



Aviation Investigation Final Report

Location:	MILWAUKEE, Wisconsin	Accident Number:	CHI87FA191
Date & Time:	August 9, 1987, 13:40 Local	Registration:	N425K
Aircraft:	BEECH B90	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

ON DEPARTURE THE CREW IDENTIFIED AN IN FLIGHT FIRE. AN IMMEDIATE SHUTDOWN OF ELECTRICAL, ENVIRONMENTAL AND PRESSURIZATION SYSTEMS WAS INITIATED AND A RETURN WAS MADE TO THE AIRPORT WITH A SUCCESSFUL LANDING. THE FIRE WAS DISCOVERED TO HAVE OCCURRED IN THE AREA OF THE PRESSURIZATION SUPERCHARGER AND HAD SUBSTANTIALLY DAMAGED THE AIRCRAFT. THE CREW AND TWO PASSENGERS EVACUATED SUCCESSFULLY WITHOUT INJURY. THE SUPERCHARGER HOSE COLLAPSED FROM DETERIORATION. OIL SPILLAGE DURING SERVICING CONTAMINATED THE HOSE.

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: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIR COND/HEATING/PRESSURIZATION, TURBOCOMPRESSOR - FIRE
2. (F) MAINTENANCE, INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL

Occurrence #2: FIRE
Phase of Operation: TAKEOFF - INITIAL CLIMB

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	24, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 21, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4335 hours (Total, all aircraft), 60 hours (Total, this make and model), 3784 hours (Pilot In Command, all aircraft), 160 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N425K
Model/Series:	B90 B90	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	LJ-318
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	July 7, 1987 Continuous airworthiness	Certified Max Gross Wt.:	9650 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	8456 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-20
Registered Owner:	SCOTT AIR CHARTERED, INC.	Rated Power:	550 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MKE ,723 ft msl	Distance from Accident Site:	
Observation Time:	13:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 700 ft AGL	Visibility	6 miles
Lowest Ceiling:	Overcast / 1400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22°C / 18°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	(MKE)	Type of Flight Plan Filed:	IFR
Destination:	LAND O'LAKES , WI (LNL)	Type of Clearance:	IFR
Departure Time:	13:40 Local	Type of Airspace:	Class D

Airport Information

Airport:	GENERAL MITCHELL MKE	Runway Surface Type:	Asphalt;Concrete
Airport Elevation:	723 ft msl	Runway Surface Condition:	Dry
Runway Used:	1L	IFR Approach:	None
Runway Length/Width:	9690 ft / 200 ft	VFR Approach/Landing:	Full stop;Precautionary landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	42.980621,-87.899276(est)

Administrative Information

Investigator In Charge (IIC): Wilson, Steve

Additional Participating Persons:

Original Publish Date: December 27, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=13653>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).