

# **Aviation Investigation Final Report**

Location:	Pingree, Idaho	Accident Number:	SEA01LA110
Date & Time:	June 1, 2001, 13:15 Local	<b>Registration:</b>	CFDGH
Aircraft:	Cessna 172M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

## Analysis

The pilot departed Edmonton, Canada, with his passenger in the Cessna 172M, with 48 gallons of usable fuel aboard. The trip included 2 stops before terminating at the end of the first day having flown 3 hours and 34 minutes. The pilot added 12 gallons of fuel at his stopover. The following day he and his passenger departed on the next leg of the trip (Great Falls, MT, to Pocatello, ID). The engine quit after not less than 6 hours 51 minutes of operation on a total of 60 gallons of usable fuel. On site examination revealed no evidence of fuel in either fuel tank or spilled/leaked at the site, and only 4.5 ounces of fuel were retrieved from fuel lines. The landing site was characterized by soft furrows in a field and the furrows were observed to change direction (from parallel) during the ground roll of the aircraft. The pilot reported in a written statement that "...The pilot had thoughts of landing at Idaho Falls but decided to fly as flight planned...!"

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate in-flight decision by failing to refuel while en route, resulting in fuel exhaustion and the loss of engine power.

#### **Findings**

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

Findings

1. (C) FLUID,FUEL - EXHAUSTION 2. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND 3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

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

Occurrence #3: NOSE OVER Phase of Operation: LANDING - ROLL

Findings

4. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SOFT 5. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN

### **Factual Information**

On June 1, 2001, approximately 1315 mountain daylight time, a Cessna 172M, C-FDGH, registered to Dan Air Limited, and being flown by a Canadian certificated commercial pilot, was substantially damaged when it nosed over during a forced landing following a total loss of power while on a descent for landing near Pingree, Idaho. The pilot and passenger were uninjured. Visual meteorological conditions existed and a VFR flight plan was in effect. The flight, which was personal, was operated under 14 CFR 91 and, according to the pilot, departed from Great Falls, Montana, at 0954 on the morning of the accident.

The pilot reported that he departed Edmonton (CYXD), Alberta, with full fuel (48 gallons useable) stopping at Drumheller (CEG4), Alberta, Cut Bank (KCTB), Montana, and finally Great Falls (KGTF), Montana. He then reported purchasing 12 gallons of fuel and departed for Pocatello, Idaho. Approximately 20 miles out of Pocatello the engine abruptly stopped and the pilot was unable to achieve a restart. He executed a forced landing in a potato field. During the rollout, the soft dry furrows in the field changed orientation slightly and the aircraft nosed over.

The pilot reported in his statement (NTSB Form 6120.1/2) the following flight times and fuel loads associated with the trip:

FLIGHT LEG:	TIME	EN ROL	JTE*:		FUELING:	
CYXD-CEG4	1 hrs	10 mir	nutes	Depar	ted with 48 gallor	ns usable
CEG4-KCTB	1 hrs	35 mir	nutes	No fu	el added	
KCTB-KGTF	0 hrs	49 mir	nutes	12 ga	llons fuel added	
KGTF-SITE	3 hrs	16 mir	nutes			
TOTALS:		6 hrs	51 mi	nutes	60 gallons usabl	е

\*Does not include taxi and run up time.

The pilot further reported in his statement: "...At approximately 13:00, shortly after passing Dubois VOR, Idaho Falls tower frequency was tuned in. The pilot had thoughts of landing at Idaho Falls but decided to fly as flight planned! FSS was then contacted to extend flight plan by 30 minutes. C-FDGH commenced to descend out of 8,500 feet. At twenty (20) statue [sic] miles out, Pocatello tower was contacted with the intention to land. When out of 7,000 feet and about fifteen statue [sic] miles from Pocatello, the engine quit...."

A Federal Aviation Administration Inspector from the Salt Lake City Flight Standards District Office examined the aircraft and it was subsequently recovered from the accident site and transported to the Pocatello Airport. During the examination and recovery process no fuel spillage was noted, and no fuel was found within either wing tank. There was no evidence of a fuel spill at the site and no odor of fuel. The 5/8 inch diameter fuel supply line between the gascolator and carburetor was removed and approximately 4.5 ounces of fuel was retrieved (refer to attached statement).

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Certificate:	Commercial	Age:	51,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:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	July 11, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	January 17, 2001
Flight Time:	850 hours (Total, all aircraft), 45 hours (Total, this make and model), 710 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### **Pilot Information**

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	CFDGH
Model/Series:	172M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17260775
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 15, 2000 100 hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	58 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7976 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-320-E2D
Registered Owner:	Dan Air Limited	Rated Power:	150 Horsepower
Operator:	Danyluk, Victor	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PIH,4449 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	175°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	29°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Great Falls, MT (GTF )	Type of Flight Plan Filed:	VFR
Destination:	Pocatello, ID (PIH )	Type of Clearance:	VFR
Departure Time:	09:54 Local	Type of Airspace:	Class G

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.120037,-112.599075(est)

### **Administrative Information**

Investigator In Charge (IIC):	McCreary, Steven
Additional Participating Persons:	John E Richter; FAA Flight Standards District Office; Salt Lake City, UT
Original Publish Date:	August 26, 2003
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52404

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 <u>here</u>.