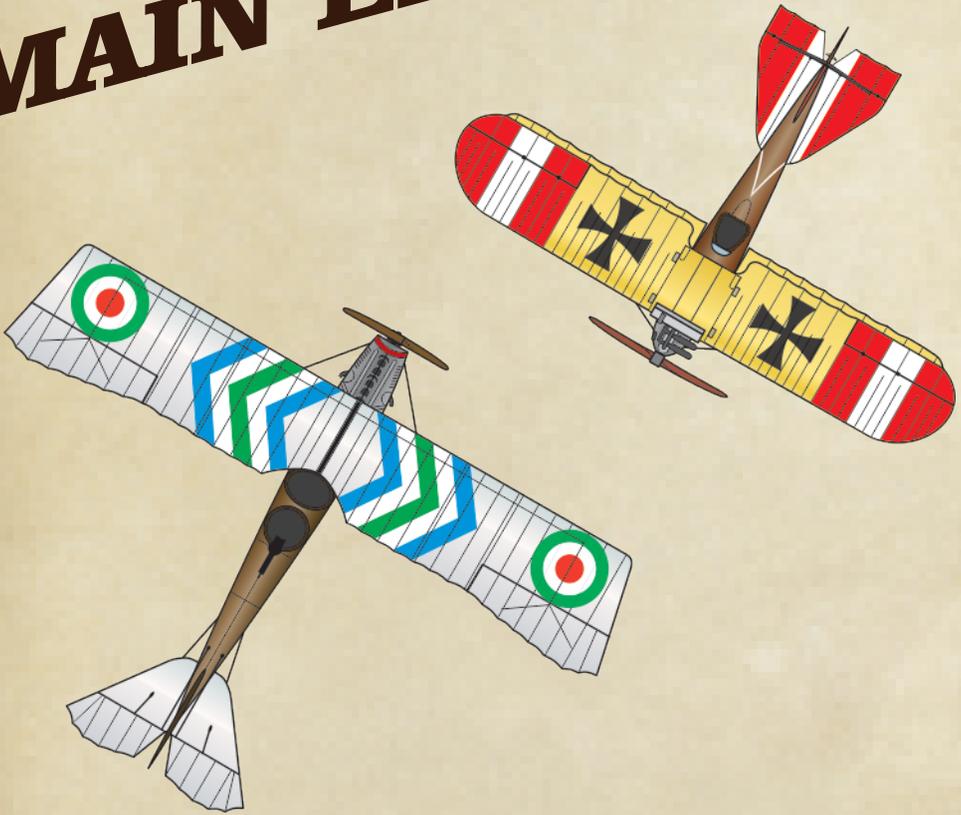




# AGE of DOGFIGHTS: WWI MAIN EXPANSION



## RULES AND SCENARIOS

# AGE of DOGFIGHTS

## WWI

### MAIN EXPANSION

#### RULES AND SCENARIOS

*Age of Dogfights: WWI* includes enough content for many exciting games in different modes and scenarios. This expansion gives even more possibilities, including new aircraft from various countries, plus airships, barrage and observation balloons, and anti-aircraft zones.

This expansion includes six aircraft types each (four fighters, one scout and one bomber) for Austria-Hungary and the Russian Empire. Although the Russian Empire had a large air force, most planes were procured from France and Great Britain, so this set only includes aircraft of Russian construction or production. These are all from the early part of the war, so their characteristics are much weaker than most other planes.

Italian industry was not capable of mass production, but their planes had excellent characteristics, especially speed.

American aviation was significant in the last years of the war, but almost exclusively used aircraft purchased from France and Great Britain or produced under license. This set includes two aircraft types of American construction and production that had only a symbolic participation in war operations.

Bulgarian and Serbian aviation took a notable part in the war. Both used planes they received or bought from their allies – Bulgarians from Germany and Serbs from France.

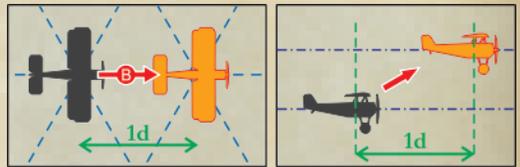
#### Box Contents

The set includes 54 plane tokens (27 types), 12 barrage balloon tokens, six observation balloon tokens, two airship tokens, 30 Control Panels, six anti-aircraft zones, six barrage nets, two black dice, a reference chart and this booklet.

#### Special Armament

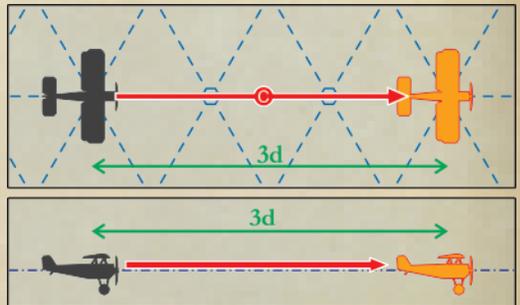
##### Fixed, Angled-Up Machine Gun ( ↴ )

At the beginning of the war, until mechanisms were devised to fire between the propeller blades, single-seater aircraft with a tractor (front) engine configuration had no effective solution for forward-firing machine guns. One workaround was to mount the machine gun on the engine, in front of the pilot, but at an angle, so that the bullets could pass outside the arc of the propeller. The Russian Mosca-Bystritsky MBbis fighter uses this configuration, which allows only one firing position, with the aircraft flying horizontally below the target aircraft (see diagrams below). To resolve these attacks, always use Column B in the Firing Outcome Chart.



##### Flexible Nose Cannon ( ↱ )

Some countries armed their aircraft with 20mm or 37mm cannons as well as machine guns. These customized army cannons were inefficient and did not allow rapid fire, so machine guns remained the primary weapon for aircraft throughout WWI. In this set, the Russian Grigorovich M-9 flying boat uses a cannon in the flexible nose position. It has a greater firing range than machine guns, so can shoot from a distance of 3d.



Cannon firing positions are the same as for flexible nose machine guns, but in addition to their greater range, they inflict more damage to the target, though with a much lower probability of hitting due to the low rate of fire. When shooting from a cannon, consult the Firing Outcome Chart below.

Chart 1 - Cannon			
ROLLED NUMBERS	A	B	C
2	×	×	×
3	×	×	×
4	×	×	×
5	×	×	×
6	×	×	×
7	×	×	×
8	×	×	×
9		×	×
10			×
11			
12			

Note that the 'damaged' and 'destroyed' outcomes are in reversed order for Column C, reflecting their higher probability of causing destruction rather than damage.

When firing cannons, long burst and jamming are not applicable. In general, a cannon has an advantage over machine guns only when it fires from a distance of 3d, as it is not then within range of enemy machine guns that could fire defensively.

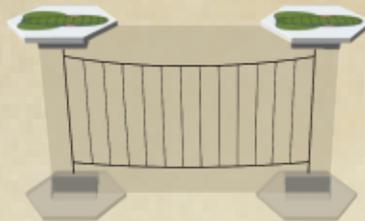
## Barrage Balloons

Some countries (Germany, Great Britain, France and Italy) used many large clusters of barrage balloons during WWI. They hovered at high altitudes (up to 5,000m), making it difficult for planes to fly over them. Barrage balloons should be placed before starting the game, anywhere on the board (player's choice) or according to scenario instructions. They can use altitude stands up to a maximum height of L5.

This set includes balloons with French or German markings, but they can also be used by other countries with the same alliance.

Planes cannot fly directly under balloons, as they are anchored to the ground with steel cables.

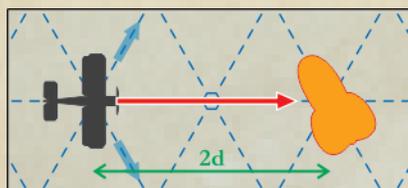
Barrage balloons were often interconnected by cables and chains to form a 'wall' that caused significant problems for aircraft, particularly in conditions of poor visibility. This set includes six special barrage net pieces (see diagram below), which always operate at a height of L4, due to the weight of the nets.



## Firing at Balloons

A large, stationary target full of flammable hydrogen gas seems an easy target for fighter pilots. However, the holes made by individual machine gun bullets were too small to cause significant damage, so it was necessary to achieve many hits in a concentrated area. Pilots also had to fire from a great distance to avoid aircraft damage from the enormous explosion if they were successful. The most effective attack strategy was to fly directly towards the balloon and concentrate fire at a single point to cause an explosion.

The position for firing at barrage balloons is shown in the diagram below. It may be attacked from any direction.



The firing aircraft may be one altitude level lower or higher, but must be tilted up or down, towards the balloon.

In the round following the attack, the plane that fired must turn right or left in its first movement step (to avoid getting caught in the explosion).

Only aircraft with fixed or flexible nose machine guns can fire from the position shown above. Firing from dorsal machine guns was not effective, so is not permitted.

When a plane is in a position to fire at a balloon, roll two red dice and consult Firing Outcome Chart 2 below.

Chart 2 - Firing at Barrage Balloons	
2	
3	×
4	×
5	×
6	×
7	×
8	×
9	×
10	
11	
12	

The table to the left assumes firing from a single machine gun. If the attacking plane has two machine guns or a cannon, add 1 to the dice total, or 2 if it has three machine guns.

If a balloon is destroyed (  ), remove its token and stand from the board.

If the destroyed balloon is one of the two holding a barrage net, the token and net are removed, while the other balloon remains in place, but must be placed on an L3 altitude stand (*due to the weight of the net, it is lowered by one level*).

Sometimes balloons did not explode, but slowly descended to the ground due to damage. These rules simply consider the balloon to be destroyed in that case, so damage is not taken into account.

## Observation Balloons

*Even before WWI, observation balloons were used to monitor movements behind enemy lines and direct artillery fire. They were anchored to the ground with ropes, and maintained a sufficiently low altitude to ensure that the crew (usually two observers) had enough oxygen.*

*Most WWI observation balloons were an elongated shape, known as 'kite balloons', which were stable even in strong winds. They were also attached to the ground with cables, which could winch the balloon to the ground if attacked. By operating the balloons at relatively low altitudes, they could be lowered to safety quite quickly and protected by ground-based machine guns.*

*Intelligence from observation balloons could be crucial to the outcome of ground battles, so both sides went to great lengths to destroy them. The most effective technique during WWI was to destroy them with fighter aircraft. Pilots who specialized in these attacks became known as 'balloon aces'. The most successful of these was the Belgian Will Coppens, who destroyed 35 German balloons. The task was extremely dangerous,*

*as the balloon crews carried their own machine guns, as well as being protected by ground-based anti-aircraft cannons and machine guns.*

This set includes both French and German observation balloons (three tokens each). As with barrage balloons, they can also be used by other countries with the same alliance. Balloons can either be placed according to the player's choice or as instructed by scenarios. Observation balloons can be placed at a maximum height of L3 and can be moved up or down by a maximum of one level per turn.

For any observation balloon that is deemed to be winched to the ground (at L0), simply remove its stand. Balloons may be freely moved up and down during the game, but cannot be attacked while on the ground.

## Firing at Observation Balloons

Firing positions when attacking observation balloons are identical to barrage balloons (see previous page).

To resolve the return fire from an observation balloon's machine gun, the attacking plane must roll two red dice, while the player controlling the balloon **simultaneously** rolls two black dice. Consult the chart below to determine the outcome.

Chart 3 - Observation Balloons and Airships		
ROLLED NUMBERS	PLANE FIRING	BALLOON/AIRSHIP FIRING
2	×	×
3	×	×
4	×	×
5	×	×
6	×	×
7	×	
8	×	
9		
10		
11		
12		

As with Firing Outcome Chart 2, dice totals are +1 if the firing plane has two machine guns, +2 if it has three, or +1 if using a cannon. An aircraft with a fixed, angled-up machine gun cannot attack balloons.

'Long burst' attacks are not possible when firing at or from a balloon.

The simultaneous firing can result in destruction of both the balloon and the attacking plane. As when attacking a barrage balloon, if the plane survives, it must turn in the first step of the next round.

If the attack results in damage to the balloon (♥), place a damage marker (any color) on its token. The balloon must then descend by one altitude level in each subsequent round until it reaches the ground, after which it is removed from the board. *This represents the balloon being punctured during the attack, making it unable to maintain altitude.* At the end of the game, when determining each player's score, damaged balloons count as 0.5 points (as for a damaged plane) unless indicated otherwise in a scenario.

## Airships

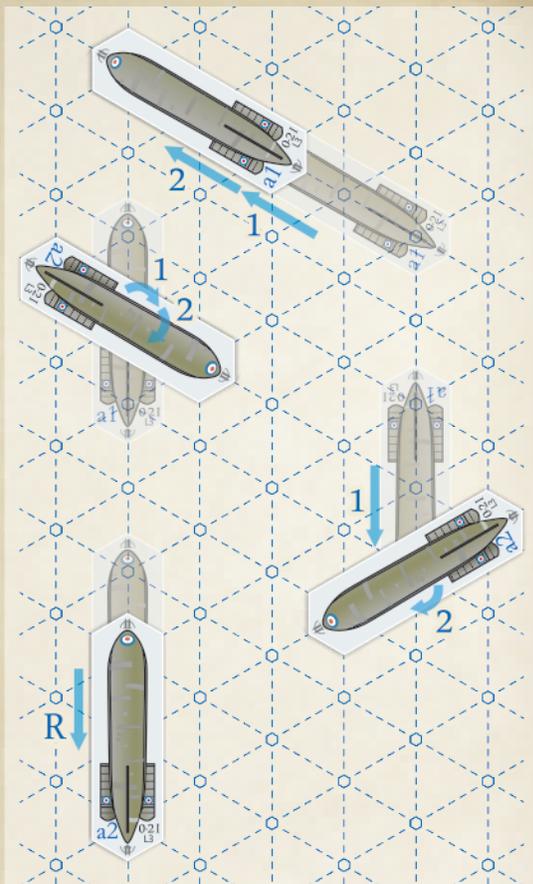
*Airships were used for various tasks in WWI, such as reconnaissance, bombing and transport. The German bombing of London using Zeppelins is especially famous, but although these attacks caused panic, they inflicted limited damage, so became very rare in the latter years of the war. Otherwise, airships were mainly used in naval operations to escort and protect ship convoys.*

*Only British Coastal class airships (two tokens) are included in this expansion. They were much smaller (around 60m long) than most German Zeppelins (around 200m long), so they fit much better into the scale of this game. Their purpose was to patrol above ship convoys to spot and destroy German submarines. There were no clashes between opposing airships during the war, so they are used solely in asymmetric scenarios with only one player commanding airships.*

## Airship Movement

Airship tokens take up three points on the board. Unlike planes, they can remain stationary or even move backwards. Since changing altitude is much slower than for aircraft, airships are not permitted to change altitude in the game. Their maximum flight altitude is L3.

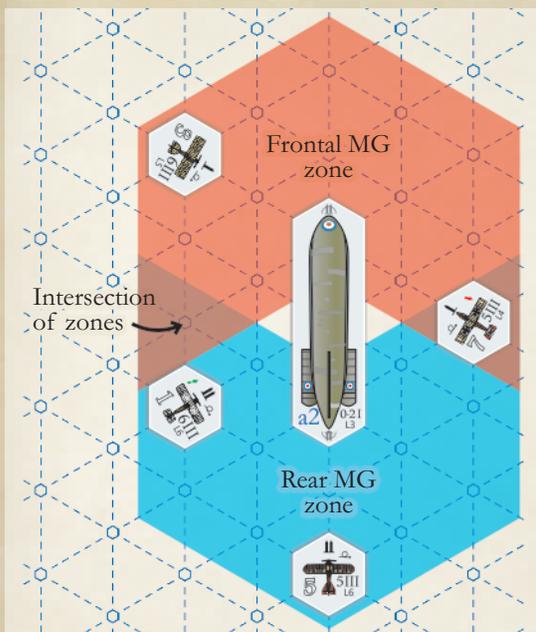
In each round, airship tokens can be moved zero, one or two steps (no dice are used). Each step can be used either to move the token 1d straight forwards or to rotate it around its center point by 60 degrees left or right. Airships can also be moved backwards, but only by 1d in a straight line. The diagram below shows examples.



## Firing at Airships

*Attacking airships was even more dangerous for fighter pilots than attacking balloons, and almost every pilot who downed an airship was decorated.*

Coastal class airships carry two machine guns that shoot forwards and two that shoot backwards. The machine guns can only fire defensively. Zones of action for the frontal and rear machine guns are shown in the diagram below.



All rules for firing at observation balloons apply equally when firing at airships (see Firing Outcome Chart 3 on page 4). After firing, the plane must turn away from the airship in the first step of the next round.

As Coastal class airships carry two machine guns at either end, add 1 to the black dice total.

If a plane fires from a position where an airship's two machine gun zones intersect (see diagram), both front and rear airship machine guns can return fire. If the airship has remaining ammunition and the player wishes to fire from both pairs of machine guns, add 3 to the black dice total and move both sliders on the airship Control Panel to the right.

If an attack on an airship results in damage, roll the multicolor die and apply the following outcomes:

**Blue:** the skin of the airship is damaged. For the rest of the game, it can be moved forwards only one step per round.

**Orange:** the rudder is damaged. For the rest of the game, the airship can be rotated only once per round.

**Green:** the engine is damaged. For the rest of the game, the airship can move only one step forwards or rotate once per round.

**Red:** machine guns are damaged. The airship cannot fire for the rest of the game.

As with aircraft, a second damage will destroy the airship.

## Anti-Aircraft Zones

*The first aircraft ever shot down in combat was on September 30, 1915, when three Austro-Hungarian planes bombed military and civilian targets in the Serbian city of Kragujevac, causing many casualties. Radoje Ljutovac, a Serbian soldier, fired a cannon at one of the planes from a nearby hill and hit it with the first shot, causing the plane to crash on the city center. The cannon he used was captured from the Turks in 1912, during the First Balkan War.*

*At the beginning of WWI, all ground-based cannons used against aircraft were simply modified army cannons. Despite being constantly improved, they failed to achieve good accuracy, especially when targeting planes flying at high altitude. Anti-aircraft machine guns, however, proved highly effective against aircraft up to 1,500–2,000m.*

This expansion contains six tinted plastic markers to represent anti-aircraft action zones (AA zones): three green for Entente and three black for Central Powers.

Each marker covers 10 points on the board and cannot be moved once positioned at the start of the game (according to either scenario instructions or player preferences). Aircraft can safely fly over friendly AA zones.

If a plane enters an enemy AA zone during its movement, the aircraft token is left in place while a break action is performed. The player controlling the AA zone then rolls two red dice and consults the chart below.

Chart 4 - Anti-Aircraft Action

	L1	L2	L3	L4	L5
2	✕	✕	✕	✕	✕
3		✕	✕	✕	✕
4			✕	✕	✕
5			✕	✕	✕
6			✕	✕	✕
7				✕	✕
8				✕	✕
9					✕
10					
11					
12					

The probability of aircraft being hit by AA guns is dramatically increased when flying at L1 or L2, decreasing at higher altitudes and reaching zero above L5, which is beyond their effective range.

Any aircraft not destroyed in a break action can continue its movement, but if the next movement step is also within the AA zone, a break action must be performed again, then repeated for every movement step where the plane is within the opposing AA zone.

AA zones can be destroyed by aerial bombing. To neutralize an AA zone, it must be hit by three bombs, or as instructed within a scenario.

## Scenarios

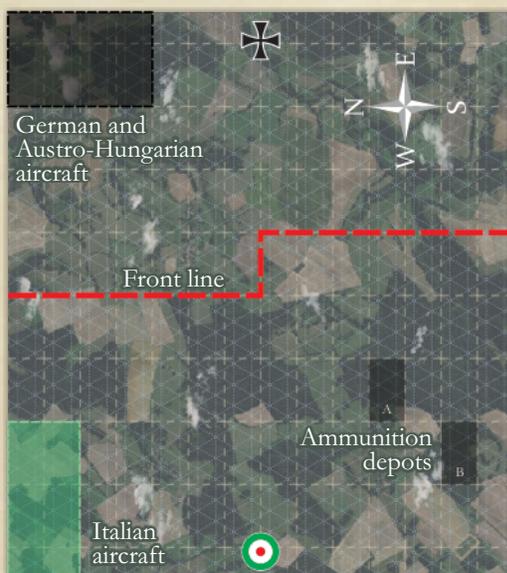
Each scenario below includes numbers and descriptions of initial aircraft positions and the tasks to be performed. This booklet contains 11 examples from which players can then develop their own scenarios.

Some scenarios do not use board extensions, but instead start with all aircraft located in the Combat Zone. In such cases, the normal maximum of six fighter planes in the Combat Zone does not apply.

### 1. 'Ammunition Depot Attack'

*A mixed squadron of Austro-Hungarian and German planes is ordered to bomb two Italian ammunition depots behind the front line.*

The German and Austro-Hungarian player chooses any five planes that can carry bombs, plus four fighters. Mark ammunition depots using Task Zones A and B (see diagram below). The defending Italian player chooses six planes (a Pomilio PE scout can be used as a fighter, in which case it does not carry a bomb), plus six barrage nets (connected barrage balloons) and three anti-aircraft guns (AA zones), placed anywhere behind the front line. The initial layout is shown in the diagram below.



The German and Austro-Hungarian player moves first. If German and Austro-Hungarian planes manage to drop at least two bombs on each zone, they are the winner. If they drop a total of two or three bombs but neither depot is destroyed, the game is a draw. If no more than one bomb was dropped, the Italian player wins (as both depots are successfully defended). This is the only criterion for determining the winner – the number of destroyed and damaged planes does not affect the result.

## 2. 'Ambush Behind the Clouds'

*A French-Serbian formation of light bombers with an escort of fighters must photograph the movements of enemy troops behind the front line. The escorting fighters have already strafed troops on the ground, so have suffered some damage from anti-aircraft fire. On their way back from the mission, the formation encounters several Bulgarian fighters.*

French and Serbian light bombers (two Voisin Vs and two Farman F.40s) fly at altitude L3, with escorting fighters (two French and two Serbian of the player's choice) at altitude L4. The fighters have only two machine gun bursts remaining (i.e. sliders start at position 2). Two fighters are damaged, one has damaged wings (blue marker) and the other has a damaged tail (orange marker). They encounter six Bulgarian fighters (two Albatros C.IIIs are without bombs, so operating as fighters), all at L3. Their primary task is to shoot down the light bombers, as they are carrying important photographs. If they manage to destroy three or four before they escape (exiting off the board on the south side), they win. If they shoot down two light bombers, the result is a draw. Otherwise, the French-Serbian player wins. Initial positions of aircraft and clouds are shown in the diagram below. The French-Serbian planes move first. A possible tactic for the light bombers is to use a longer route to the south, allowing them to hide in the clouds.



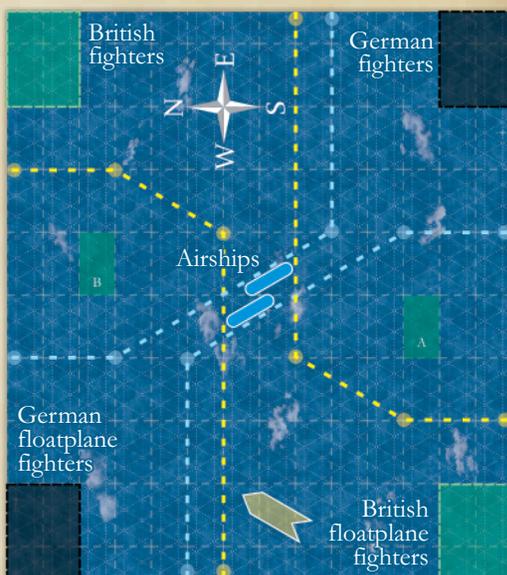
The number of destroyed or damaged fighter planes does not affect the outcome of the game.

## 3. 'Airships on Patrol'

*Two British airships have the task of patrolling between points A and B (see diagram below) in the North Sea. Near one end of the route they are protected by fighters from a nearby airfield, and near the other end are accompanied by floatplane fighters located near to a group of cruisers on the open sea. Two groups of German fighters are trying to destroy the airships.*

Starting positions are shown in the diagram. The airships must move from their initial positions to Task Zone A (in the southwest), fly over it, then proceed to fly over Zone B (northeast), finally exiting the board on the north side. The airships can move freely, with no limit on fuel, so can choose either to fly together or follow completely separate routes.

To accompany the airships, the British player chooses any three fighters plus two floatplane fighters (Sopwith Baby). The German player chooses any six fighters plus two floatplane fighters (Rumpler 6B). Ranges of all aircraft are limited due to available fuel (see diagram). Use yellow and blue circular markers from the basic game to mark the boundary points within which each squadron must remain.



The British move first (airships, then planes). They win if both airships complete all tasks. If only one completes the tasks, the result is a draw. The German player wins if both airships are destroyed. The number of destroyed and damaged planes does not affect the result.

#### 4. 'Fleet Bombing'

*A British airship and American seaplanes, accompanied by American fighters, are tasked with bombing a small convoy of Austro-Hungarian ships. The ships are protected by floatplane fighters, together with fighters from nearby airfields.*

Starting positions are shown in the diagram below. All British-American aircraft (one airship, two Curtiss H-16s and two LUSAC-11s) are at L3 altitude. They are intercepted by four Austro-Hungarian fighters (player's choice), which approach from nearby airfields at altitude L4, plus two Hansa-Branderburg CC floatplane fighters that have just taken off and are at L1.



The airship moves first, followed by American seaplanes and fighters. If they manage to bomb at least two Austro-Hungarian ships during the game, they are victorious. If they hit only one, the game is a draw.

#### 5. 'The Russians Are Coming'

*A large mixed formation of Russian planes is approaching from the east, trying to penetrate enemy lines. They are intercepted by a small group of German fighters.*

Starting positions are shown in the diagram below. The Russian formation consists of 12 planes flying at different altitudes (player's choice). All three German fighters (player's choice) start at L4.



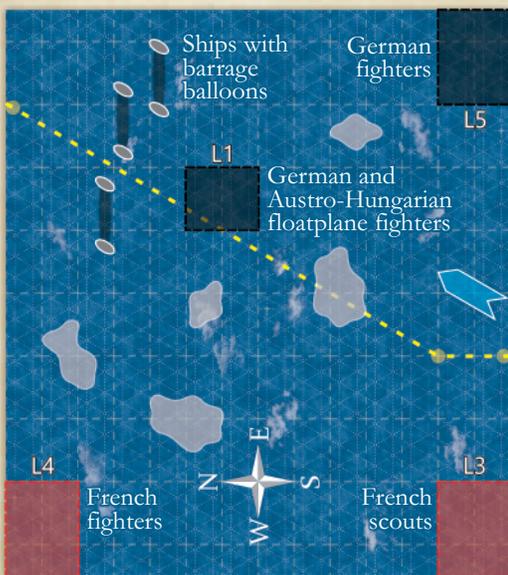
If at least two Russian planes carrying bombs manage to break through (exiting the board on the west side), the Russian player wins. If only one plane breaks through, it is a draw.

## 6. 'Convoy Reconnaissance'

The French command has learned that part of a German fleet has gone to sea in foggy, cloudy weather. French scouts are ordered to fly low over the ships to photograph them and determine their type and numbers. The scouts are accompanied on this risky mission by just two floatplane fighters.

Starting positions are shown in the diagram below. Five French scouts (three Salmson 2s and two Bréguet 14s) fly at an altitude of L3. They carry machine guns for self-defense, but no bombs. Their task is to fly over the ships at a height of L1 and photograph them. They are protected by two Hanriot HD.2 floatplane fighters, which fly at L4.

The German ships are protected by four fighters (two Rumpler 6B floatplane fighters and two Austro-Hungarian Hansa-Brandenburg CC flying boats) all of which start at altitude L1. Three more German fighters (player's choice) approach from the mainland at L5, but only have fuel for a limited range (marked by the yellow line in the diagram). Each ship has two barrage balloons above it, at L3.



The French player moves first. Each scout may photograph up to two ships. If two or more scouts manage to return to their starting positions and exit the board with photos of all three ships, the French player wins. If they only manage to photograph two ships, the result is a draw. Otherwise, the German player wins. The number of destroyed and damaged planes does not affect the result.

## 7. 'Neutralizing AA Zones'

French and American commanders are planning a ground offensive on the front lines, supported by numerous aircraft. Before commencing the attack, the commanders send bombers to neutralize the enemy anti-aircraft defenses.

Starting positions are shown in the diagram below. The French bomber strike group comprises three Letord Let.5s, three Salmson 2s and two Bréguet 14 aircraft. At least two bombs must be dropped on each zone to neutralize the AA guns. The strike group is protected by three French fighters (player's choice) and two Packard-LePère LUSAC-11 American fighters, all flying in from the east. All altitudes are set to the player's choice.

Nine German fighters (player's choice) approach from the north, at altitude L5.



The task is completed if at least two AA zones are hit with two bombs each and the third zone is hit with at least one bomb. The game is considered a draw if all three AA zones are hit, but only one is hit with two bombs. In all other cases, the German player wins. The number of destroyed and damaged planes does not affect the result.

## Symmetric Scenarios

The seven scenarios above are all asymmetric, with each player required to complete different tasks. The four scenarios below are symmetric, with both forces attacking each other in pitched battles.

### 8. 'The Best Fighter'

Short, symmetric games with only one type of plane per player can provide interesting gameplay (with either two or three aircraft on each side). In such duels, a small number of fighters battle for supremacy in straightforward combat, allowing players to investigate which of the two aircraft types is the most effective. The Fokker D.VII was considered the best fighter of WWI, but players can test combinations for themselves, using opponents such as the SPAD S.XIII, Sopwith Camel, Ansaldo A1 Balilla, etc. To create interesting combinations and tests of skill, players may even both use fighters from the same country.

### 9. 'Serbia vs Bulgaria'

This scenario represents a battle between Serbian and Bulgarian forces of eight planes each. Use two board segments, with zones to be bombed and then photographed as shown in the diagram below.



The winner is determined by totalling points as described on page 15 of the basic rulebook.

### 10. 'Observation Balloon Attack'

One side comprises French and Russian fighters: three Morane-Saulnier ACs, three Nieuport 24s, three Hanriot HD.3s, two Sikorsky S-16s, two Grigorovich M-11s and two Anatra DS Anasal planes – 15 fighters with a total value of 88 points.

The other side comprises German and Bulgarian fighters: three Fokker Dr.Is, three Albatros D.Vs, three Fokker D.VIIs, two LFG Roland D.IIs and two Albatros C.III planes – 13 fighters, also with a total value of 88.

The French and Russian force has two planes more than the Germans and Bulgarians, but with the same total points value. Both sides also have four barrage balloons and three observation balloons. All observation balloons are at L3 and are protected by AA zones. Starting positions are shown in the diagram below.



Both players have the task of shooting down as many enemy observation balloons as possible. The number of destroyed and damaged planes does not affect the result, only destroyed (1 point) and damaged (0.5 points) observation balloons. If both players score the same number, the result is a draw.

## 11. 'Grand Battle'

This scenario uses *two* complete sets of three bi-fold boards (the second board is available as an add-on to the basic game), but can also be played on one board, with a reduced number of planes and Task Zones. One side comprises French and Italian planes, with German and Austro-Hungarian planes on the other.

Each player picks any combination of aircraft with a total value of 180–190, or 100–110 if played on the standard three-segment board.

*For example, the selected aircraft on one side could be three Nieuport 24s ( $3 \times 7.5 = 22.5$ ), three SPAD S.XIIIs ( $3 \times 7.5 = 22.5$ ), three Salmson 2s ( $3 \times 10.5 = 31.5$ ), three Letord Let.5s ( $3 \times 11 = 33$ ), two Breguet 14s ( $2 \times 13 = 26$ ), two Ansaldo A.1 Balillas ( $2 \times 7 = 14$ ), two Pomilio PEs ( $2 \times 10 = 20$ ) and two Caproni Ca.5s ( $2 \times 14 = 28$ ), making a total of 20 aircraft, worth 187.5 points.*

*The German side could comprise three Fokker Dr.Is ( $3 \times 7.5 = 22.5$ ), three Fokker D.VIIIs ( $3 \times 8 = 24$ ), three Aviatik DFW C.Vs ( $3 \times 8.5 = 25.5$ ), three AEG G.IVs ( $3 \times 10.5 = 31.5$ ), two Rumpler 6Bs ( $2 \times 4.5 = 9$ ), two Aviatik (Berg) D.Is ( $2 \times 7.5 = 15$ ), two Hansa-Brandenburg D.Is ( $2 \times 6 = 12$ ), two Phönix D.Is ( $2 \times 6.5 = 13$ ), two Lloyd C.Vs ( $2 \times 9 = 18$ ) and two Hansa-Brandenburg G.Is ( $2 \times 9.5 = 19$ ), for a total of 24 aircraft, worth 189.5 points.*

Task Zones must be bombed and photographed according to the diagram opposite. Players set up three AA zones, six barrage balloons and three observation balloons each, positioned anywhere on the board. Board extensions (four for each player) are placed as desired along the west and east sides of the board.

Bombing AA zones does not score points, but all other elements are taken into account to determine the final score: destroying and damaging planes (1/0.5 point), destroying balloons (2 points), dropping bombs in Task Zones (5 points each) and photographing the Task Zones (3 points each). Bonus points are scored if all five Task Zones are bombed (10 points) and photographed (5 points). If two bombs are dropped on one AA zone, it is neutralized and removed from the board.

When played on two boards with the full number of planes, up to eight fighter planes per player are allowed in the Combat Zone.

If played on a single board, the layout of Task Zones should be adjusted to fit the available space.



All scenarios described in the basic rulebook can be modified to include aircraft from this and other expansions. Also, the scenarios presented in this booklet can be modified to include aircraft from other expansions.