

Aircraft Accident

Cubana de Aviacion

DC8-43 Aircraft

CUT-1201

which crashed into the sea northwest of  
Bridgetown, Barbados on October 6, 1976  
with the loss of all on board

*The Commission determines that  
the accident was due to the  
effects of an explosive device  
placed within the passenger  
compartment of the aircraft*

REPORT OF THE COMMISSION OF ENQUIRY

PART ONE

Bridgetown, Barbados  
March, 1977

2.3

Events in the Flight Compartment

*The following analytical reconstruction of probable events during the flight is based on assessment of evidence detailed elsewhere in this report and on related technical studies.*

The take-off and climb-out from Seawell were normal. The First Officer was at the flight controls and the Captain was handling the radio communications. At 1723 the aircraft had reached an altitude of about 16,000 feet.

A few seconds later the crew heard violent explosive sounds which appeared to come from the rear of the aircraft. The Captain pressed his microphone button and shouted "cuidado" (be careful) as he assumed control. The First Officer then reported an explosion and fire to air traffic control.

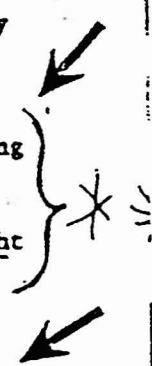
The Captain commenced an emergency descent and at 1723:43 started a right turn toward Seawell Airport. During the rapid descent the crew carried out emergency procedures to effect smoke removal.

The flight compartment door had been locked in accordance with regulations. During the emergency a crew member opened the door. Heavy smoke and noxious fumes entered the flight compartment causing the Captain to shout "Close the door! Close the door!"

In the passenger cabin, an uncontrollable fire had started in the aft cabin making it impossible to reach the wall-mounted fire extinguisher or to open the galley access door to remove the smoke. Some occupants of the cabin died within minutes from the effects of noxious gases produced by burning plastic materials. They were still strapped to their seats. The cabin flight attendants were similarly affected. The fire was intensified by oxygen escaping from shattered supply lines in the rear.

The pilots continued to attempt to reach Seawell airport. They reduced speed and altitude, lowered flap and extended the landing gear. During the descent they flew through rainshowers. Heavy black smoke and choking fumes continued to enter the flight compartment and the pilots had great difficulty seeing the flight instruments. Nevertheless they managed to guide the aircraft almost to the extended centre-line of runway 09 at Seawell.

Finally it became impossible to see the flight instruments because of the smoke. Irritation from the chemical fumes made wearing the oxygen masks uncomfortable. One pilot opened a cockpit window but the only effect was to draw more smoke; the other shouted "That's worse! Go near the water! Go near the water!"



4.0

RECOMMENDATIONS

The Commission of Enquiry recommends that the Government of Barbados brings the following items formally to the attention of the International Civil Aviation Organization for dissemination to member states:


- (a) *Flight crew members in large Commercial aircraft should be provided with an adequate number of effective portable devices to protect the eyes and respiratory tract, for use in emergencies related to fire and toxic gases.* } ←
- (b) *Research and regulatory action should be expedited to develop and require the use of materials in aircraft cabins that do not support combustion and do not produce toxic gases when exposed to high temperatures.* } ←
- (c) *The criteria for the certification of large Commercial aircraft should include requirement for a positive means of smoke removal, particularly from the cockpit area.* } \*

For reasons of security, other recommendations are being made in a separate document.

By the Commission of Enquiry

Denys Ambrose Williams  
Chairman

Thomas Edwin Went  
Member

  
William Maurice Howes  
Member

Bridgetown Barbados

March 1977.