

# Tenerife Airport

DATE OF EVENT: 27<sup>th</sup> March 1977

OUTCOME: 583 Fatalities, 61 injuries

## UNUSUAL CIRCUMSTANCES:

- Terrorist attack at destination airport. Large planes diverted to smaller regional airport.
- Lack of ground radar & high density clouds passing through the smaller regional airport.

## WHAT HAPPENED:

- International flights prepared to leave for their original destination airport.
- KLM plane was instructed to taxi down the entire runway and make a 180° turn in prep for takeoff.
- Pan Am plane was instructed to follow KLM and take exit 3. Pan Am missed the 3<sup>rd</sup> exit and continued.
- Sudden thick fog rolled in; neither the control tower, KLM, nor Pan Am had visibility of one another.
- KLM began take off without clearance. Communication between them and the tower included the phrase “takeoff” but clearance was not given.
- Pan Am attempted to alert the tower & KLM, however simultaneous radio communication caused interference. The message was not heard by either.
- KLM collided with Pan Am at exit 4, killing all people on board KLM. 61 people survived on Pan Am.

## MAH Barriers

### Radio communication

- Protocols implemented to prevent the use of ambiguous non-standard phrases.
- Air traffic instruction can no longer be acknowledged solely by ‘ok’ or ‘roger’; key parts of the message must be readback to confirm mutual understanding.

### Ground radar

- Installed following the incident to ensure visibility of plane locations in low visibility conditions.

## 7Cs Discussion Points

- **Communication** – How do you ensure your communications are received and understood?
- **Control of Work** – How do you manage operational risk in unusual circumstances?

