



National Transportation Safety Board Aviation Accident Final Report

Location:	LANSING, MI	Accident Number:	CHI00LA114
Date & Time:	04/15/2000, 0743 EDT	Registration:	N26SA
Aircraft:	Cessna 404	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The pilot was departing from Lansing, Michigan, when he reported engine problems. The aircraft subsequently lost power to both engines. Fuel receipts were found that indicate that the aircraft was serviced with 25 gallons of jet fuel in each wing tank. No preexisting anomalies were found with regard to the aircraft or its systems. An FAA inspector interviewed the person that had fueled the aircraft and that person stated he had used a JET-A fuel truck to fuel the accident aircraft. The inspector also interviewed the safety director of the company that provided the fueling service. The safety director told the inspector that the fuel truck used to fuel the accident aircraft was found to have a small nozzle installed on one of the hoses and not the wide nozzle used on jet fueling trucks. He also said that, '...the small nozzle was used for the purpose of fueling tugs at the airport and that the small nozzles were immediately removed from all jet refueling trucks so that this could not happen again.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to improper fuel. Also causal was the improper aircraft service by the fixed base operator personnel and the unsuitable terrain for the forced landing encountered by the pilot. Factors were the improper grade of fuel and the lack of suitable terrain for the landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FLUID,FUEL GRADE - IMPROPER
2. (C) AIRCRAFT SERVICE - IMPROPER - FBO PERSONNEL

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE
4. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On April 15, 2000, at 0743 eastern daylight time, a Cessna 404, N26SA, piloted by a commercial pilot, sustained substantial damage during an off airport forced landing following a loss of power on both engines, after takeoff from the Capital City Airport, Lansing, Michigan. The cargo flight was conducted under the provisions of 14 CFR Part 135 and was on an instrument flight rules flight plan. The pilot, who was the sole occupant, reported no injuries. The flight was originating at the time of the accident and was en route to Caro, Michigan.

The Federal Aviation Administration (FAA) conducted a postaccident examination of the aircraft. Fuel receipts were found that indicate that the aircraft was serviced with 25 gallons of jet fuel in each wing tank. No preexisting anomalies were found with regard to the aircraft or its systems.

A FAA inspector interviewed the person that had fueled the aircraft and that person admitted that he had used a JET-A fuel truck to fuel the accident aircraft. The inspector also interviewed the safety director of the company that provided the fueling service. The safety director told the inspector that the fuel truck used to fuel the accident aircraft was found to have a small nozzle installed on one of the hoses and not the wide nozzle used on jet fueling trucks. He also said that, "...the small nozzle was used for the purpose of fueling tugs at the airport and that the small nozzles were immediately removed from all jet refueling trucks so that this could not happen again."

The FAA inspector had line services put equal amounts of JET-A and 100LL aviation gasoline in a container. According to the inspector's statement, "when JET-A and 100LL gas is mixed the blue color remains quite visible and the predominant smell is that of 100LL gas."

Pilot Information

Certificate:	Commercial	Age:	33, 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:	No
Medical Certification:	Unknown Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3600 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N26SA
Model/Series:	404 404	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	404-0225
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	03/24/2000, AAIP	Certified Max Gross Wt.:	6300 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	17393 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	GTSIO-520-M2
Registered Owner:	SUPERIOR AVIATION, INC.	Rated Power:	
Operator:	SUPERIOR AVIATION, INC.	Operating Certificate(s) Held:	Air Cargo

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LAN, 861 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	0742 EDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	3 Miles
Lowest Ceiling:	Overcast / 3600 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13°C / 12°C
Precipitation and Obscuration:			
Departure Point:	(LAN)	Type of Flight Plan Filed:	IFR
Destination:	CARO, MI (78D)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class D

Airport Information

Airport:	CAPITAL CITY AIRPORT (LAN)	Runway Surface Type:	
Airport Elevation:	861 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	JOHN M BRANNEN	Report Date:	07/02/2001
Additional Participating Persons:	PAUL HANSEN; GRAND RAPIDS, MI		
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/ .		

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](#).