

National Transportation Safety Board Aviation Accident Final Report

Location: ANCHORAGE, AK Accident Number: ANC98LA055

Date & Time: 05/24/1998, 0024 AKD Registration: N67588

Aircraft: Douglas DC-3C Aircraft Damage: Substantial

Defining Event: 1 Minor, 2 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

The captain/operator, the first officer and one passenger, departed on a cross-country positioning flight. The airplane contained about 300 gallons of fuel. After 3.9 hours en route, the flight was cleared for a visual approach to the destination airport. During the approach, both engines lost power about 2,000 feet mean sea level. The pilot stated the right fuel tank was empty. He estimated that 50 to 60 gallons of fuel remained in the left fuel tank. While the airplane was descending toward an area of open water, he attempted to restart the engines without success. He then lowered the landing gear, and made a right turn toward a small airstrip, located about 5 miles northwest of the destination airport. The airplane touched down in an area of soft, marsh covered, terrain. During the landing roll, the airplane nosed down and received damage to the forward, lower portion of the fuselage. An inspection of the airplane by an FAA inspector revealed the left fuel tank contained about 1 inch of fuel. The right fuel selector was positioned on the right auxiliary fuel tank. The left fuel selector was positioned between the left main, and the left auxiliary fuel tanks.

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 planning/decision which resulted in fuel exhaustion and subsequent loss of engine power. A related factor was the soft, marshy terrain at the forced landing area.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. ALL ENGINES

2. (C) FLUID, FUEL - EXHAUSTION

3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

4. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: NOSE DOWN

Phase of Operation: LANDING - ROLL

Findings

5. (F) TERRAIN CONDITION - SOFT

Page 2 of 5 ANC98LA055

Factual Information

On May 24, 1998, about 0024 Alaska daylight time, a Douglas DC-3C cargo airplane, N67588, sustained substantial damage during a forced landing, about 5 miles northwest of Anchorage, Alaska. The airplane was being operated as an instrument (IFR) cross-country positioning flight under Title 14 CFR Part 91, when the accident occurred. The airplane was operated by Majestic Air Cargo, Anchorage, Alaska. The captain/operator received minor injuries. The first officer, and the one passenger, were not injured. Visual meteorological conditions prevailed. An IFR flight plan was filed. The flight originated at the Unalakleet Airport, Unalakleet, Alaska, about 2030 on May 23, 1998.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on May 24, 1998, at 0915, the pilot reported that prior to departure from Unalakleet, he measured the fuel in the airplane's fuel tanks. The total amount of fuel was 300 gallons. After arriving in the Anchorage area, the flight was cleared for a visual approach to runway 14. During the approach, both engines quit running about 2,000 feet mean sea level. The pilot said the right fuel tank was empty. He estimated that 50 to 60 gallons of fuel remained in the left fuel tank. The pilot attempted to restart the engines without success. The airplane was descending toward open water of the Cook Inlet. The pilot lowered the landing gear, and made a right turn toward a small airstrip, located at Point McKenzie, about 5 miles northwest of Anchorage. The pilot touched down in an area of soft, marsh covered, terrain. During the landing roll, the airplane nosed down and received damage to the forward, lower portion of the fuselage.

A Federal Aviation Administration (FAA) airworthiness inspector, Anchorage Flight Standards District Office (FSDO), inspected the airplane on May 27, 1998. He reported the right fuel tank was empty. The left fuel tank contained about 1 inch of fuel. The right fuel selector was positioned on the right auxiliary fuel tank. The left fuel selector was positioned between the left main, and the left auxiliary fuel tanks.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	05/01/1998
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	14000 hours (Total, all aircraft), 7000 hours (Total, this make and model), 13800 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Page 3 of 5 ANC98LA055

Aircraft and Owner/Operator Information

Aircraft Make:	Douglas	Registration:	N67588
Model/Series:	DC-3C DC-3C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	20536
Landing Gear Type:	Retractable - Tailwheel	Seats:	3
Date/Type of Last Inspection:	05/22/1998, AAIP	Certified Max Gross Wt.:	26900 lbs
Time Since Last Inspection:	11 Hours	Engines:	2 Reciprocating
Airframe Total Time:	34232 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	1830-92
Registered Owner:	MAJESTIC LEASING INC.	Rated Power:	1200 hp
Operator:	GALAXY AIR CARGO INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	MAJESTIC AIR CARGO	Operator Designator Code:	GX7C

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	ANC, 137 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	2357 ADT	Direction from Accident Site:	150°
Lowest Cloud Condition:	Scattered / 9000 ft agl	Visibility	40 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	6°C / 3°C
Precipitation and Obscuration:			
Departure Point:	UNALAKLEET, AK (UNK)	Type of Flight Plan Filed:	IFR
Destination:	(ANC)	Type of Clearance:	VFR
Departure Time:	2030 ADT	Type of Airspace:	Class C

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 2 None	Latitude, Longitude:	

Page 4 of 5 ANC98LA055

Administrative Information

Investigator In Charge (IIC): SCOTT R ERICKSON Report Date: 11/17/1999

Additional Participating Persons: JACK DEVLIN; ANCHORGE, AK

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 publinq@ntsb.gov, or at 800-877-6799. Dockets released after

this date are available at http://dms.ntsb.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.