

National Transportation Safety Board Aviation Accident Final Report

Location:	POCATELLO, ID	Accident Number:	SEA85FA110
Date & Time:	05/15/1985, 1826 MDT	Registration:	N402CS
Aircraft:	CESSNA 402	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

SHORTLY AFTER DEPARTURE & LEVEL OFF, THE PLT REPORTED AN ENG MALFUNCTION & INITIATED A RETURN TO THE ARPT. ABOUT 2 MIN LATER, HE REPORTED AN ENG FIRE & DECLARED AN EMERGENCY. APRX 1 MIN THEREAFTER, THE RGT WING SEPARATED FROM THE ACFT & THE PLANE CRASHED. AN EXAM OF THE WRECKAGE REVEALED EXTENSIVE INFLT FIRE DAMAGE IN THE AREA OF SEPARATION. A 2.5 BY 3 INCH HOLE WAS FOUND IN THE RGT INBOARD EXHAUST TUBE, PN 0850712-6. IT WAS ORIENTED TOWARD THE ACCESSORY COMPARTMENT WITHNUMEROUS FUEL & OIL LINES WHICH WERE FIRE DAMAGED & CHARRED. ALSO, MUCH OF THE ENG SUPPORT STRUCTURE & WING SPAR WERE MELTED IN THAT AREA. AN EXAM OF THE EXHAUST TUBE REVEALED ITS WALLS WERE THIN, BRITTLE & DISCOLORED IN THE AREA OF THE RUPTURE & SEVERAL AREAS OF CRACKS & SMALL HOLES WERE FOUND. THE EXHAUST TUBE HAD 5862 HRS OF TOTAL SERVICE & 1762 HOURS SINCE IT WAS OVERHAULED. RECORDS SHOWED THAT AD 75-23-08 HAD BEEN COMPLIED WITH DURING THE LAST INSPECTION, 25 FLT HRS PRIOR TO THE ACCIDENT.

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: UNKNOWN

Findings

1. (C) EXHAUST SYSTEM, MANIFOLD/PIPE - CORRODED

2. (C) MAINTENANCE, INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL

3. (F) PROCEDURE INADEQUATE - MANUFACTURER

4. (F) INADEQUATE SURVEILLANCE OF OPERATION - FAA(ORGANIZATION)

5. (C) EXHAUST SYSTEM, MANIFOLD/PIPE - FAILURE, TOTAL

6. (C) EXHAUST SYSTEM, MANIFOLD/PIPE - LEAK

Occurrence #2: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF Phase of Operation: CRUISE - NORMAL

Findings

7. INITIATED - PILOT IN COMMAND

Occurrence #3: FIRE Phase of Operation: DESCENT

Findings 8. (C) MISCELLANEOUS - FIRE 9. WING,SPAR - BURNED

Occurrence #4: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: DESCENT

Findings 10. (C) WING - FAILURE, TOTAL 11. WING - SEPARATION

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Military	Age:	37, 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:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	02/18/1985
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4500 hours (Total, all aircraft), 350 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N402CS
Model/Series:	402 402	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	402-0108
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	02/11/1985, Unknown	Certified Max Gross Wt.:	6300 lbs
Time Since Last Inspection:	12 Hours	Engines:	2 Reciprocating
Airframe Total Time:	5862 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-E
Registered Owner:	FBN LEASING CORP	Rated Power:	300 hp
Operator:	REGIONAL EXPRESS COMPANY	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	RECA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PIH, 4449 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	1849 MDT	Direction from Accident Site:	342°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	40 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	17°C / 8°C
Precipitation and Obscuration:			
Departure Point:	POCATELLO, ID (PIH)	Type of Flight Plan Filed:	IFR
Destination:	SALT LAKE CITY, UT (SLC)	Type of Clearance:	VFR
Departure Time:	1812 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	In-Flight
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEVEN A MCCREARY	Report Date:
Additional Participating Persons:	R GRAVES; BOISE, ID	
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 <u>publing@ntsb.gov</u> , or at 800-877-6799. Dockets released after this date are available at <u>http://dms.ntsb.gov/pubdms/</u> .	

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 <u>here</u>.