

**Fire on board.**

**Describe the picture below.**

What is happening?

Where is it?

Do you think it is a real fire or a training exercise? Why?

What are the **fire brigade** doing?

What type of aircraft is it?

What are the **firemen** wearing?

What liquid are they using to **put out** the fire?

Is the fire **under control** or **out of control**?

What could have caused the fire?



## Vocabulary

smoke    smell    oxygen mask    warning light  
fire brigade    choke    escape chutes    evacuate  
burn    source    out of control    under control

### Match the words in the box with the meanings below:

1. remove people to a safe place due to danger - **evacuate**
2. the fire has been contained
3. the origins of the fire
4. emergency slide
5. the fire is spreading rapidly
6. grey fumes created by fire
7. an injury received from fire
8. breathing equipment
9. people who put out fires
10. odour
11. a light that tells you about a serious problem
12. have breathing difficulties

### Vocabulary exercise

Complete the sentences with a suitable word.

1. I can \_\_\_\_\_ burning but I can't see any \_\_\_\_\_.
2. Can you identify the \_\_\_\_\_ of the fire?
3. A \_\_\_\_\_ has just come on, indicating there is a fire in the washroom.
4. The passengers are \_\_\_\_\_ due to the thick smoke.
5. Tell the passengers to put on their \_\_\_\_\_.
6. The fire is \_\_\_\_\_ and the flames have gone out.
7. The fire is \_\_\_\_\_ and the flames are spreading.
8. We need to \_\_\_\_\_ the passengers as soon as possible.
9. We request the \_\_\_\_\_ on landing.
10. Release the \_\_\_\_\_ for immediate evacuation .
11. We have a passenger with severe \_\_\_\_\_ who requires immediate medical assistance.

**Questions:** choose the **best** question.

1. You want to know if there is a smell of smoke in the cabin.
  - a. Can you smell smoke?
  - b. Do you smell smoke?
2. You want to know where the fire is coming from.
  - a. What is the source of the fire?
  - b. What does the source of the fire come from?
3. You want to know if the warning light is on.
  - a. Does the warning light come on?
  - b. Has the warning light come on?
4. You want to know if the passengers can breathe properly.
  - a. Are the passengers choking?
  - b. Do the passengers choke?
5. You want to know if the fire is spreading.
  - a. Does the fire out of control?
  - b. Is the fire out of control?
6. You want to know if the pilot intends to use the escape chutes.
  - a. Are you going to use the escape chutes?
  - b. Do you use the escape chutes?
7. You want to know if the pilot requires the fire brigade on arrival.
  - a. Do you require the fire brigade on arrival?
  - b. Are you requiring the fire brigade on arrival?
8. You want to know if any passengers are injured.
  - a. Do any passengers burn?
  - b. Have any passengers received burns?
9. You want to know if it is a good idea to use oxygen masks.
  - a. Are we using oxygen masks?
  - b. Should we use oxygen masks?
10. You want to know if it is necessary to evacuate the passengers.
  - a. Do we need to evacuate the passengers?
  - b. Are we needing to evacuate the passengers?

**Now read the situations and ask your colleague appropriate questions.**

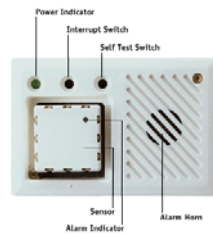
1. You want to know if there is a smell of smoke in the cabin.
2. You want to know where the fire is coming from.
3. You want to know if the warning light is on.
4. You want to know if the passengers can breathe properly.
5. You want to know if the fire is spreading.
6. You want to know if the pilot intends to use the escape chutes.
7. You want to know if the pilot requires the fire brigade on arrival.
8. You want to know if any passengers are injured.
9. You want to know if it is a good idea to use oxygen masks.
10. You want to know if it is necessary to evacuate the passengers.

## Onboard fire equipment

smoke detector    portable fire extinguisher    fire axe  
fire protection gloves    smoke hood    smoke goggles    fire blanket



a.



b.



c.



d.



e.



f.



g.

### What is the above equipment used for?

Match the sentences.

- |                                    |                          |
|------------------------------------|--------------------------|
| 1. Use the smoke goggles to...     | a. put out fires.        |
| 2. The smoke alarm is used to...   | b. protect your hands.   |
| 3. Use the fire axe to...          | c. suffocate the fire.   |
| 4. Use the fire extinguisher to... | d. help you breathe.     |
| 5. Use the smoke hood to...        | e. protect your eyes.    |
| 6. Use the fire blanket to...      | f. detect fires.         |
| 7. Use the gloves to...            | g. smash through panels. |

### Speaking: now test your partner.

Eg. What is a fire blanket used for?

What would you use if you wanted to smash through a panel?

What would you put on if there was smoke in the cabin?

## Important verbs

**break out   catch fire   put out   set on fire   set off**

### Match the words in the box with the meanings below:

1. The fire brigade **extinguished** the fire.
2. The cigarette smoke **made** the smoke alarm **ring**.
3. Engine number one **ignited** on take-off.
4. The fan in the washroom / toilet **ignited** due to the electrical fault.
5. A fire **started** during the flight.

### Mid-air cockpit fire causes Jetstar Airbus emergency landing



An Airbus owned by a budget Australian airline with over 200 people on board has made an emergency landing on the remote island of Guam after a fire **broke out** in the cockpit as the plane flew over the western Pacific Ocean. The A330-200 Jetstar aircraft – the same model as the fatal Air France plane which crashed off the coast of Brazil last week – was carrying 190 passengers, including two Britons, and 13 crew, when the fire **broke out** mid-air about four hours after it had taken off from Japan. In the early hours of Thursday, the pilots on Flight JQ20 **smelt smoke** and **saw flames** licking the side of the right hand cockpit window and immediately began to **put out** the flames with a **fire extinguisher**. They then placed a mayday call and prepared for an emergency landing in Guam, a small US territory which forms part of the Micronesia island chain in the Pacific region, about 1300 miles east of the Philippines. The aircraft landed without incident and there were no injuries among the passengers – the majority of whom were Japanese and Australian - or crew. The cause of the fire is unknown at present.

## Speaking

Explain why the following sentences are false.

1. The fire **broke out** in the cabin.

“The fire **didn't break out** in the cabin. It **broke out** in the cockpit. The captain discovered the fire.”

2. The fire **broke out** over the Atlantic Ocean.

3. The fire **broke out** just after the Airbus had taken off from Japan.

4. The steward **smelt smoke** and **saw flames** coming from the washroom.

5. A passenger **put out** the flames with a **fire blanket**.

6. The pilot didn't declare an emergency and continued on its journey to Australia.

7. The plane crashed on landing.

8. Several passengers were injured and were taken to hospital.

## Causes of fire on board

Read the following incidents where a fire started or smoke was detected on board. What was the cause of the smoke / fire and what action did the pilot take?

1. An ATR 42 was en-route to the Isle of Man when an AFT SMK warning was triggered on the flight deck, indicating there was smoke in the toilet compartment at the rear of the aircraft. The cabin crew member carried out the fire fighting procedure and the smoke cleared. The cover on the illuminated **RETURN TO SEAT** sign in the toilet had overheated and the bulb filaments had failed, producing smoke.

2. During taxi to Runway 27R, a wheel fire on a Boeing 747 was seen by the crew of another aircraft who reported it to ATC. The commander of Boeing 747 brought it to a stop and requested the assistance of the fire service. When the fire service arrived, they saw smoke coming from the No 7 wheel but no fire. The wheel was removed and the aircraft towed to a stand where the passengers disembarked. The cause of the fire was attributed to a failure of the outer bearing in the wheel; this resulted in a loss of support and caused the rotating wheel hub to rub against the axle.

3. A Bombardier CL600 was on a scheduled flight from London Heathrow to Dusseldorf. Shortly after take-off, the Engine Indicating and Crew Alerting System (EICAS) gave a "SMOKE CARGO" warning. The crew carried out the appropriate emergency procedure, declared an emergency and returned to London Heathrow airport. Following a search of the cargo hold, no sign of fire or smoke was found and the aircraft was towed to a parking stand where the passengers were disembarked normally. The investigation concluded that the warning was spurious; probably caused by the smoke detector reacting to dust, condensation or electromagnetic interference. This aircraft had been fitted with a new design of smoke detector, which was intended to reduce its susceptibility to these factors.

4. During cruising flight at Flight Level (FL) 330, the crew of a Beech King Air 350 reported an electrical burning smell and smoke in the cockpit, and diverted to Cardiff Airport. The cause was subsequently found to have been caused by electrical shorting due to moisture ingress into the right circuit breaker panel, located directly below the direct vision (DV) panel in co-pilot's side window. Before the flight, the aircraft had been parked outside for two days at Galway, during which time it had rained.

5. Prior to the flight the aircraft was de-iced due to snow accumulation. During a 'No Engine Bleed Air Takeoff', in which APU bleed air was in use, fumes and smoke entered the cockpit and cabin causing some passengers to suffer from eye and throat irritation. After isolating the APU bleed air and selecting engine bleed air the fumes dissipated. The aircraft returned to Newcastle and the passengers were offered medical attention. The fumes were as a result of de-icing fluid entering the APU air inlet during the initial climb out.

**Answers:**

**Match the words in the box with the meanings below:**

1. remove people to a safe place due to danger - **evacuate**
2. the fire has been contained - **under control**
3. the origins of the fire - **source**
4. emergency slide - **escape chutes**
5. the fire is spreading rapidly - **out of control**
6. grey fumes created by fire - **smoke**
7. an injury received from fire - **burn**
8. breathing equipment - **oxygen mask**
9. people who put out fires - **fire brigade**
10. odour - **smell**
11. a light that tells you about a serious problem - **warning light**
12. have breathing difficulties - **choke**

**Complete the sentences with a suitable word.**

1. I can **smell** burning but I can't see any **smoke**.
2. Can you identify the **source** of the fire?
3. A **warning light** has just come on, indicating there is a fire in the washroom.
4. The passengers are **choking** due to the thick smoke.
5. Tell the passengers to put on their **oxygen masks**.
6. The fire is **under control** and the flames have gone out.
7. The fire is **out of control** and the flames are spreading.
8. We need to **evacuate** the passengers as soon as possible.
9. We request the **fire brigade** on landing.
10. Release the **escape chutes** for immediate evacuation .
11. We have a passenger with severe **burns** who requires immediate medical assistance.

**Questions:** choose the **best** question.

1. a. Can you smell smoke? ✓  
b. Do you smell smoke? ✗
2. a. What is the source of the fire? ✓  
b. What does the source of the fire come from? ✗
3. a. Does the warning light come on? ✗  
b. Has the warning light come on? ✓
4. a. Are the passengers choking? ✓  
b. Do the passengers choke? ✗
5. a. Does the fire out of control? ✗  
b. Is the fire out of control? ✓
6. a. Are you going to use the escape chutes? ✓  
b. Do you use the escape chutes? ✗



7. a. Do you require the fire brigade on arrival? ✓  
b. Are you requiring the fire brigade on arrival? ✗
8. a. Do any passengers burn? ✗  
b. Have any passengers received burns? ✓
9. a. Are we using oxygen masks? ✗  
b. Should we use oxygen masks? ✓
10. a. Do we need to evacuate the passengers? ✓  
b. Are we needing to evacuate the passengers? ✗

### **Onboard fire equipment**

- a. smoke goggles
- b. smoke detector
- c. fire axe
- d. portable fire extinguisher
- e. smoke hood
- f. fire blanket
- g. fire protection gloves

### **What is the above equipment used for?**

1. Use the smoke goggles to...e. protect your eyes.
2. The smoke alarm is used to...f. detect fires.
3. Use the fire axe to...g. smash through panels.
4. Use the fire extinguisher to... a. put out fires.
5. Use the smoke hood to...d. help you breathe.
6. Use the fire blanket to...c. suffocate the fire.
7. Use the gloves to...b. protect your hands.

### **Important verbs**

1. The fire brigade **extinguished** the fire. - **put out**
2. The cigarette smoke **made** the smoke alarm **ring**. - **set off**
3. Engine number one **ignited** on take-off. - **caught fire / set on fire**
4. The fan in the washroom / toilet **ignited** due to the electrical fault. - **caught fire / set on fire**
5. A fire **started** during the flight. - **broke out**

### **Speaking**

2. The fire didn't break out over the Atlantic Ocean. It broke out over the Pacific Ocean.
3. The fire didn't break out just after the Airbus had taken off from Japan. The fire broke out 4 hours after it had taken off from Japan.
4. The steward didn't smell smoke and see flames coming from the washroom. The captain saw flames coming from the cockpit window.
5. A passenger didn't put out the flames with a fire blanket. The captain put out the flames with a fire extinguisher.
6. The pilot declared an emergency and didn't continue on its journey to Australia. It made an emergency landing in Guam.
7. The plane didn't crash on landing. It landed safely.
8. Passengers weren't injured and no one was taken to hospital.