

Air Activities Stage 3

Visit an Air Museum

That's the easy bit done, put a tick in the box.

Once you have told others about something you have learned, tick the second box.

H1 H6

The Royal Air Force has been at the cutting edge of technology since its formation in 1918. Drones or unmanned aircraft are one of the most recent innovations in aviation.

We have a Predator unmanned aircraft or 'RPAS' in Hanger 6.



What does **RPAS** stand for?

R

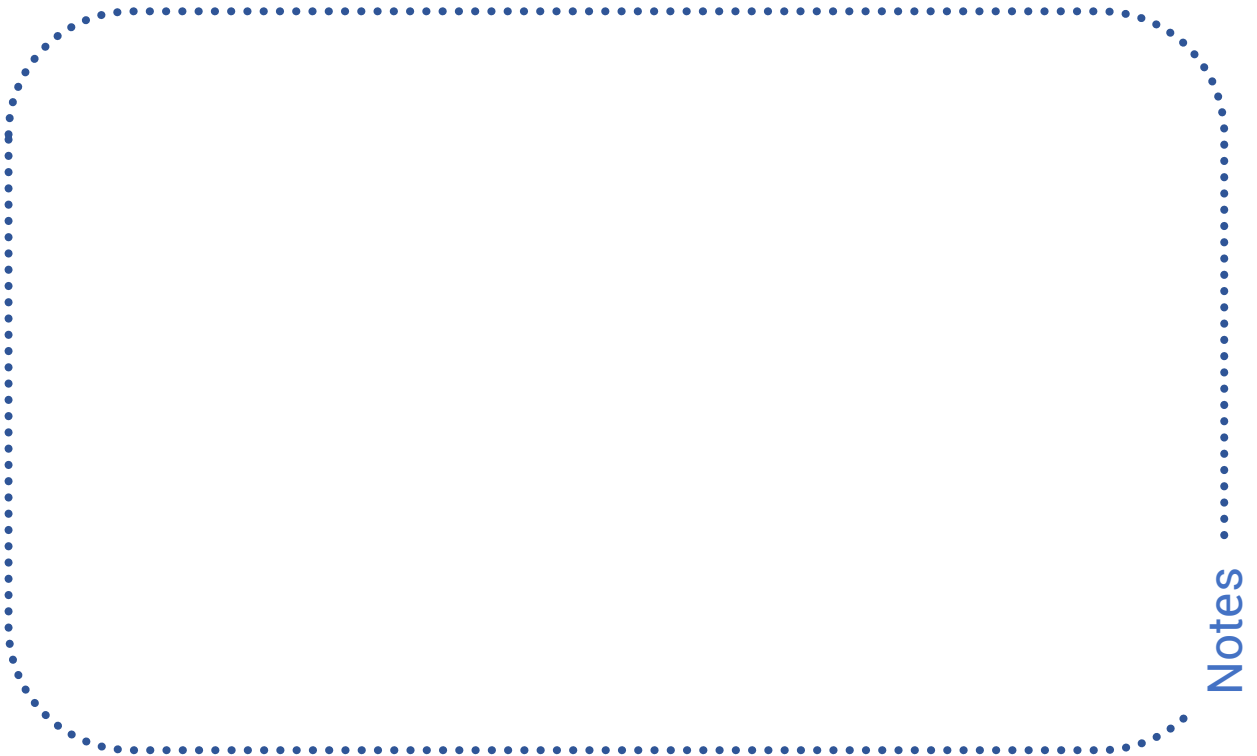
P

A

S

H1

In **RAF: First to the Future** you can read or listen to an interview with an RAF drone pilot or use the interactive table to find out more flying unmanned aircraft.



You can find out more about the rules for flying drones on the Civil Aviation Authority's website.

Not all drones carry weapons, or are as big as the ones used by the RAF but they can still be dangerous. What do you think some of the dangers might be?

.....

.....

.....

Do you think all aircraft will be 'unmanned' in the future?

Yes No

Have a chat with a member of your scout group about why you think this.

Find the Lancaster. It is identified by the big letter 'S' painted on the tail.



It is easy to follow instructions when they are written down, but if you had been give the same instruction over the phone or a radio, it may have been harder...



This Lancaster became known as 'S' for Sugar, during the Second World War. By saying 'S' for Sugar, the 'S can't be mistaken for an 'F'.



Brilliant idea, but to stop any confusion, everyone needs to use the same word for each letter.

The Royal Air Force now uses the NATO Phonetic Alphabet.

Alfa, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, India, Juliette, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Romeo, Sierra, Tango, Uniform, Victor, Whiskey, Xray, Yankee, Zulu

What should the Lancaster be called?

H3

The serial number of the Hawker Typhoon is made up of letters and numbers. Fill in the missing letters.



2 3 5

.....

You are the pilot of the Hawker Typhoon. Use the NATO alphabet to give yourself a radio call sign based on your initials.



This is

.....

flying Hawker Typhoon

2 3 5

.....

Are you receiving? Over.



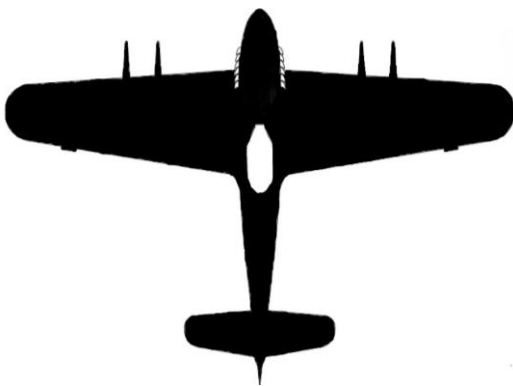
Receiving. Go Ahead. Over



I have damage to my port wing. Over

Why is the word 'over' used at the end of each message?

.....



The port wing is on the left in the direction of travel, starboard on the right. Mark them on both pictures using a P or an S.

Draw arrows to match the parts of the aircraft to the correct descriptions.

Fuselage

Gives the aircraft stability

Nose

Main body of the aircraft

Tailfin

Generates 'lift' so the aircraft can fly

Wings

Front part of aircraft, points to direction of travel

Add arrows to label the parts on the Eurofighter Typhoon



See the Eurofighter Typhoon in

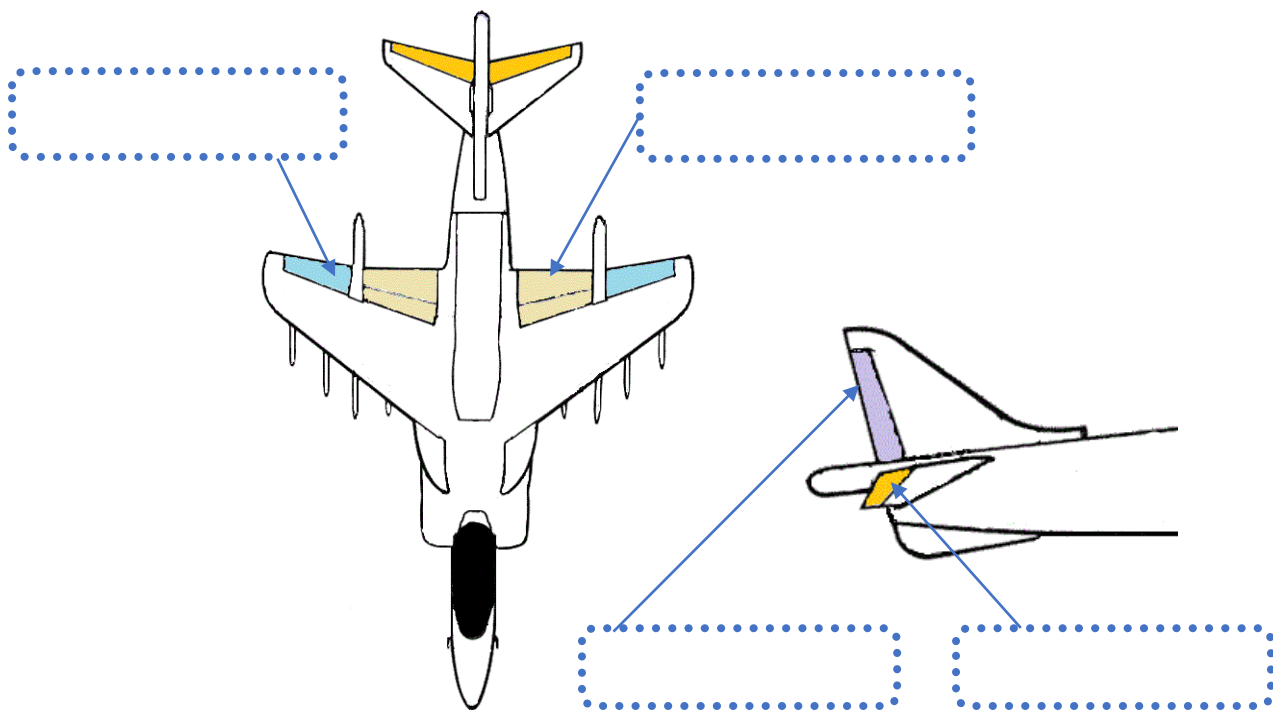


Find the Harrier, stand underneath and look up at the wings.

Flight Control surfaces are moving parts of the airframe. They allow the pilot to manoeuvre the aircraft.

Ailerons are on the outside of the trailing edge (back) of the wing. By moving the ailerons up and down the plane can roll.

Flaps are on the inside of the wings trailing edge. By extending the flaps, the aircraft can gain more 'lift'.



The **Rudder** is on the vertical part of the tail. Moving the rudder directs the nose of the aircraft, left or right.

Elevators are on both sides of the tail plane (the flat bit of the tail). Moving the elevators direct the aircraft nose up and down.