

SYNOPSIS

On September 3rd 2010, a Boeing 747-44AF departed Dubai International Airport (DXB) on a scheduled international cargo flight (SCAT-IC) to Cologne (CGN), Germany.

Twenty two minutes into the flight, at approximately 32 000 feet, the crew advised Bahrain Area East Air Traffic Control (BAE-C) that there was an indication of an on-board fire on the Forward Main Deck and declared an emergency.

Bahrain Air Traffic Control advised that Doha International Airport (DOH) was “at your ten o’clock and one hundred miles, is that close enough?”, the Captain elected to return to DXB, configured the aircraft for the return to Dubai and obtained clearance for the turn back and descent.

A cargo on the main cargo deck had ignited at some point after departure. Less than three minutes after the first warning to the crew, the fire resulted in severe damage to flight control systems and caused the upper deck and cockpit to fill with continuous smoke.

The crew then advised Bahrain East Area Control (BAE-C) that the cockpit was “full of smoke” and that they “could not see the radios”, at around the same time the crew experienced pitch control anomalies during the turn back and descent to ten thousand feet.

The smoke did not abate during the emergency impairing the ability of the crew to safely operate the aircraft for the duration of the flight back to DXB.

On the descent to ten thousand feet the captains supplemental oxygen supply abruptly ceased to function without any audible or visual warning to the crew five minutes and thirty seconds after the first audible warning. This resulted in the Captain leaving his position. The Captain left his seat and did not return to his position for the duration of the flight due to incapacitation from toxic gases.

The First Officer (FO), now the Pilot Flying (PF) could not view outside of the cockpit, the primary flight displays, or the audio control panel to retune to the UAE frequencies.

Due to the consistent and contiguous smoke in the cockpit all communication between the destination (DXB) and the crew was routed through relay aircraft in VHF range of the emergency aircraft and BAE-C.

BAE-C then relayed the information to the Emirates Area Control Center (EACC) in the UAE via landline, who then contacted Dubai ATC via landline.

As the aircraft approached the aerodrome in Dubai, it stepped down in altitude, the aircraft approached DXB runway 12 left (RWY 12L), then overflew the northern perimeter of the airport at 4 500 ft at around 340 kts. The PF could not view the Primary Flight Displays (PFD) or the view outside the cockpit.

The PF was advised Sharjah International Airport (SHJ) was available at 10 nm. This required a left hand turn, the aircraft overflew DXB heading East, reduced speed, entering a shallow descending right-hand turn to the south of the airport before loss of control in flight and an uncontrolled descent into terrain, nine nautical miles south west of Dubai International Airport.

There were no survivors.