



National Transportation Safety Board Aviation Accident Final Report

Location:	INVER GROVE HGT, MN	Accident Number:	MKC90FA057
Date & Time:	03/01/1990, 1350 CST	Registration:	N3077G
Aircraft:	BEECH B36TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

THE ACFT WAS EQUIPPED WITH A TEMPORARY FUEL SYS TO FERRY IT TO SOUTH AFRICA. ALSO, IT WAS APPROVED FOR SPECIAL FLT OPNS & A MAXIMUM GROSS WT LIMITATION OF 4235 LBS. ITS ACTUAL WEIGHT FOR TAKEOFF WAS CALCULATED TO BE 3956 LBS. THE PLT TOOK OFF ON RWY 16 FOR THE INITIAL FLT WITH THE WIND FROM ABOUT 240 DEG AT 17 KTS. SHORTLY AFTER LIFT-OFF, THE ACFT WAS OBSERVED FLYING JUST ABOVE THE TREES IN A NOSE HI ATTITUDE. THE PLT TURNED THE ACFT ABOUT 90 DEG TO THE LEFT TOWARD A RIVER (DOWN SLOPE). HE THEN TURNED IT FURTHER LEFT & ALIGNED ITS FLT PATH WITH THE RIVER. HOWEVER, THE ACFT HIT A POLE ON A BOAT DOCK & CRASHED IN THE RIVER. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND DURING THE INVESTIGATION. ONE WITNESS, WHO SAW THE ACFT AFTER TAKEOFF, SAID IT WAS MUSHING AS THE LNDG GEAR WAS BEING RETRACTED, THEN THE PLT 'MADE A STEEP BANK TO THE LEFT & WENT BELOW THE TREES.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PREMATURE LIFT-OFF BY THE PILOT, WHILE TAKING OFF WITH A HEAVY GROSS WEIGHT IN UNFAVORABLE WINDS, AND THE PILOT'S FAILURE TO ATTAIN/MAINTAIN ADEQUATE AIRSPEED, WHICH RESULTED IN AN INADVERTENT STALL/MUSH.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF

Findings

1. WEATHER CONDITION - UNFAVORABLE WIND
2. AIRCRAFT WEIGHT AND BALANCE - EXCESSIVE
3. (C) LIFT-OFF - PREMATURE - PILOT IN COMMAND
4. (C) AIRSPEED - NOT ATTAINED - PILOT IN COMMAND
5. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. TERRAIN CONDITION - WATER

Factual Information

Pilot Information

Certificate:	Commercial	Age:	26, 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):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	08/28/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1073 hours (Total, all aircraft), 8 hours (Total, this make and model), 919 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N3077G
Model/Series:	B36TC B36TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Special Flight; Utility	Serial Number:	EA-383
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	4235 lbs
Time Since Last Inspection:	79 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	TSIO-520-UB
Registered Owner:	AVEX, INC.	Rated Power:	300 hp
Operator:	AVEX, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MSP, 841 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1350 CST	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 25000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	17 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	14° C / -4° C
Precipitation and Obscuration:			
Departure Point:	SOUTH ST PAUL, MN (D97)	Type of Flight Plan Filed:	None
Destination:	SOUTH AFRICA	Type of Clearance:	None
Departure Time:	0150 CST	Type of Airspace:	Class G

Airport Information

Airport:	SOUTH ST PAUL MUNI (D97)	Runway Surface Type:	Asphalt
Airport Elevation:	819 ft	Runway Surface Condition:	Dry
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	4000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	DANIEL T DUKE	Report Date:	06/16/1992
Additional Participating Persons:			
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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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](#).