

## 7 Descent, landing, and layover

### Background

In 2005, an Airbus A320 landed at Los Angeles International Airport with the wheels beneath the nose of the aircraft cocked at ninety degrees. In reports of the incident, an insight can be gained into the procedures that might be followed in an emergency situation.

The flight crew received an error message regarding a nose landing gear shock absorber. The DFDR (Digital Flight Data Recorder) then indicated that the gear handle was in the down position and then the crew received an error message of a fault in the nose wheel steering. As there was no master warning, the first officer continued to fly the aircraft while the captain tried to troubleshoot the aircraft monitoring system. The captain consulted the flight crew operating manual and maintenance control in order to evaluate the problem and attempt to ascertain the system's status. The flight crew continually updated the cabin crew and passengers.

The flight diverted to Long Beach, California and the captain decided to perform a flyby of the tower to verify the status of the landing gear. The tower airline ground personnel and a local news helicopter told him that the nose gear was down and pointing 90 degrees to the left. After discussing the situation with company representatives, the captain decided to divert to LAX because it had optimum landing conditions and better emergency support services. The crew flew for several hours to burn fuel so that they could land with less weight. The captain monitored the fuel burn to ensure that the centre of gravity stayed within limits. The captain also told the cabin crew that in the event of the nose gear collapsing, evacuation from the aft doors would be impossible, so everyone should deplane from the forward exits. The flight crew instructed the cabin crew to follow the procedures up to the point of exit from the plane, at which time they would give further instructions. Prior to landing, the captain announced "Brace" and the flight attendants also transmitted "Brace" over the public address system.

The plane touched down and the captain managed to hold the nose gear off the ground as long as possible. During the landing, the forward cabin crew could smell burnt rubber. The cabin crew stayed at their stations, as previously requested by the captain, reassuring passengers and remaining outwardly calm. The air traffic control tower confirmed that there was no fire, and the captain announced this to the cabin crew. After this notification, the passengers deplaned normally.

No one on-board the aircraft sustained an injury. Procedures were followed and the cabin crew and flight crew worked as a team and achieved a very positive outcome.

The Delta airways emergency landing at JFK Airport in September 2010 was caused by landing gear not deploying correctly. The pilot eventually landed the aircraft on two sets of wheels and its right wing. An Atlantic Southeast Airlines spokesman praised the flight and cabin crew for their calmness and assertiveness in the situation: *"Atlantic Southeast Airlines is extremely proud of the actions and professionalism displayed by the flight crew and cabin crew of Flight 4951. Our crew members are fully trained to respond to all types of abnormal and emergency situations, and this crew did an exceptional job of following procedure to ensure the safety of our passengers"*. On Internet videos a flight attendant can be heard shouting "Heads down, stay down," as sparks fly outside and one of the plane's wings drags along the tarmac. The video captured by a passenger shows a quiet cabin in the seconds before the words "Brace for impact" came over the jet's loudspeaker. All sixty passengers exited safely.

One passenger comments that, although the cabin crew member's monotonous and repetitive shouts of "Heads down, stay down" almost seemed to make the situation tenser, he realized that this was SOP (Standard Operating Procedure) in this situation and that it needed to be followed. There are numerous stories of passengers in such situations not following procedure and causing injury to themselves or others in the process. In this unit, the language work revolves around situations during descent and landing, a critical part of the flight. The emphasis should be on the clarity of language, in terms of efficiency of word choice and delivery.

## Jargon Buster

**stand** The stand is the aircraft parking bay. It is the area where the plane finally stops and the point at which passengers disembark. It is located on the apron.

**apron** An area of an airport intended to accommodate the loading and unloading of passengers and cargo, the refuelling, servicing, maintenance and parking of aircraft and any movement of aircraft, vehicles and pedestrians necessary for such purposes.

**descent** This describes the part of an air journey where the aircraft decreases altitude and prepares to land. When the captain announces the beginning of the descent, the aircraft begins to prepare for landing.

**taxi (vb)** An aircraft taxis when it moves on the ground under its own power, for example, between the runway and the stand. The term "taxiing" is not used for the accelerating run along a runway prior to takeoff, or the decelerating run immediately after landing.

**layover** or **stopover** A break between parts of a single journey.

## Activity Assistant

**8** Suggested answers to this exercise are in the back of the book. The following are suggested extensions to these answers or phrases that could be added to those in the answer key.

- a** We are sorry for any inconvenience / If you are in need of toilet facilities while we are trying to fix the problem, please tell/bring this to the attention of one of the cabin crew /We will try to fix the problem as quickly as possible.
- b** This is due to... / This is because (of)...
- c** We are pleased to announce that the runway is clear / We are happy to say that the snow has been cleared from the runway / Thank you for your patience / understanding.
- d** We will re-open meal service in approximately ten minutes / As we will soon be preparing to land, (the trolley service will be closing shortly / If you require anything further from the trolley, please contact a member of the cabin crew (as soon as possible).
- e** This is standard procedure and should be no cause for alarm.
- f** Due to adverse weather conditions in X, we will be diverting to Y / Transfer arrangements will be made to return passengers to X / This will extend our journey time by approximately thirty-five minutes.

**11** A's lines are written in exercises 9 and 10.

So that students learn a variety of question forms, the following are suggested variations in response by B:

- 1** Why? What's wrong?
- 2** Have you any idea why?

- 3 (Why?) What's the problem (with it)?
- 4 Do you know why (it won't work)?
- 5 Can you see why?
- 6 What exactly is wrong with it?
- 7 What's the matter with it?
- 8 With what? What's made it wet?
- 9 Is that going to cause/be a problem?
- 10 Do we have a spare? Can we do anything about it?
- 11 How is it damaged?
- 12 Why?

**21** The following are suggested dialogues based on the problems illustrated at the bottom of page 59 (a-d). This could be done as a dialogue-build on the board, eliciting from students. If students do not have appropriate suggestions, the following models could be elicited through mime or prompts. Since the idea of the exercise should be to encourage students to explain problems as precisely and concisely as possible, there are three suggestions for each situation.

**Picture a**

- A** Hello. This is Room 323.
- B** Hi. How can I help you?
- A** Smoke is coming out of the back of my TV.  
Smoke is pouring out of the back of my television.  
There's (a lot of) smoke coming out of the TV.
- B** Someone will be there immediately.

**Picture b**

- A** Hi. I'm calling from Room 555
- B** Hi. How can I help?
- A** The room is very cold and I can't get the radiator to work.  
I can't work out how to turn the heating on.  
The temperature in the room is very low and the heating isn't working.
- B** I'll send someone up immediately.

**Picture c**

- A** Hi. I'm in Room 286.
- B** Hello. Can I help you at all?
- A** Yes. The hairdryer smokes when I use it. Could I get a replacement?  
Yes. The hairdryer is faulty. Smoke comes out when I try to use it. Could I have another one, please?  
I hope so. Smoke comes out of the hairdryer when I turn it on. I think I need a replacement.
- B** I will send a replacement up straight away.

**Picture d**

- A** Hello. I'm phoning from Room 498.
- B** Hello there. Is everything OK?
- A** I don't have any towels. Could you send some up, please?  
There are no towels in the bathroom. Could I have some sent up?  
I can't seem to find any towels. Could you get some sent up?
- B** Certainly. I'll do that right away.