

## 6 Safety and emergencies

### Background

On January 15<sup>th</sup> 2009 US Airways flight 1549, flying from New York to Charlotte, North Carolina ditched in the Hudson River with no loss of life. The aircraft had lost thrust in both engines due to a bird strike and the captain, having decided he would be unable to return to La Guardia or reach any other airfield, decided to make an emergency landing in the Hudson. All passengers were evacuated successfully after the aircraft had made the crash landing and the actions of the captain and crew were highly praised. The principal spokesperson for the NTSB (National Transportation Safety Board), Kitty Higgins referred to the event as the most successful ditching in aviation history.

The impact of hitting the water had ripped open a hole in the underside of the plane and a subsequent twist in the fuselage had caused cargo doors to spring open and fill the plane with water from the rear. Immediately, the flight attendants urged passengers to move forward by climbing over seats to escape the rising water within the cabin. They began evacuating passengers on to the wings through the four mid-cabin emergency window exits in the middle of the cabin and into an inflated slide deployed from the front right passenger door (the front left slide had failed to operate). To make matters worse, one passenger had tried to open the back door, (which one of the flight attendants tried unsuccessfully to reseal), and this caused more water to enter the cabin. The plane was partly submerged and floating downstream with the current. The water temperature was two degrees centigrade. The captain checked that all passengers had been evacuated and then left the plane. The rescue services then moved in and picked up the passengers, who were huddling on the partly submerged slide and on the wings of the plane.

In the event of an aircraft emergency the behaviour of passengers and crew is critical in determining the extent of passenger survival. In such circumstances flight crew often have to deal with behaviour ranging from sheer panic through to helpless dependency and frozen immobility. There have also been reports of cool, orderly competence in similar situations. Clearly the main objective in critical situations is to increase the incidence of this kind of behaviour, while dealing with a great variety of personalities. An understanding of human response to sudden traumatic events will predict the conditions where inappropriate behaviour is likely to occur. It may also indicate where behaviour more adaptive to survival can be encouraged. Studies have concluded that assertive cabin crew are essential for the rapid evacuation of aeroplanes. There are many notable examples of cabin crew actions which have led directly to the saving of many lives.

The majority of a flight attendant's duties are related to safety. Prior to each flight, flight attendants attend a safety briefing with the pilots and purser. During this briefing they go over safety and emergency check lists; boarding particulars are verified, weather conditions are discussed, including anticipated turbulence, and a safety check is conducted to ensure all equipment is on-board and the cabin is thoroughly checked. Flight attendants must conduct cabin checks every 20–30 minutes and regular cockpit checks must be done to ensure the pilot's health and safety.

In this unit and Unit 5 we see a variety of situations that flight attendants may have to deal with, but they may also encounter rejected take-offs, emergency landings, a range of in-flight medical situations, smoke in the cabin, fires, depressurization, on-board births and deaths, and dangerous goods and spills in the cabin. Flight attendants are also given training in land and water landings, which includes the

preparation of passengers and cabin, the emergency evacuation of the cabin via inflatable slides or rafts, and the follow-up survival skills for environments such as open water, jungle, and tropical or arctic climates. Flight attendants are now also given basic training on defence against terrorist attacks.

## Jargon Buster

**arm/disarm (vb) doors** If something is armed, it is ready for use. If the doors on a plane are armed, it means the door slide will inflate if the door is opened. The action of opening the door (if “armed”) causes the slide to deploy as intended. When passengers are embarking or disembarking the door is disarmed, as the slide is not needed.

**hypoxia (n)** An inadequate supply of oxygen to the tissues and cells of the body. Symptoms include headache, shortage of breath, rapid heart beat, increase in blood pressure, dizziness, and discolouration of the skin and lips.

**hypothermia (n)** A potentially fatal condition, which occurs when the body temperature drops below 95C / 35F. The condition, depending on the extent of the drop in body temperature, may be mild, moderate or severe. Different approaches are used for patients depending on the level of severity. Other considerations, such as the patient’s age or the condition of the heart, can also influence treatment choices.

**turbulence (n)** Highly irregular atmospheric motion characterized by rapid changes in wind speed and direction and by the presence, usually, of up and down currents. Turbulence can be due to flying through clouds, rain, or storms, or sometimes what is known as clear air turbulence.

**Clear Air Turbulence (CAT) (n)** Atmospheric turbulence that occurs under tranquil and cloudless conditions and subjects aircraft to strong up draughts and down draughts. It is caused when bodies of air moving at widely different speeds meet. There is an absence of any visual cues, such as clouds, rain etc. It usually occurs at high altitudes and, although it can be forecast, it cannot be detected by the aircraft radar, so there is often no warning.

## Activity Assistant

- 19** Getting students to develop appropriate intonation is often achieved by highlighting the effect of doing the opposite. Here, it has been established that in order to be assertive, delivery should be clear, calm, slow, and quiet.

For the following exercise, use the two dialogues on page 50, (exs. 18 and 20, tracks 23 and 24)

- 1** Do an example with a confident student, where you play the part of the flight attendant. Do it the first time loudly, but not quickly, the second time quickly, but not loudly and the third time angrily (i.e. loudly and quickly). You may want to do just do the first of these three and ask confident pairs of students to “perform” the other two examples in the ways prescribed.
- 2** Now, ask students to do the same in pairs (or in threes, where the third member monitors the effect of inappropriate speech delivery on the passenger). Students should do a wrong version (i.e. loud, quick or angry), followed by an appropriate version (i.e. calmly, slowly and clearly) Monitor, giving help with the correct versions.
- 3** Choose a couple of good examples to “perform” for the group.

## Over to you

Can you think of other diversion tactics which may help to calm passengers in a situation like this?

### Possible answers

Keeping calm yourself – this should be apparent in your voice and manner.

Making sure passengers are given constant updates on the situation.

Making sure your body language shows concern and is as natural as possible.

Being aware of anyone who looks as if they need assistance.

Appearing confident and competent despite any feeling you may have to the contrary.