



National Transportation Safety Board Aviation Accident Data Summary

Location:	Immokalee, FL	Accident Number:	MIA04LA050
Date & Time:	02/03/2004, 1015 EST	Registration:	N252WF
Aircraft:	Mooney M20K	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot stated that the airplane was in cruise flight, at an altitude of 4,500 feet, when he detected a slight engine vibration. He noted that the fuel consumption had increased from the usual 12.5 gals/hr to 15.7 gals/hr, at 2,300 rpm and a manifold pressure of 30.00. Shortly thereafter he said the engine ceased operating, and he made a forced landing to the field. During the landing rollout the airplane incurred damage. An FAA airframe and powerplant mechanic with an inspection authorization rating, who responded to the scene of the accident stated that he found the B-nut on the inlet side of the fuel flow divider loose, about one full turn. In addition he said he saw signatures consistent with a leak which originated at the B-nut and ran down the right front of the engine case. Follow-on examination of the accident airplane revealed that at the connection of the B-nut on the fuel inlet line to the manifold, there was torque putty on the threaded connection on the manifold side, and no putty was observed on the B-nut. In addition, when conditions were recreated and the engine given a test run, when the electric fuel boost pump turned on, fuel leaked from around the B-nut. According to the airplane's engine log book, the engine had been rebuilt by Teledyne Continental Motors, and shipped to Mod Works Inc., Punta Gorda, Florida, who installed it in the accident airplane on March 03, 2003. At the time of the accident the engine had accumulated a total time of 80 hours since installation, and had received two previous oil changes, all of which had been performed by Mod Works Inc.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to the airplane mechanic's improper maintenance/installation and failure to ensure that the B-nut on the inlet side of the fuel manifold was properly tightened, which resulted in a fuel leak, and fuel starvation.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
2. FUEL SYSTEM, LINE FITTING - LOOSE PART/BOLT/NUT/CLAMP/ETC
3. FLUID, FUEL - LEAK
4. FLUID, FUEL - STARVATION

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings

5. TERRAIN CONDITION - PLOWED/FURROWED

Pilot Information

Certificate:	Private	Age:	68
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	1800 hours (Total, all aircraft), 1560 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N252WF
Model/Series:	M20K	Engines:	1 Reciprocating
Operator:	George M. Darnell	Engine Manufacturer:	Teledyne Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	TSIO-360-MB2B
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	APF, 9 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	/ ,
Temperature:	21 °C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Miami, FL (TMB)	Destination:	Punta Gorda, FL (PGD)

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	26.433056, -81.401111		

Administrative Information

Investigator In Charge (IIC): John W Lovell

Adopted Date: 09/13/2005

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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