
Spurious engine fire warning, Boeing 727-276, XA-SIJ, April 3, 1995

Micro-summary: Following a a spurious engine fire warning on climb, this Boeing 727 returned to the origin for an evacuation.


Event Date: 1995-04-03 at 0949 CDT

Investigative Body: National Transportation Safety Board (NTSB), USA

Investigative Body's Web Site: <http://www.nts.gov/>

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		NTSB ID: FTW95IA156		Aircraft Registration Number: XASIJ	
		Occurrence Date: 04/03/1995		Most Critical Injury: Minor	
		Occurrence Type: Incident		Investigated By: NTSB	
Location/Time					
Nearest City/Place DFW AIRPORT		State TX	Zip Code 75261	Local Time 0949	Time Zone CDT
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer BOEING			Model/Series 727-276		Type of Aircraft Airplane
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>On April 3, 1995, at 0949 central daylight time, a Boeing 727-276, Mexican Registration XA-SIJ, sustained minor damage and one passenger and one flight attendant received minor injuries during an emergency evacuation at Dallas/Fort Worth Airport (DFW), Texas. Seven crew members and 151 passengers were not injured. The airplane, owned and operated by Aeroejecutivo, S.A. de C.V. as Aeroexo flight 749, departed DFW for Cozumel, Mexico, at 0920 CDT, on a Title 14 CFR Part 129 non-scheduled international flight. Visual meteorological conditions prevailed and an IFR flight plan was filed and in effect.</p>					
<p>During personal interviews, and on the enclosed statements, the crew reported the following information. After a normal takeoff from DFW, the aural and visual fire warnings for the number 1 (left) engine activated during climb through 17,100 feet MSL. Emergency checklist procedures, which included shutting down the number 1 engine, were completed. The fire warning light remained on, an emergency was declared, and the airplane returned to DFW for a one-engine-out landing. At the captain's command, the flight attendants prepared for an emergency evacuation and briefed the passengers. After landing on runway 31R, the captain stopped the airplane on high speed taxiway R1 and issued the evacuation command.</p>					
<p>During the investigation, the injured passenger was interviewed and requests for statements were made to a random selection of other passengers. A total of eight statements, including one from the injured passenger, were received. Seven of these eight passengers reported problems understanding the flight attendants. One passenger stated: "There were some communication problems because the English speaking ability of the crew was somewhat limited and essentially the entire passenger list were non-Spanish speaking Americans." Five of the eight passengers also reported being unaware of why the airplane was returning to DFW and the possibility of an emergency evacuation. None of the passengers reported encountering any difficulties during the evacuation. The one passenger who received injury reported "no problem getting to the exit" and that she "caught" her right leg "behind" her while going down the aft right (R2) slide.</p>					
<p>According to the crew, the estimated total time involved in the evacuation was less than 90 seconds. In accordance with the captain's instructions, the aft left (L2) exit was not used because of proximity to the suspected number 1 engine fire. Exits used in the evacuation were the forward left (L1), the aft right (R2), and the four overwing exits. One automatic (R2) and three manual slides were installed in the airplane. The forward right (R1) manual evacuation slide did not fully deploy, and this exit was unusable. The flight attendant stationed at the R1 door reported that she opened the door, and when the slide "did not activate", she "activated" it manually. She further reported that "half of the slide remained on board" inflating into the galley and "hurting" her, after which she pushed the slide out the door.</p>					
<p>A Federal Aviation Administration (FAA) inspector examined the airplane before it was moved from the site of the evacuation and reported the following information. Three of the overwing exit</p>					
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National Transportation Safety Board

FACTUAL REPORT

AVIATION

NTSB ID: FTW95IA156

Occurrence Date: 04/03/1995

Occurrence Type: Incident

Narrative (Continued)

doors were found outside the aircraft, one on the right wing and two on the ground. All three were scratched and dented. The R1 slide "was found hanging out of the door in a folded position with the tear strips still attached." The slide girt bar was installed in the floor brackets. The slide compartment cover had separated from the backing pan and was found on the floor of the forward galley. Scratches were found on the right forward inner door handle and a corresponding dent was found in the slide compartment cover.


The R1 slide, Aircrusier part number D29835-105, serial number 2238290, was examined at the Delta Airlines maintenance facility at DFW on April 4, 1995. The cover latch bracket had separated from the slide compartment cover and was found attached to the latch assembly. The latch assembly is designed to release the slide compartment cover at 15 degrees of door travel. The latch assembly was operated several times and released each time without any difficulty. The slide and the pressure cylinder valve were tested and no discrepancies which would have affected operation of the slide were found. Delta had overhauled the slide on March 31, 1995.


Examination of the number 1 engine, a Pratt & Whitney JT8D-15, serial number 700545, revealed no physical evidence of fire. Fire detection system troubleshooting indicated a short in the engine sensing unit, Boeing part number 65-62404-6.

According to Aeroejecutivo's Director of Operations, all crew members had received hands on emergency evacuation procedures training in November 1994. The written training records provided by the company (copies attached) show that, in November 1994, each flight attendant received initial B-727-100/200 flight attendant training consisting of 26 hours 30 minutes of classroom instruction and 3 hours 30 minutes of practical instruction. The topics in which practical instruction was provided were fire extinguishing and first aid.

Examination of airplane documentation revealed the following discrepancies: 1. Company maintenance status reports indicated numerous AD notes and A, B, and C checks overdue. 2. Data in the weight and balance manual on board the airplane was not current. 3. The company produced several documents regarding their approved maintenance program, each of which contained different time periods for maintenance checks. 4. Passenger briefing cards were not consistent with airplane configuration. 5. Minimum Equipment List showed 4 life rafts "required for dispatch", and none were aboard the airplane. A complete discussion of the maintenance record review is contained in the attached maintenance records group chairman's report.

The airplane was released to the operator.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: FTW95IA156				
		Occurrence Date: 04/03/1995				
		Occurrence Type: Incident				
Landing Facility/Approach Information						
Airport Name DALLAS/FORT WORTH		Airport ID: DFW	Airport Elevation 603 Ft. MSL	Runway Used 31R	Runway Length 9000	Runway Width 200
Runway Surface Type: Concrete						
Runway Surface Condition: Dry						
Type Instrument Approach: NONE						
VFR Approach/Landing: Precautionary Landing						
Aircraft Information						
Aircraft Manufacturer BOEING		Model/Series 727-276		Serial Number 22017		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 175	Certified Max Gross Wt. 191000 LBS		Number of Engines: 3	
Engine Type: Turbo Jet		Engine Manufacturer: P&W		Model/Series: JT8D-15	Rated Power: 15500 LBS	
- Aircraft Inspection Information						
Type of Last Inspection Continuous Airworthiness		Date of Last Inspection	Time Since Last Inspection Hours		Airframe Total Time 38987 Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? Yes		ELT Operated? No		ELT Aided in Locating Accident Site?		
Owner/Operator Information						
Registered Aircraft Owner AEROEJECUTIVO, S.A. DE C.V.		Street Address HUMBERTO LOBO 660 COL. VALLE				
		City MONTERREY		State MX	Zip Code	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner				
		City		State	Zip Code	
Operator Does Business As: AEROEXO				Operator Designator Code: QAJF		
- Type of U.S. Certificate(s) Held:						
Air Carrier Operating Certificate(s):						
Operating Certificate: Large Aircraft Operator			Operator Certificate:			
Regulation Flight Conducted Under: Part 129: Foreign						
Type of Flight Operation Conducted: Non-scheduled; International; Passenger Only						

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: FTW95IA156
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	Occurrence Type: Incident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 35
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Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Foreign

Airplane Rating(s): Multi-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 02/1995
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	7250									
Pilot In Command(PIC)										
Instructor										
Last 90 Days										
Last 30 Days										
Last 24 Hours	1	1		1						

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point Same as Accident/Incident Location	State	Airport Identifier	Departure Time 0920	Time Zone CDT
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Destination COZUMEL	State MX	Airport Identifier CZZ	
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Type of Clearance: IFR

Type of Airspace: Class B

Weather Information

Source of Briefing: Commercial Weather Service

Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
DFW	0950	CDT	603 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			3000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		5500 Ft. AGL		Visibility: 12 SM	Altimeter: 30.00 "Hg
Temperature: 14 °C	Dew Point: 13 °C	Wind Direction: 170		Density Altitude: Ft.	
Wind Speed: 8	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

Accident Information		
Aircraft Damage: Minor	Aircraft Fire: None	Aircraft Explosion: None

Classification: Foreign Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer				1	1
Cabin Attendants			1	3	4
Other Crew				1	1
Passengers			1	151	152
- TOTAL ABOARD -			2	158	160
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	2	158	160

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: FTW95IA156

Occurrence Date: 04/03/1995

Occurrence Type: Incident

Administrative Information

Investigator-In-Charge (IIC)

GEORGIA R. SNYDER

Additional Persons Participating in This Accident/Incident Investigation:

DAVID L AMSDEN

FAA FSDO

DFW AIRPORT, TX 75261