



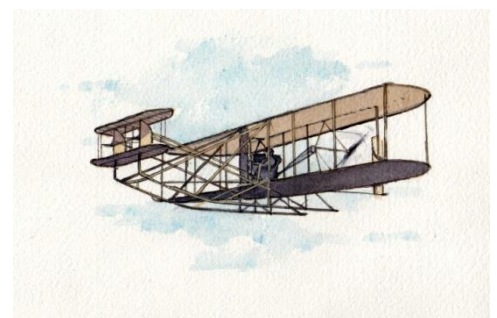
Scouts: Air Activities Badge Stage 3

Name: _____

Scout Troop: _____

Patrol: _____

To gain this badge, you must:	Tick when completed
1. Know the rules relating to access to airfields in Policy, Organisation and Rules	
2. Carry out research into the development of a specific aircraft type, discovering details of its history, role and achievements.	
3. In the course of your research, visit at least one place of interest that is directly relevant to your project. For example a museum, an air display or an aeronautics factory.	
4. Understand the terms nose, fuselage, tail, wings, port, starboard and tailfin. Also learn the names of an aeroplanes control surfaces.	



Part 1: Know the rules relating to access to airfields in Policy, Organisation and Rules

Rules can be found at: <http://www.scoutbase.org.uk/library/hqdocs/facts/pdfs/fs120702.pdf>

Airfields can be dangerous places. Answer the questions below to make sure you understand the rules.

1. What should you do before going to any airfield?

- a) Make sure you pack appropriate clothing?
- b) Get permission from the airfield?
- c) Arrive and ask for help?

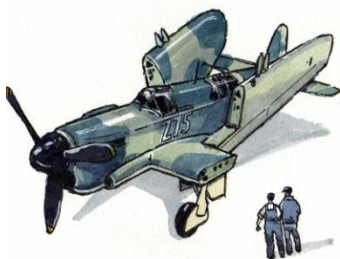
Jet Engines are one of the most dangerous hazards on the air field.



Always STOP well away from the aircraft until a responsible person guides you to where to board.

2. When approaching an aircraft with its engines running you should do so from ...

- a) the side of the aircraft to keep clear of the danger area.
- b) the front of the aircraft so you can be seen.
- c) the rear of the aircraft to avoid a collision if the plane moves forward.



3. If an aircraft engine is shut down, it is safe to touch the propeller. True or false.

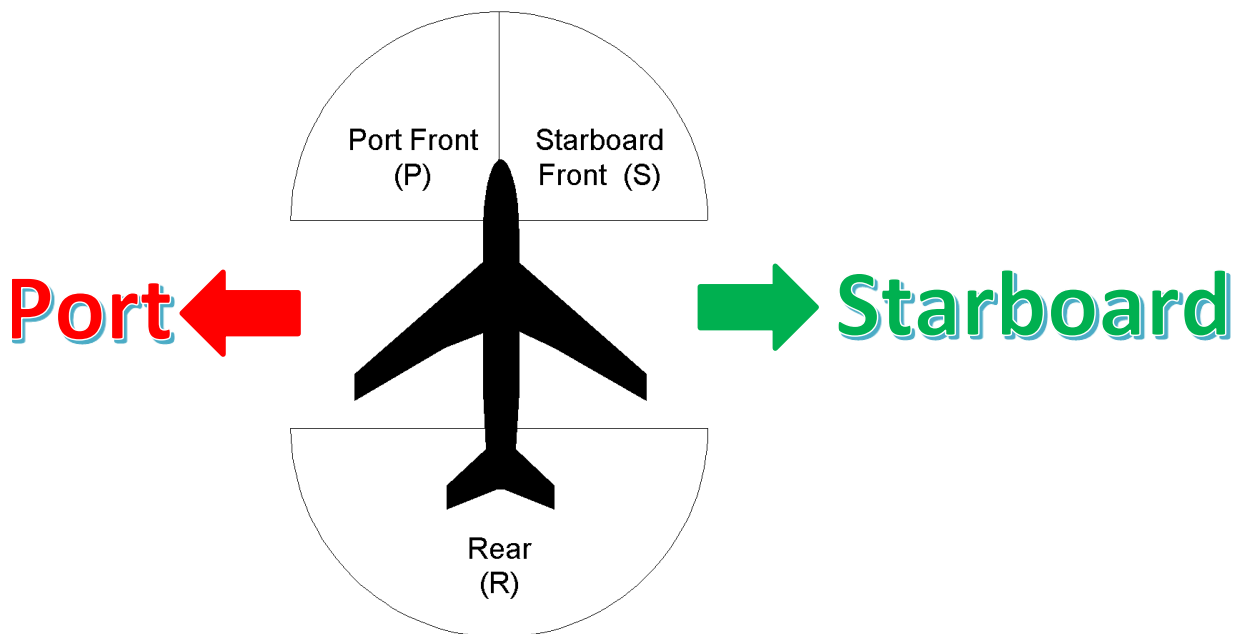
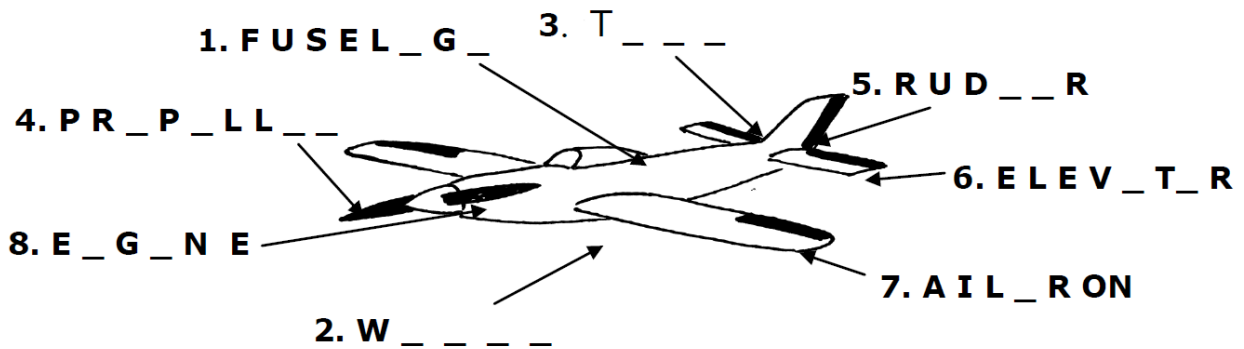
- a) True
- b) False

Tick **all** the correct answers; there may be more than one.

4. When crossing an airfield you should...

- a) Follow the green cross code.
- b) Choose a route clear of all obstructions.
- c) Constantly radio the control tower for instructions.
- d) Split into lots of small groups.
- e) Choose a route that will minimise the amount of time spent in the take-off and landing area.

Part 2: You should become familiar with the terms used on aircraft and also learn the names of the Aircraft Control Surfaces.



The terms port and starboard are used to identify the different sides of the aircraft. Do you know of any other forms of transport that use these terms?

FACT:

Port and Starboard are used to avoid confusion. The terms refer to the sides of the aircraft. Therefore it should not matter which way you are facing!

Part 3: Carry out research into the development of a specific aircraft type, discovering details of its history, role and achievements.

To complete this section research 6 different aircraft by answer the following questions.

Sopwith Baby: Hall 1

This aircraft is fitted with Le Prieur rockets, mounted between the wings. What were these rockets mainly used to attack? Look up above the aircraft to see pictures of these rockets in action.

This aircraft is fitted with 2 rudders one for steering the aircraft during flight. Find the 2 rudders on the aircraft. When would the second rudder used?

Some aircraft were fitted with machine guns. Machine guns could be very dangerous to your own aircraft and could result in bullets hitting your own propeller. Look on the wall opposite to discover what device was engineered to overcome this problem.

I _____ G _____

FACT:

Look carefully on the starboard side of the cockpit. There is a small wind generator mounted. This wind generator created the electricity to create a spark to fire the rockets.

Statistics Table: Sopwith Baby

Role	
Engine details	
Measurements	Wing Span:
	Length
	Height
Top speed	
Armament	

**Insert Photograph or make a drawing
of the Sopwith Baby**

Sea King: Hall 1

What are the 4 main roles of a Sea King?

1. _____
2. _____
3. _____
4. _____

When was the Sea-King painted in the joint Naval and RAF search and rescue colours?

What is its nickname?

Find out details of when a Sea King was used for rescue.

How many people were airlifted during the Boscastle flood on the Monday the 16th of August 2004?

How many Search and Rescue bases are there around England, Scotland and Wales?

Statistics Table: Sea King HAS. 1

Top Speed (mph)	
Length	
Rotor Diameter	
Engine Type	
Years in Service	

**Insert Photograph or make a drawing
of the Sea King**

Seafire: Hall 2

What was the main role of a Seafire?

Which aircraft were converted to Seafire's?

Investigate the aircraft. What changes have been made to allow the Seafire to be used on an aircraft carrier?

Achievement: What was the first success for the seafire?

Make some notes on the action seen by the Seafire.

Statistics Table: Seafire F Mk.17

Length	
Wingspan	
Weight	
Armament	
Engine Horsepower	
Engine Type	
Years in Service	

**Insert Photograph or make a drawing
of the Seafire**

Sea Harrier: Hall 4

What were the 3 main roles of a Sea Harrier?

1. _____
2. _____
3. _____

This aircraft is described as V/STOL. What does this stand for? What other aircraft in this hall is V/STOL.

V/STOL: _____

The _____ is also a V/STOL aircraft.

Which conflict was the Sea Harrier XZ493 involved in and what year was this?

Conflict _____

Year _____

Find out who piloted XZ493 during the conflict and make some notes on his service.

Statistics Table: Sea Harrier

Type	
Crew	
Length	
Span	
Engine Type	
Speed	
Years in service	

Insert Photograph or make a drawing of the Sea Harrier

Concorde 002: Hall 4

What was the main role of Concorde 002?

What year did Concorde enter commercial service?

Which countries and airlines were involved in developing the Concorde project?

Country _____

Country _____

Airline _____

Airline _____

Achievement: What was special about the speed of Concorde? Why do you think this was an achievement?

At the tail end of Concorde there is a video. Watch this video and make notes on other key facts related to the development and history of Concorde.

Statistics Table: Concorde

Top Speed (mph)	
Time of Fastest Flight from New York to London	
First Flight of Type 002	
Number Produced	
Engine Type	

Insert Photograph or make a drawing of Concorde

Aircraft of your choice

Name of aircraft _____

What was the main role of the aircraft?

Achievement: What successes has your aircraft had?

Use this space to record **2** extra facts about your aircraft.

Statistics Table: _____

Complete the statistics table for your chosen aircraft.

Type	
Years in service	

Well done you have completed the Air Researcher Trail