

National Transportation Safety Board Aviation Accident Final Report

Location: FLAGSTAFF, AZ Accident Number: LAX87FA119

Date & Time: 02/20/1987, 1845 MST Registration: N6858S

Aircraft: CESSNA 441 Aircraft Damage: Destroyed

Defining Event: Injuries: 2 Fatal

Flight Conducted Under: Part 135: Air Taxi & Commuter - Non-scheduled

Analysis

THE ACFT WAS ON AN EMERG MED SVC (EMS/MED-EVAC) FLT WITH A PLT & FLT NURSE ABOARD TO TRANSPORT A MATERNITY PATIENT FM FLAGSTAFF TO PHOENIX. DRG A NGT ARRIVAL, THE PLT BGN A VOR-A APCH IN IMC, THEN HE RPRTD A PROBLEM WITH HIS AVIONICS & ELECTED TO MAKE A MISSED APCH. DRG THE MISSED APCH. HE SAID THAT HE 'LOST' AN INVERTER. THEN RPRTD THE GYROS WERE INOP. RADAR VECTORS WERE BEING PROVIDED WHEN HE STATED 'WE HAVE BIG TROUBLE HERE.' SOON THEREAFTER, RADAR & RADIO CTC WERE LOST & THE ACFT CRASHED APRX 7 MI SE OF THE ARPT. DRG IMPACT, THE ACFT MADE A DEEP CRATER & WAS DEMOLISHED. NO PREIMPACTENG OR AIRFRAME FAILURE WAS FND. AN INV REVEALED THE #2 (COPLT'S) ATTITUDE INDCR WAS INOP ON THE PREV FLT. A DISCREPANCYRPRT WAS TAKEN TO THE AVIONICS DEPT, BUT THE REQD ENTRY WAS NOT MADE IN THE ACFT FORM-4. THE PLT TKOF BEFORE CORRECTIVE ACTION WAS TAKEN. THE OPNS MANUAL REQD 1000 HRS MULTI-ENG TIME AS PIC & TRNG BY DESIGNATED CFI'S. THE PLT HAD APRX 837 HRS MULTI-ENG TIME, RECD 9 TRNG FLTS IN N6858S WITH NON-DESIGNATED INSTRUCTORS, COMPLETED A PART 135 FLT CHK ON 2/17/88.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: APPROACH

Findings

- 1. MAINTENANCE, RECORDKEEPING IMPROPER
- 2. PROCEDURES/DIRECTIVES NOT FOLLOWED
- 3. (F) INADEQUATE SURVEILLANCE OF OPERATION COMPANY/OPERATOR MGMT
- 4. (C) ELECTRICAL SYSTEM UNDETERMINED
- 5. ELECTRICAL SYSTEM, INVERTER INOPERATIVE
- 6. FLIGHT/NAV INSTRUMENTS, ATTITUDE INDICATOR INOPERATIVE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH

Findings

7. (F) LIGHT CONDITION - DARK NIGHT

8. (F) WEATHER CONDITION - LOW CEILING

9. (F) WEATHER CONDITION - SNOW

10. (C) AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND

11. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

12. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	27, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	03/27/1986
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2311 hours (Total, all aircraft), 24 hours (Total, this make and model), 256 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N6858S
Model/Series:	441 441	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0253
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	02/10/1987, Continuous Airworthiness	Certified Max Gross Wt.:	9850 lbs
Time Since Last Inspection:	239 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	3349 Hours	Engine Manufacturer:	AIRESEARCH
ELT:	Installed, not activated	Engine Model/Series:	TPE-331
Registered Owner:	CESSNA FINANCE CORP.	Rated Power:	635 hp
Operator:	SAMARITAN HEALTH SERVICES	Operating Certificate(s) Held:	On-demand Air Taxi (135)

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	FLG, 7011 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1845 MST	Direction from Accident Site:	308°
Lowest Cloud Condition:	Unknown / 1200 ft agl	Visibility	1 Miles
Lowest Ceiling:	Broken / 1200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-4°C / -6°C
Precipitation and Obscuration:			
Departure Point:	PHOENIX, AZ (PHX)	Type of Flight Plan Filed:	IFR
Destination:	FLAGSTAFF, AZ (FLG)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	AUDREY M SCHUTTE	Report Date:	10/13/1988
Additional Participating Persons:	BRIAN CALENDINE; SCOTTSDALE, AZ		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as investigations. Dockets released prior to June Record Management Division at publicq@ntsb. this date are available at http://dms.ntsb.go	1, 2009 are public gov, or at 800-877-	ly available from the NTSB's

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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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