# Air war over the Italian front La Squadriglia degli Assi

# by Gregory Alegi and Andrea Angiolino





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#### **1. INTRODUCTION**

La Squadriglia degli Assi is a game that simulates aerial duels on the Italian front during the period 1916-1918. One or more players maneuver Italian aircraft and their allies against one or more Austro-German opponents.

# 1.1. Game Components

- An A2 map
- 280 die-cut counters
- This rule booklet
- Four game tables

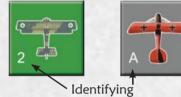
Two six-sided dice are also required

#### 1.2. Map

The map represents an aerial view of a front zone and has an overlaid hexagonal grid.

#### 1.3. Counters

There are two types of counters: aircraft and informational markers.



The front of the aircraft counters displays the silhouette and an identifying number or letter, while the back indicates the model name, maximum speed, acceleration, maneuverability, and maximum climb/ descent capability.



#### 1.4. Aircraft Cards

There are two cards, one per side. Each aircraft in the game must have a corresponding card. The aircraft card should record the characteristics of the aircraft as indicated in the **Aircraft Characteristics Table**.

If an aircraft model has various types of machine guns separated by a slash "/", it means that the different armaments refer to different versions. Players must agree on which version to use before the start of the game.



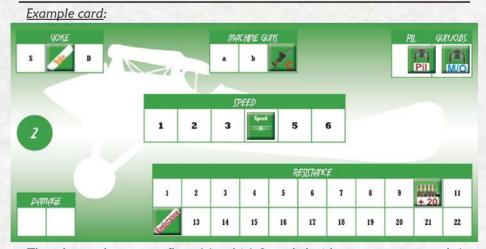
**2. GAME PREPARATION** 

After laying out the map, the players choose the aircraft that make up each deployment. They can choose one of the scenarios proposed in Chapter 8 or create their own. Each team takes turns placing their aircraft on the map in a free hexagon, ensuring that it is oriented toward one side (not a corner) of the hexagon, within the deployment line indicated by the scenario.

#### **3. GAME TURN**

The game is played in turns. Each turn is divided into several phases. At

- the end of the sequence, a new turn begins, starting with the assignment of orders. This continues until the end of the game.
- 1) Order Assignment Phase
- 2) First Movement Impulse
- 3) First Firing Phase
- 4) Second Movement Impulse
- 5) Second Firing Phase
- 6) Third Movement Impulse
- 7) Third Firing Phase
- 8) Fourth Movement Impulse
- 9) Fourth Firing Phase
- 10) Fifth Movement Impulse
- 11) Fifth Firing Phase
- 12) Sixth Movement Impulse
- 13) Sixth Firing Phase



The player chooses to fly a Macchi L.3 and decides to start at speed 4 (his maximum speed). From the Airplane Characteristics table, the aircraft appears to have 1 pilot, 1 machine gunner, 1 type C machine gun and resistance 12. The stick (yoke) is placed in a straight position (C). If you decide to use the optional ammunition rule (9.2), place the counter on the +20 side in space 10.



During the Order Assignment Phase, the players secretly place counters corresponding to the assigned orders for each aircraft on the map.

After assigning all the orders for an aircraft's turn, place an unused counter from the cocarde side over the orders to conceal the first order from the opponents.

During a turn, a player can always review their moves but cannot intentionally modify them.

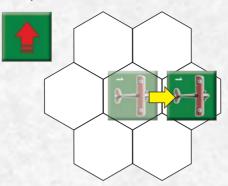
#### 4.1. Speed

First, the player must choose the aircraft's speed. In the first turn, any speed can be chosen (but not exceeding the aircraft's maximum speed). In subsequent turns, the speed cannot vary (increase or decrease) by more than the acceleration characteristic of that type of aircraft compared to the previous turn. The speed cannot fall below one or exceed the maximum speed.

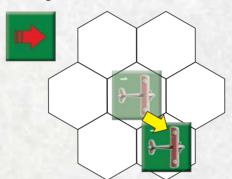
Example: A SPAD XIII (acceleration 2 and maximum speed 5) at speed 4 can choose speeds of 2, 3, 4, or 5 in the next turn.

#### 4.2. Moves

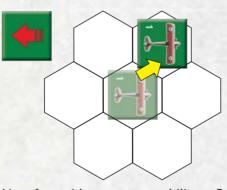
For each aircraft, the player must place a number of arrows on the corresponding "Move" box on the map equal to their speed. An upward arrow for each hexagon they want to move forward.



 A rightward arrow for each hexagon they want to move forward and to the right.



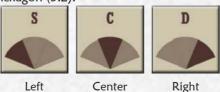
A leftward arrow for each hexagon they want to move forward and to the left.



Aircraft with maneuverability P (Heavy) can only move forward (upward arrow).

#### 4.3. Stick

During the Order Assignment Phase, when a player wants to change the position of their stick (yoke), they must place an S, C, or D stick counter under the chosen move counter. S represents moving the stick to the left, C keeps it centered, and D moves it to the right, changing the orientation of the aircraft toward a different side of the hexagon (5.2).



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If you do not place any stick counter, in this move the stick is considered to be in the same position as the previous move. You cannot use an S if you had a D in the previous move and vice versa.

Mark on the table how the stick was positioned in the last move as a reminder.

# **5. AIRCRAFT MOVEMENT**

Players simultaneously reveal their movement orders and execute them during each impulse during which the aircraft move.

#### 5.1. Speed

Each arrow corresponds to moving one hexagon. These movements occur in different impulses depending on the aircraft's speed.

- Aircraft with speed 1 move during impulse 4 of the turn
- Aircraft with speed 2 move during impulses 3 and 6
- Aircraft with speed 3 move during impulses 2, 4, and 6
- Aircraft with speed 4 move during impulses 2, 3, 5, and 6
- Aircraft with speed 5 move during impulses 1, 2, 3, 5, and 6
- Aircraft with speed 6 move during all six impulses

Use the Impulse table on the map to remember the turn's impulse.

#### 5.2. Orientation

After an aircraft has moved, it maintains the same orientation if the stick is centered (C). If the stick is tilted to the left (S), rotate the aircraft counter 60 degrees (one hexagon side) to the left. If the stick is tilted to the right (D), rotate it 60 degrees to the right.

Example: An aircraft with speed 4 has a centered stick indicated on the card and an upward arrow, two rightward arrows, and another upward arrow in the "Move" box. It will move forward and to the right during impulse 1, forward during impulses 2 and 4, and forward and to the right during impulse 5. However, in the last hexagon, there is a stick counter tilted to the right (D), so it will rotate 60 degrees to the right.

#### 5.3. Firing

After each movement impulse, there is a machine gun firing phase. During this phase, all aircraft can fire, even if no aircraft moved during the previous impulse.

#### 5.4. Exiting the Map

Unless specified by the scenario, voluntarily exiting the map is prohibited except from one's own side.

Aircraft that have exited cannot reenter the game.

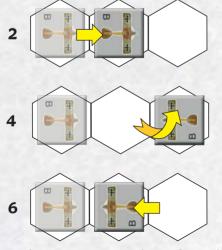
#### 5.5. Immelmann Turn

This maneuver is allowed only for aircraft with maneuverability L (light). Aircraft intending to perform an Immelmann turn must be moving at speed 3 and have a centered stick (C). Place the Immelmann turn counter in the "Move" box (if altitude rules are used, see 9.1.4 as well) and any other two counters underneath in order to hide the move you have chosen from your opponent.

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During the second movement impulse, when the move is revealed, the aircraft moves one hexagon forward; it does the dame during impulse 4, then rotates 180 degrees and during impulse 6 it moves one hexagon forward.



Immelmann turns cannot be performed two turns in a row.

#### **6. MACHINE GUN FIRE**

During each firing phase, all aircraft that have enemy aircraft within range can fire, even if they haven't moved.

#### 6.1. Range

Machine guns have a range of 5 hexagons. The firing arc depends on the type of machine gun, as indicated by the letter.

You can only shoot at aircraft located within the highlighted red hexagons relative to an aircraft positioned as shown in the figure.

6.1.1. Firing Arc Type A (Forward Fixed)



6.1.2. Firing Arc Type B (Rear)



Note that for type B machine guns, the hexagon immediately behind the aircraft's tail is a "blind spot" where you cannot shoot.

# 6.1.3. Firing Arc Type C (Front Elevated)



#### 6.2. Firing to Hit

For each firing machine gun, choose one of the possible targets and roll two dice. If the aircraft has different types of machine guns (e.g., a Pomilio PE with a front and a rear machine gun), perform a separate roll for each machine gun.

Apply the following modifications to the dice result:

- +1 If that machine gun had fired at the same target in the previous firing phase without causing damage
- +3 If that machine gun had fired at the same target in the previous firing phase, causing at least one point of damage





 -2 If the aircraft is performing an Immelmann turn.

#### 6.3. Damage

Cross-reference the dice result with the Machine Gun Fire Effect (MGFE) table using the distance between the two aircraft (counting the target hexagon but not the one occupied by the shooter). If the result indicates a number, subtract that from the target aircraft's Robustness value on its card.

An asterisk (\*) indicates a special damage (see 6.6).

#### 6.4. Shot Down Aircraft

At the end of a firing phase in which an aircraft has received enough damage to reduce its Robustness value to zero or less, that aircraft is shot down and removed from the game.

Both aircraft fire simultaneously: in the firing phase in which an aircraft is shot down, it can still shoot if it has a valid objective.

#### 6.5. Multiple Machine Guns

If two machine guns of the same type are mounted on the same aircraft (for example, both front machine guns on the Ansaldo SVA 5), you make a single roll to hit, but the damage points indicated on the table are doubled. However, if an asterisk (\*) appears, consult the Special Damage table only once, and any damage indicated there is not doubled.

#### 6.6. Special Damage

Whenever the EFM table indicates an asterisk, the player who hit the target rolls two dice and consults the Special Damage table to determine a specific damage to the affected aircraft.

#### 6.6.1. Jammed Rudder

An aircraft that suffers this damage replaces its movement order with an upward arrow and uses



the stick D, C, or S, depending on how the rudder is jammed.

After this initial movement, the player can roll one die during each impulse. On a result of 6, the rudder becomes unjammed.

If an aircraft receives Jammed Rudder damage while already having a jammed rudder, the damage is ignored.

#### 6.6.2. Damaged Controls

The aircraft moves like a Heavy aircraft even if it is Light or Medium.

#### 6.6.3. Engine Stalled

An aircraft with a stalled engine cancels all movement orders. If it has already moved

at least one hexagon, it remains stationary for the rest of the turn; otherwise, it moves straight one hexagon with a stick C during impulse 4.

At the end of each turn, the player can roll one die. On a result of 6, the engine restarts normally.

### 6.6.4. Wounded Crew Member

⇒ If the sole pilot is

wounded, the aircraft

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moves like a Heavy aircraft even if it is Light or Medium. Additionally, type A machine guns fire with a -2 penalty to the dice.

- If a gunner is wounded, their machine guns fire with a -2 penalty to the dice.
- If an observer is wounded, the aircraft continues to maneuver and fire normally.

If a previously wounded crew member is wounded again, they are considered dead.

#### 6.6.5. Crew Member Killed

- If the pilot is killed, the aircraft is shot down (if the aircraft has two pilots, it is shot down when the second pilot dies).
- If a gunner is killed, their machine guns cannot fire anymore.
- If an observer is killed, the aircraft continues to maneuver and fire normally.

In the case of aircraft with multiple crew members, randomly determine which one was hit.

#### 6.7. Jammed Machine Guns

If a player, when firing with the machine guns, rolls a three on the dice (before applying any



modifications), one of the machine guns jams. The jammed machine gun cannot be used until it is unjammed. The player can attempt to unjam it during each firing phase, starting from the next phase. Roll two dice, and the machine gun becomes operational again if the result is 11 or higher (the machine gun can resume firing from the subsequent firing phase).

- If it's a type A machine gun, the unjamming attempt can only be made if, during the previous movement impulse, the aircraft had a straight stick (C) and was not changing altitude or performing an Immelmann turn.
- If a twin machine gun jams, the player can decide during the firing phase whether to attempt to unjam it or fire with the other machine gun, now considered a single machine gun. This decision applies for the entire turn: if the decision is to fire, unjamming cannot be attempted until the next turn.

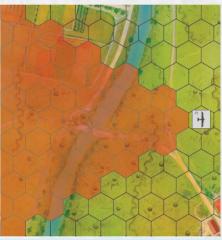
#### 7. PURSUIT

At the beginning of a turn, if an aircraft has an enemy aircraft in its frontal sector within 8 hexagons of distance and is in the tail sector of that aircraft, it can declare itself as the pursuer. The "pursued" aircraft must inform the pursuer how many D and S positions of its stick it intends to use during the turn and whether it plans to increase or decrease its altitude or perform an Immelmann turn (upward or downward). In scenarios with multiple players, this information should only be given to the owner of the pursuing aircraft.

#### Frontal Sector:



Tail Sector:



## 7.1. Different Altitudes

If the altitude rule is used, in addition to calculating the effective distance (9.1.5), you cannot "pursue" aircraft at a higher altitude more than 30 meters per hexagon of distance.

Example: An SVA at an altitude of -75 meters has two Lohner aircraft in its frontal sector at altitudes of +40. The first Lohner is three hexagons away, and the other is five hexagons away. The SVA can "pursue" the more distant Lohner, but not the closer one because it is lower, and the altitude difference exceeds 90 meters.

#### 8. SCENARIOS

Scenarios represent episodes of aerial warfare that either occurred or were inspired by historical events. Altitude indication is necessary only if the





advanced rule 9.1 is in use. The Italian map border is on the left (with its own move boxes), and the Austrian map border is on the right.

Players are encouraged to create additional scenarios.

# 8.1. April 7, 1916:

# Baracca's First Victory

- **Italy**: 1 Nieuport 11
- **Austria:** 1 Brandemburg C.1 (first series)
- Placement: First, the Brandenburg C.1 within 4 hexagons from the Italian map border (at altitude 0), then the Nieuport 11 within 4 hexagons from the Italian map border (at altitude -250)
- Victory Conditions: The Brandenburg C.1 must exit from the Austrian side of the map, and the Nieuport 11 must shoot down the enemy aircraft.

<u>Comment</u>: This scenario well represents the balanced performance between the aircraft of the first year of war.

#### 8.2. "Senza cozzar dirocco"

- SITALA STATES I Caproni Ca.450, 1 SVA 5
- Austria: 3 Phönix D.IIa or Albatros
   D.II with dual armament
- Placement: Within 4 hexagons from their respective map borders (altitude ranging from -200 to +200)

➤ Victory Conditions: The Italian wins by flying the Ca.450 with a centered stick (at an altitude not exceeding 0) over one of the three trench hexagons located 5 hexagons from the Austrian map border. The Austrian wins by shooting down the Ca.450. If both achieve their objectives, the game is a draw.

#### 8.3. November 17, 1917

- Italy: 1 Macchi L.3
- **Austria**: 1 Ufag W.13
- Placement: The Macchi within 3 hexagons from its own map border (altitude 0), and the Ufag within 3 hexagons from its own map border (altitude -150)
- Victory Conditions: Shoot down the enemy aircraft.

<u>Comment</u>: In the actual encounter, pilots Briganti and Scavino shot down the W.13 K374. The two formations each consisted of 3 aircraft, making it suitable for team battles or experienced players.

#### 9. ADVANCED RULES

Once players are familiar with the game, they can choose to adopt one or more of these advanced rules. While games may be slower, the simulation gains realism.

#### 9.1. Altitude

At the beginning of the game, when placing an aircraft on the map, players must also place an Altitude counter on the Altitude Table. The average altitude for the scenario is always 0, and players can start with an altitude within 150 meters of 0.

### 9.1.1. Limits

During the game turn, a player can modify their aircraft's altitude, but they cannot increase it beyond their "climb" capacity or decrease it beyond their "descent" capacity. A player with a climb or descent order can adjust their aircraft's altitude by +/- 5 meters, up to the maximum allowed by that aircraft model.

# - +

# 9.1.2. Climbing in Altitude

If an aircraft wants to climb in altitude, they must replace one of the arrows with a + symbol. During that impulse, the aircraft does not move.

Example: An Hanriot HD.1 with a speed of 5 (and altitude +5) wants to climb. The player places three arrows, a +, and another arrow in the "Move" box. The aircraft then moves one hexagon during impulses 1, 2, and 3, does not move during

impulse 4 (like all speed 5 aircraft), changes altitude (from +5 to +20 meters) during impulse 5, and moves one more hexagon during impulse 6.

#### 9.1.3. Descending in Altitude

If an aircraft wants to descend in altitude, they must replace one of the arrows with a - symbol. During that impulse, the aircraft moves two hexagons instead of one based on the previous move order.

Example: If a - symbol is placed after an upward arrow during the impulse when the order is activated, the aircraft will move two hexagons forward.

#### 9.1.4. Change Effect Impulse

The change in altitude takes effect from the impulse in which the + or - order is placed. Until that moment, the aircraft is considered to be at the altitude from the previous turn.

In the case of an "Immelmann turn," if there is a + symbol in the counter, the aircraft climbs according to its climb capacity. If there is a - symbol, it descends according to its descent capacity. The altitude change occurs in impulse 4 of the turn.

#### 9.1.5. Effective Distance

To evaluate the distance for firing and pursuits, consult the Altitude Difference (DdQ) table. Calculate the altitude difference in meters and find it in the column corresponding to the hexagonal distance between the two aircraft. The row where this difference is located indicates, on the left, the effective distance to be used for assessing whether pursuit is possible (paragraph 7), and on the right, the row of the EFM table to consult for machine gun fire.

Example: A Caproni at an altitude of -150 meters wants to shoot at a Lohner TL at an altitude of +15, which is two hexagons away. The altitude difference is 165 meters, so consult column 2 of the DdQ table. The altitude difference falls within the range of 121-180, corresponding to an effective difference of four hexagons. This will be the distance to consider for calculating machine gun damage.

#### 9.2. Ammunition

Each aircraft has 30 ammunition points for each Light or Medium aircraft machine gun, and 40 for each Heavy aircraft machine gun. During each firing phase, using a machine gun consumes 1 ammunition point, whether it causes damage or misses the target. Once the points are depleted, the machine gun cannot fire anymore. Ammunition points cannot be transferred from one machine gun to another.



#### 9.3. Fuel

Each Light aircraft has 80 fuel points, and each Medium aircraft has 100 fuel points. Heavy aircraft never have fuel problems.

Each turn, an aircraft spends 1 fuel point for each speed point.

Once the points are depleted, the aircraft proceed as "gliders," moving at speed 1 and only in the hexagon in front. They can always use the stick to change orientation.

If altitude rules are used, they lose a number of altitude meters equal to their "descent" characteristic each turn. Fuel points cannot be transferred from one aircraft to another.

If a Heavy aircraft suffers a special damage of "Fuel Loss," from that moment on, it only has 60 fuel points to finish the game.

Use the red numbers on the Quota table to count your fuel points.



#### 9.4. Aces

At the beginning of the game, players can decide that some of the aircraft are piloted by Aces.

Aircraft with an Ace have +2 on the dice to hit when firing with type A machine guns.

Additionally, they have +1 when attempting to clear jams in machine guns and can also attempt to clear jams when not using a straight stick, but in this case, with a -1 penalty to the dice.

#### **10. CREDITS**

2024 Edition

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EFFECT OF MACHINE GUN FIRE									
DISTANCE DICE	1	2	3	4	5				
<b>U</b> р то 6	-	-	-	-	-				
7	1	-	-	-	-				
8	1*	1	-	-	-				
9	1	1*	1	-	-				
10	2*	1	1*	1	-				
11	2	1	1	1*	1				
12	2	2*	2*	1	1*				
13	3	3	3	2	1				
14+	4	4	3	3	2				

\* = Special Damage



	SPECIAL DAMAGE
2	A tank explodes - Airplane shot down
3	Engine stalled - The aircraft continues like a glider
4	Damaged Controls. The aircraft moves like a L aircraft even if it is L or M
5	Fuel loss - If rule 9.6 is in use the aircraft loses 25 points of fuel, otherwise it receives 1d6 points of damage
6	Jammed Rudder (D)
7	Jammed Rudder (C)
8	Jammed Rudder (S)
9	Structural failure - Roll a die and score the same number of damage points
10	Structural failure - Roll two dice and score the same number of damage points
11	Wounded Crew Member
12	Crew Member Killed
0	

AIRPLANE CHARACTERISTICS									
Model (Allied)	CREW	Max SPEED	Acc.	Arm.	Res.	MAN.	CLIMB. / DESC.		
Ansaldo A.1 Balilla	1p	6	2	2a	12	L	25/40		
Ansaldo S.V.A. 5	1p	6	2	2a	13	L	20/30		
Ansaldo S.V.A. 10	1p+1m	6	1	2a+1b	13	м	10/20		
BRISTOL F.2 FIGHTER	1p+1m	6	2	2a+1b	16	м	15/30		
CAPRONI CA. 300	2p+1m	3	1	1c	20	Р	5/10		
CAPRONI CA. 450	2p+2m	4	1	1c+1b	22	Р	5/10		
CAPRONI CA. 600	2p+2m	5	1	1c+1b	20	Р	10/15		
CAPRONI CA. 4	2p+2m	3	1	2c+2b	22	Р	5/10		
CAUDRON G.3	1p+1o	3	1	-	8	М	5/5		
CAUDRON G.4	1p+1m	4	1	1c/2c	10	Р	5/10		
HANRIOT HD.1	1p	5	2	1a/2a	12	L	20/40		
Массні L.3	1p+1m	4	1	1c	12	М	5/10		
Массні М.5	1p	5	2	2a	12	L	15/30		
Массні М.5 мод./М.7	1p	6	3	2a	14	L	20/40		
NIEUPORT 11	1p	4	1	1a	10	L	20/35		
NIEUPORT 17	1p	5	2	1a/2a	11	L	20/40		
POMILIO PD/PE	1p+1m	5	1	1a+1b	14	M	10/20		
SAML S.1	1p+1m	4	1	1b	14	М	10/20		
SAML S.2	1p+1m	5	1	1a+1b	14	М	10/20		
Savoia MF.14	1p+1m	3	1	1a	9	М	5/10		
Savoia-Pomilio SP.2	1p+1m	4	1	1a	10	М	10/20		
SIAI FBA H	1p+1m	4	1	1a	12	м	5/10		
Sopwith Camel	1p	5	2	2a	13	L	35/70		
SPAD S. VII	1p	5	2	1a	12	L	20/40		
SPAD S. XIII	1p	6	2	2a	12	L	20/40		
Model (Central Powers)	CREW	Max SPEED	Acc.	Arm.	Res.	MAN.	CLIMB. / DESC.		
AEG G.IV	1p+2m	5	1	2c+1b	24	Р	10/20		
AEG G.IV Albatros D. Va	1p+2m 1p	5 5	1 2	2c+1b 2a	24 15	P L	10/20 20/40		
			-						
Albatros D. Va	1p	5	2	2a	15	L	20/40		
Albatros D. Va Aviatik C.I serie 37	1p 1p+1m	5 5	2	2a 1a+1b	15 12	L	20/40 20/35		
Albatros D. Va Aviatik C.I serie 37 Aviatik D.I	1p 1p+1m 1p	5 5 5	2 1 2	2a 1a+1b 1a	15 12 12	L L L	20/40 20/35 30/60		
ALBATROS D. VA Aviatik C.I serie 37 Aviatik D.I Albatros D.II Albatros D.III serie	1p 1p+1m 1p 1p	5 5 5 5	2 1 2 2	2a 1a+1b 1a 1a/2a	15 12 12 12	L L L L	20/40 20/35 30/60 35/70		
Albatros D. Va Aviatik C.I serie 37 Aviatik D.I Albatros D.II Albatros D.III Serie 253 Brandemburg C.1 prime	1p 1p+1m 1p 1p 1p	5 5 5 5 6	2 1 2 2 2 2	2a 1a+1b 1a 1a/2a 2a	15 12 12 12 12 14		20/40 20/35 30/60 35/70 20/40		
Albatros D. Va Aviatik C.I serie 37 Aviatik D.I Albatros D.II Albatros D.III Serie 253 Brandemburg C.1 prime serie Brandemburg C.1	1p 1p+1m 1p 1p 1p 1p	5 5 5 6 3	2 1 2 2 2 1	2a 1a+1b 1a 1a/2a 2a 1a+1b	15 12 12 12 12 14 12	L L L L L M	20/40 20/35 30/60 35/70 20/40 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.III ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI	1p 1p+1m 1p 1p 1p 1p 1p+1m	5 5 5 6 3 4	2 1 2 2 2 1 1	2a 1a+1b 1a 1a/2a 2a 1a+1b 1a+1b	15 12 12 12 12 14 14 12 12	L L L L M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.III ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI	1p 1p+1m 1p 1p 1p 1p+1m 1p+1m 1p+1m	5 5 5 6 3 4 4	2 1 2 2 2 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b	15 12 12 12 14 14 12 12 12 12 12 14	L L L L M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I	1p 1p+1m 1p 1p 1p 1p 1p+1m 1p+1m 1p+1m 1p	5 5 5 6 3 4 4 5	2 1 2 2 2 1 1 1 1 2	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b	15 12 12 12 14 12 14 12 12 14 12	L L L L M M M L	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 20/40		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.III ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I BRANDEMBURG K	1p       1p+1m       1p       1p+1m       1p+1m       1p+1m       1p+1m	5 5 5 6 3 4 4 5 4	2 1 2 2 2 1 1 1 2 1 2 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a 1c	15 12 12 12 14 12 14 12 12 14 12 14 12 15	L L L L M M M M L P	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 20/40 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I BRANDEMBURG K D.F.W.	1p       1p+1m       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m	5 5 5 6 3 4 4 5 4 5	2 1 2 2 2 1 1 1 2 1 1 2 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b	15 12 12 12 14 12 14 12 12 12 14 12 14 12 15 14	L L L L M M M L P M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 20/40 10/20 15/30		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG	1p       1p+1m       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p       1p       1p	5 5 5 6 3 4 4 5 4 5 4	2 1 2 2 2 1 1 1 2 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b 1a	15 12 12 12 14 12 14 12 12 14 12 14 12 15 14 10	L L L L M M M L P M L	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 10/20 15/30 5/15		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18	1p       1p+1m       1p       1p       1p       1p       1p       1p       1p       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p       1p+1m       1p+1m       1p       1p+1m       1p       1p <th>5 5 5 6 3 4 4 5 4 5 4 5 4 5</th> <th>2 1 2 2 2 1 1 1 2 1 1 1 2 2</th> <th>2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b 1a 1a 1a/2a</th> <th>15 12 12 12 14 12 14 12 12 14 12 15 14 10 12</th> <th>L L L L M M M L P M L L</th> <th>20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15</th>	5 5 5 6 3 4 4 5 4 5 4 5 4 5	2 1 2 2 2 1 1 1 2 1 1 1 2 2	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b 1a 1a 1a/2a	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12	L L L L M M M L P M L L	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II	1p       1p+1m       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p	5 5 5 6 3 4 4 5 4 5 4 5 4 5 3	2 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 2 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b 1a 1c 1a/2a 1b	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12 9	L L L L M M M L P M L L L M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15 15/30 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.III SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG D.I BRANDEMBURG C.1 TARDI BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17)	1p       1p+1m       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p       1p+1m       1p+1o/m	5 5 5 6 3 4 4 5 4 5 4 5 3 3 3	2 1 2 2 1 1 1 1 2 1 1 1 2 1 1 2 1 1 1 2 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+1b 1a 1a/2a 1b -/1b	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12 9 8	L L L L M M M L P M L L L M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 15/30 5/15 15/30 10/20 10/20		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE 253 BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T	1p       1p+1m       1p       1p       1p       1p       1p       1p       1p       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p       1p       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m       1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 4 5 3 3 3 3 3	2 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 2 1 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a/2a 1a/2a 1b -/1b 1c	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12 9 8 10	L L L L M M M L P M L L L M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 20/40 10/20 15/30 5/15 15/30 10/20 10/20 5/10		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T LOHNER TL	1p         1p+1m         1p         1p         1p         1p         1p         1p         1p         1p         1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 4 5 3 3 3 3 4	2 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+2a 1a/2a 1b -/1b 1c 1c	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12 9 8 10 12	L L L L M M M L P M L L L M M M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 15/30 5/15 15/30 10/20 10/20 5/10 5/10		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T LOHNER TL MICKL G.4	1p         1p+1m         1p         1p         1p         1p         1p         1p         1p         1p         1p+1m         1p+1m         1p+1m         1p+1m         1p+1m         1p         1p+1m         1p+1m         1p+1m         1p+1m         1p+1m         1p+1m         1p+1m         1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 3 3 3 3 3 4 3	2 1 2 2 2 1 1 1 1 2 1 1 2 1 1 2 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+2a 1b 1a/2a 1b -/1b 1c 1c 1c 1c+1b 1c+1b	15 12 12 12 14 12 14 12 12 14 12 15 14 10 12 9 8 10 12 20	L L L L M M M L P M L L L M M M M M P	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15 15/30 10/20 10/20 5/10 5/10		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 C/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T LOHNER TL MICKL G.4 PHÖNIX C.1 PHÖNIX D.I	1p         1p+1m         1p         1p         1p         1p         1p         1p         1p         1p         1p         1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 3 3 3 3 3 4 3 3 3 4 3 5 5 5	2 1 2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+2a 1a/2a 1b -/1b 1c 1c 1c+1b 1c+1b 2a	15       12       12       12       14       12       14       12       14       12       14       12       14       12       14       12       14       12       14       10       12       9       8       10       12       20       16       13	L L L L M M M M L L L M M M M M M M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15 15/30 10/20 10/20 5/10 5/10 5/10 5/10 5/10		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T LOHNER TL MICKL G.4 PHÖNIX C.I PHÖNIX D.I PHÖNIX D.IIA	1p         1p+1m         1p         1p         1p         1p         1p         1p         1p         1p         1p         1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 3 3 3 3 3 4 3 3 4 3 5 5 5 5	2 1 2 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a 1a/2a 1a/2a 1b 1a/2a 1b 1c 1c 1c 1c 1c 1c 1c 1c 1c 1c	15       12       12       12       12       14       12       14       12       14       12       14       12       14       12       14       12       9       8       10       12       9       8       10       12       20       16       13       13	L L L L M M M L L L M M L L M M M M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 20/40 10/20 15/30 5/15 15/30 10/20 5/10 5/10 5/10 5/10 5/10 5/10 10/30 15/30		
ALBATROS D. VA AVIATIK C.I SERIE 37 AVIATIK D.I ALBATROS D.II ALBATROS D.II ALBATROS D.II SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 PRIME SERIE BRANDEMBURG C.1 MEDIANI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 TARDI BRANDEMBURG C.1 BRANDEMBURG K D.F.W. FOKKER A.III HANSA BRANDENBURG CC/W.18 LLOYD C.II LOHNER B.VII (SERIE 17) LOHNER L./T LOHNER TL MICKL G.4 PHÖNIX C.I PHÖNIX D.I	1p         1p+1m         1p         1p         1p         1p         1p         1p         1p         1p         1p         1p+1m	5 5 5 6 3 4 4 5 4 5 4 5 3 3 3 3 3 4 3 3 3 4 3 5 5 5	2 1 2 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2a 1a+1b 1a 2a 2a 1a+1b 1a+1b 1a+1b 1a+1b 1a+1b 1a 1c 1a+2a 1a/2a 1b -/1b 1c 1c 1c+1b 1c+1b 2a	15       12       12       12       14       12       14       12       14       12       14       12       14       12       14       12       14       12       14       10       12       9       8       10       12       20       16       13	L L L L M M M L P M L L L M M M M M M M	20/40 20/35 30/60 35/70 20/40 10/20 10/20 10/20 10/20 15/30 5/15 15/30 10/20 10/20 5/10 5/10 5/10 5/10 5/10		