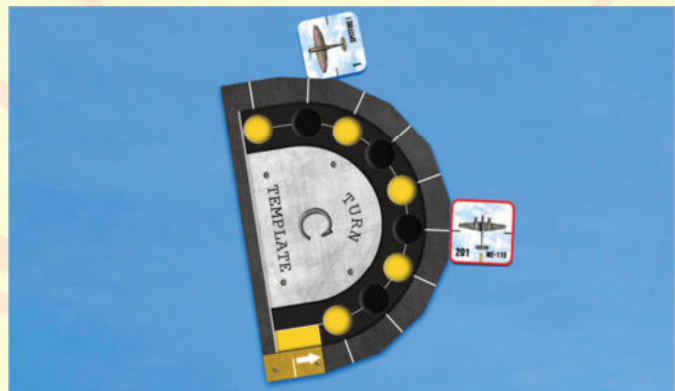
The human player rolls 1d20 to define how to move the 110. The result is 7, modified with +2 since the AI pilot is an Ace, thus it's 9: Hardest turn, that is a D-turn for a 110 at energy 6.



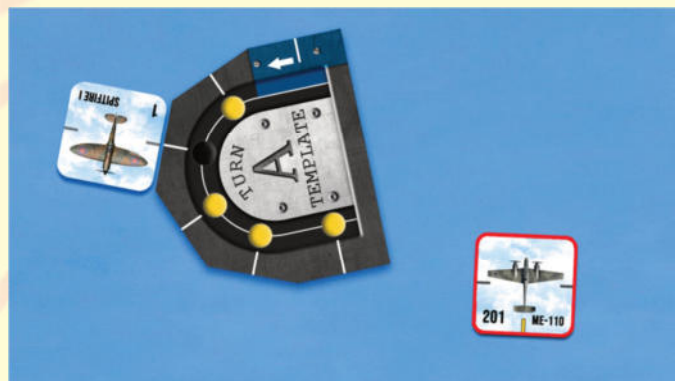
Round 2. The Spit now has an energy of 2, but the human player accelerates to energy 4. He selects a B-turn.



The roll for the 110 is 15 (13+2): another Hard turn. It has an energy of 4, that allows it to perform a B-Turn, the tightest for the plane, at its highest speed; thus the energy stays the same.



Round 3. The human player opts not to accelerate and keep the Spitfire within its tightest turn energy range, trying to overturn the German two-seater.



The 110's energy is now 2, thus it must be accelerated to 4, in order to achieve the highest energy for the tightest turn. The roll result is 4, modified to 6. A Hard turn, once again.



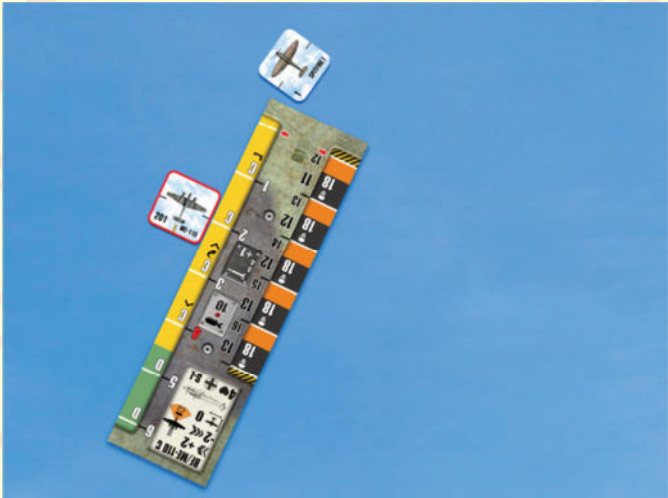
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Round 5. After a Wingover of the Spitfire and another Hard turn for the 110, the Spitfire opts for a Hard turn, putting itself on the rear sector of the German AI plane. The die roll is 20 that doesn't need to be modified all the more. The 110 has to perform a Wingover, but starting with an energy of 2, it needs to accelerate to 4, to avoid stalling. The Me-110 is in position to fire!



According to the Combat ruler it needs a roll of 12+ to hit the Spitfire and 18+ to shoot it down. The Ace ranking of the German pilot (+1 to the Roll to hit) balances the size modifier of the Spitfire of -1. The Roll to hit is 13 and the Spitfire is damaged to the fuselage.

TIME FREEZE TABLE

	a	b	c	d	e	f	g	h	i	j	
STARTING ENERGY	1									1	1
	2				1					2	2
	3		1				2			3	3
	4		1		2			3		4	4
	5	1		2		3		4		5	5
	6	1	2		3		4	5		6	6
	7	1	2	3		4	5		6	7	7
	8	1	2	3	4	5		6	7	8	8
	9	1	2	3	4	5	6	7	8	9	9
	10	1	2	3	4	5	6	7	8	9	10