

EXTRA ACTIVITY 3

ENGLISH AS A MATTER OF SAFETY IN AVIATION

CASE STUDY

The Avianca accident

Avianca Flight 52 was a regularly scheduled flight from Bogotá to New York, via Medellín that crashed on January 25, 1990, at 21:34. The Boeing 707 flying this route ran out of fuel after a failed attempt to land at **John F. Kennedy International Airport (JFK)**, causing the aircraft to crash onto a hillside in the small village of Cove Neck, New York, on the north shore of Long Island. Eight of the nine crew members (including all three flight crew members) and 65 of the 149 passengers on board were killed. **The National Transportation Safety Board (NTSB)** determined that the crash occurred due to the captain and co-pilot failing to properly declare a fuel-emergency failure to use an airline operational control dispatch system, inadequate traffic flow management by the **Federal Aviation Administration (FAA)**, and the lack of standardized understandable terminology for pilots and controllers for minimum and emergency fuel states.



The flight left Medellín with more than enough fuel for the journey and progressed toward JFK normally. While *en-route*, the flight was placed in three holding patterns. Due to poor communication between the air crew and the air traffic controllers, as well as an inadequate management of the fuel load by the pilots, the flight became critically low on fuel. This dire situation was not recognized as an emergency by the controllers because of the failure of the pilots to use the word “emergency”. The flight attempted to make a landing at JFK, but bad weather, coupled with poor communication and inadequate management of the aircraft, forced it to abort and attempt a go-around. The flight ran out of fuel before it was able to make a second landing attempt. The airplane crashed approximately 20 miles (32 km) from JFK.

Avianca transcript indicating the miscommunication:

While circling to make the second landing attempt, the plane ran out of fuel and crashed. Of 158 people aboard, 73 were killed, including the three crew members, and 85 were injured.

The transcript shows that at 9:24 p.m., the Avianca pilot ordered his co-pilot: “Tell them we are in emergency.”

The co-pilot told controllers: “We’re running out of fuel.”

Seconds later, the pilot said: “Advise him we are in emergency. . . . Did you tell him?”

The co-pilot replied: “Yes, sir. I already advised him.”

Moments later, the flight crew received new orders from the air traffic controllers authorizing a second approach: “Good evening, climb and maintain 3,000 (feet).”

The flight crew responded: “Climb and maintain 3,000, and, uh, we’re running out of fuel, sir.”

The controller replied: “OK, ah, fly a heading of zero-eight-zero.”

A minute later, the controller continued: “I’m going to bring you about 15 miles northeast and then turn you back on for the approach. Is that fine with you and your fuel?”

The response from Flight 52: “I guess so, thank you very much.”

At 9:32 p.m., the crew told controllers: “We just lost two engines, and we need priority, please.”

Then Flight 52 ran out of fuel and crashed.

In February, the safety board recommended that the Federal Aviation Administration insist on better communication between pilots and air traffic controllers, citing the Avianca crash as an example. The board said the Avianca crew should have used more precise phrases such as “emergency fuel” or “minimum fuel” that would have better conveyed the seriousness of its situation. Such phrases are required, it said. **The transcript indicates that language also may have contributed to the communication problems. The cockpit discussions were in Spanish. The conversations with the ground controllers were in English, and the crew seemed somewhat reluctant to assert itself to ground personnel.**

TEA
T
E
S
T:

Follow up

After examining the transcript, what do you think might be the main factor contributing to the accident?

Is the use of the phrasal verb “run out” appropriate?

Is there a more suitable way to express the concept in Aviation Phraseology?

MOCK

Part 1

The first part lasts about 8 minutes. The examiner will enquire about the candidate's flight activities. The questions are broad and do not request a specific aeronautical knowledge.

Here are some examples:

- Could you tell me about your job?
- Can you describe what you do at work?
- Is a pilot's job important?
- What's the difference between a pilot's role today, compared to the past?
- How much training is necessary to be a pilot?

Part 2

The examiner will provide six mini-audios. The candidate will be asked to say whether the speaker is a pilot or a controller, then to repeat what has been heard, choosing between the readback and the rephrasing.

After this, the examiner will play four longer audios, and the examiner will have pen and paper to take notes and to report what has been heard.

Finally, the candidate will be asked to listen to a radio communication and to ask questions concerning what has been said.

Part 3

The candidate will be shown two pictures that he will have to describe and compare.



Later, the examiner will be asked specific aviation-related questions:

“When is a situation, an emergency situation?”

“Which emergency situations should passengers be most worried about?”

“People hear a lot more about emergency situations on television these days.. What would you say to people who are worried about flying?”