



National Transportation Safety Board Aviation Accident Final Report

Location:	SAINT JAMES, MI	Accident Number:	CHI95LA303
Date & Time:	09/01/1995, 1115 EDT	Registration:	N9528L
Aircraft:	GRUMMAN AA-5	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Minor

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PILOT REPORTED THAT THE LEFT FUEL GAGE WAS NOT WORKING AND BOTH FUEL TANKS WERE FULL PRIOR TO DEPARTURE. HE DID NOT LEAN THE ENGINE DURING THE 2.7 HOUR FLIGHT. THE PILOT INITIATED A GO-AROUND DURING AN ATTEMPTED LANDING. WHEN THE AIRPLANE WAS AT AN ALTITUDE OF ABOUT 50 FEET, THE ENGINE LOST POWER. THE PILOT ATTEMPTED TO LAND THE AIRPLANE ON THE REMAINING RUNWAY. THE AIRPLANE DEPARTED THE RUNWAY AT THE DEPARTURE END AND 'SLID INTO THE TREES.' EXAMINATION OF THE WRECKAGE REVEALED NO USABLE FUEL REMAINED IN THE FUEL TANKS AND THE FUEL LINES WERE EMPTY. ABOUT 3/8 INCH OF FUEL REMAINED IN THE CARBURETOR BOWL. A FUEL LINE FITTING WAS LEAKING NEAR THE FUEL PUMP.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's operation of the airplane with an inoperative fuel gage and the leaking fuel line fitting, which resulted in fuel exhaustion, loss of engine power, and a forced landing. The inoperative fuel gage was a related factor.

Findings

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

Findings

1. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - INOPERATIVE
2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
3. (C) FUEL SYSTEM,LINE FITTING - LEAK
4. (C) FUEL SYSTEM - EXHAUSTION

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

Occurrence #3: OVERRUN
Phase of Operation: LANDING - ROLL

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING

Findings

5. OBJECT - TREE(S)

Factual Information

On September 1, 1995, at 1115 eastern daylight time, a Grumman AA-5, N9528L, was destroyed when it impacted the terrain during an attempted go around at the Welke Airport, Saint James, Michigan. The private pilot and one passenger reported minor injuries. The personal flight originated in Three Rivers, Michigan, about 0830, and was conducted under 14 CFR Part 91 in visual meteorological conditions. No flight plan was filed.

The pilot reported that the left fuel gage was not working and both fuel tanks were full prior to departure. He did not lean the engine during the flight and used fuel from the right tank for approximately one hour. He switched to the left tank for the remaining 1.7 hours of the flight. The pilot initiated a go around during an attempted landing on runway 17. When the airplane was at an altitude of about 50 feet, the engine lost power. The pilot attempted to land the airplane on the remaining runway. The airplane departed the runway at the departure end and "slid into the trees."

Examination of the wreckage by a Federal Aviation Administration (FAA) Inspector revealed both fuel tanks were ruptured. A "trace" of fuel remained in the right tank. The left tank was empty. No fuel remained in the fuel lines and about 3/8 inch of fuel remained in the carburetor bowl. An inspection cover in the outboard section of the left fuel tank and the quick drain in the right fuel tank were stained a red color. The quick drain was in the closed position. He reported the airplane would normally have approximately 4 hours of usable fuel.

An aircraft inspector who examined the airplane reported that a fuel line fitting was leaking near the fuel pump.

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/21/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	102 hours (Total, all aircraft), 3 hours (Total, this make and model), 37 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN	Registration:	N9528L
Model/Series:	AA-5 AA-5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	AA5-0528
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	04/18/1995, 100 Hour	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-320-E2G
Registered Owner:	LADD J. REINHOLD	Rated Power:	150 hp
Operator:	JOHN CONRAD	Operating Certificate(s) Held:	None
Operator Does Business As:	CONRAD AERO	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 4000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21 °C
Precipitation and Obscuration:			
Departure Point:	THREE RIVERS, MI (HAI)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	0830 EDT	Type of Airspace:	Class E

Airport Information

Airport:	WELKE (6Y8)	Runway Surface Type:	Grass/turf
Airport Elevation:	664 ft	Runway Surface Condition:	Vegetation
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3500 ft / 140 ft	VFR Approach/Landing:	Forced Landing; Go Around; Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	WESLEY M ROBBINS	Report Date:	03/21/1996
Additional Participating Persons:	WILLIAM W BEST; 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/ .		

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