



National Transportation Safety Board Aviation Accident Final Report

Location:	SALT LAKE CITY, UT	Accident Number:	DCA90MA002
Date & Time:	10/14/1989, 1419 MST	Registration:	N530DA
Aircraft:	BOEING 727-232	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	5 Minor, 17 None

Flight Conducted Under: Part 121: Air Carrier - Scheduled

Analysis

THE CREW HEARD A MUFFLED EXPLOSION & SAW FLAMES COMING FROM THE VENT NEAR SEAT 3-D WHILE ACFT WAS PARKED AT GATE. LOCATION OF FIRE PREVENTED CREW FROM RETURNING TO COCKPIT TO NOTIFY CFR & ILLUMINATE EMERG FLOOR LIGHTING. PASSENGERS & CREW EVACUATED ACFT. SECOND OFFICER, LAST TO LEAVE, COULD NOT REACH REAR AIRSTAIRS & EXITED VIA EMERG WINDOW EXIT AFTER HAVING DIFFICULTY IN LOCATING AN EXIT BECAUSE OF SMOKE. A MECHANIC NOTED LOW PASSENGER OXYGEN SUPPLY DURING PREFLIGHT & REPLACED OXYGEN CYLINDERS. WHILE EXITING THE ELECTRICAL EQUIP BAY THE MECHANIC SAW A WHITE FLASH ENGULF THE OXYGEN SYSTEM FLOW CONTROL UNIT. HE ATTEMPTED TO HAVE CFR NOTIFIED OF THE FIRE USING A HAND HELD RADIO TO NO AVAIL. THE PASSENGER OXYGEN SYSTEM HAD 6 LOW OXYGEN QUANTITY MAINTENANCE WRITE-UPS DURING PREVIOUS 30 DAYS BUT WAS NOT 'FLAGGED' BY COMPANY AUTOMATED TREND ANALYSIS PROGRAM BECAUSE OF THE JOB TITLE OF THE PERSON ENTERING THE WRITE-UPS. INSPECTION OF DELTA'S FLEET REVEALED 35 OXYGEN SYSTEM LEAKS ON OTHER ACFT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A FIRE WHICH STARTED IN THE PASSENGER OXYGEN SYSTEM FOR UNDETERMINED REASONS. CONTRIBUTING TO THE ACCIDENT WAS THE FAILURE OF DELTA AIRLINES TO RECOGNIZE, ATTEND TO AND CORRECT REPEATED LEAKS IN THE OXYGEN SYSTEM.

Findings

Occurrence #1: FIRE/EXPLOSION

Phase of Operation: STANDING

Findings

1. (C) OXYGEN SYSTEM,PASSENGER - LEAK
2. (C) OXYGEN SYSTEM,PASSENGER - UNDETERMINED
3. (F) MAINTENANCE - INADEQUATE - COMPANY MAINTENANCE PERSONNEL
4. (F) INSUFFICIENT STANDARDS/REQUIREMENTS,AIRCRAFT - COMPANY/OPERATOR MGMT
5. EMERGENCY PROCEDURE - INADEQUATE - COMPANY/OPERATOR MANAGEMENT
6. EMERGENCY LIGHTS - NOT POSSIBLE
7. EVACUATION - DELAYED - COPILOT/SECOND PILOT

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last Medical Exam:	06/08/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	15000 hours (Total, all aircraft), 5000 hours (Total, this make and model), 8000 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BOEING	Registration:	N530DA
Model/Series:	727-232 727-232	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	21813
Landing Gear Type:	Retractable - Tricycle	Seats:	155
Date/Type of Last Inspection:	09/30/1989, Continuous Airworthiness	Certified Max Gross Wt.:	185200 lbs
Time Since Last Inspection:	150 Hours	Engines:	3 Turbo Jet
Airframe Total Time:	30173 Hours	Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	JT8D-15A
Registered Owner:	DELTA AIRLINES, INC.	Rated Power:	15500 lbs
Operator:	DELTA AIRLINES, INC.	Air Carrier Operating Certificate:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	DALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Observation Time:	0000
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	21 °C / -18 °C
Lowest Ceiling:	Unknown / 0 ft agl	Visibility	20 Miles
Wind Speed/Gusts, Direction:		Visibility (RVR):	0 ft
Altimeter Setting:		Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	EDMONTON CANADA, OF (VEG)	Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	

Airport Information

Airport:	SALT LAKE CITY (SLC)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor, 6 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor, 11 None	Aircraft Fire:	On-Ground
Ground Injuries:	3 Minor	Aircraft Explosion:	None
Total Injuries:	5 Minor, 17 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	BARRY STRAUCH	Adopted Date:	06/21/1990
Additional Participating Persons:	TREDGAR R SMILEY; ATLANTA, GA DAVID L MUNTZINGLER; WASHINGTON, DC JIM MAULERE; ATLANTA, GA PAUL D MCCARTHY; MARBLEHEAD, MA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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