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Accident

Status:	Final	languages:    
Date:	26 MAY 1991	
Time:	23:17	
Type:	Boeing 767-3Z9ER	
Operator:	Lauda Air	
Registration:	OE-LAV	
C/n / msn:	24628/283	
First flight:	1989-09-26	
Total airframe hrs:	7429	
Cycles:	1132	
Engines:	2 Pratt & Whitney PW4060	
Crew:	Fatalities: 10 / Occupants: 10	
Passengers:	Fatalities: 213 / Occupants: 213	
Total:	Fatalities: 223 / Occupants: 223	
Airplane damage:	Written off	
Location:	5,6 km (3.5 mls) NNE of Phu Toey (Thailand)  show on map	
Phase:	En route	
Nature:	International Scheduled Passenger	
Departure airport:	Bangkok-Don Muang International Airport (BKK/VTBD) , Thailand	
Destination airport:	Wien-Schwechat International Airport (VIE/LOWW) , Austria	
Flightnumber:	004	

Narrative:

Lauda Air Flight NG004 was a scheduled service from Hong Kong (HKG) back to Vienna (VIE), Austria. An intermediate stop was made in Bangkok (BKK), Thailand. The flight departed Bangkok at 23:02 hours. Some five minutes after takeoff the pilot-in-command stated "that keeps coming on," referring to a REV ISLN advisory warning. This indication appears when a fault has been detected in the thrust reverser system. The crew discussed the REV ISLN indication for about four and one-half minutes. The co-pilot read information from the Airplane Quick Reference Handbook as follows: "Additional systems failures may cause in-flight deployment" and "Expect normal reverser operation after landing." The pilot-in-command remarked "...its not just on, its coming on and off," he said, "...its just an advisory thing..." and shortly thereafter stated, "could be some moisture in there or something." At 23:12, the co-pilot advised the pilot-in-command that there was need for, "a little bit of rudder trim to the left." Fifteen minutes and one second into the flight the co-pilot exclaimed, "ah reverser's deployed," accompanied by sound similar to airframe shuddering, sounds of metallic snaps and the pilot-in-command stating "here wait a minute." With the deployment of the nr.1 engine thrust reverser, engine thrust was reduced to idle. Aerodynamic effects of the reverser plume in-flight during the engine run down to idle resulted in a 25 percent lift loss across the wing. The airplane stalled and entered an uncontrolled descent. Buffeting, maneuvering overload,

and excessive speed caused pieces of the rudder and the left elevator to separate. This was followed by the down-and-aft separation of most of the right horizontal stabilizer from maneuvering overloads, as the crew attempted to control the airplane and arrest the high-speed descent. A torsional overload then caused the separation of the vertical and left horizontal stabilizers. The loss of the tail resulted in a sharp nose-over of the airplane, producing excessive negative loading of the wing. A downward wing failure was probably followed by the breakup of the fuselage. The complete breakup of the tail, wing, and fuselage occurred in a matter of seconds. The wreckage fell in mountainous jungle terrain.

PROBALE CAUSE: "The Accident Investigation Committee of the Government of Thailand determines the probable cause of this accident to be uncommanded in-flight deployment of the left engine thrust reverser, which resulted in loss of flight path control. The specific cause of the thrust reverser deployment has not been positively identified."

Follow-up / safety actions:

The Thai Aircraft Accident Investigation Committee recommended that the United States FAA examine the certification philosophy of all airplane certificated with ground only engine thrust reverser systems to provide appropriate design safeguards to prevent in-flight deployment.

The Aircraft Accident Investigation Committee also recommends that the FAA revise the certification standards for current and future airplane flight recorders intended for use in accident investigation to protect and preserve the recorded information from the conditions of prolonged thermal exposure that can be expected in accidents which occur in locations that are inaccessible for fire fighting efforts.

Events:

[Airplane - Engines - Reverse thrust/prop ground fine pitch
Result - Loss of control](#)

Sources:

Aviation Week & Space Technology 03.06.1991 (32), 10.06.91 (28-30)

- » [CVR transcript Lauda Air Flight 004](#)
- » [Accident Investigation Report](#) [HTML]

Statistics

3rd loss of a Boeing 767
 The worst accident involving a Boeing 767 (at the time)
 3rd worst accident involving a Boeing 767 (currently)
 The worst accident in Thailand (at the time)
 The worst accident in Thailand (currently)

» [figures explained](#)

Photos



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