



Aviation Investigation Final Report

Location:	BOYNTON BEACH, Florida	Accident Number:	MIA95LA240
Date & Time:	September 29, 1995, 15:30 Local	Registration:	N21WM
Aircraft:	MENEAR PITTS S-1S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE AIRPLANE EXPERIENCED A TOTAL LOSS OF ENGINE POWER ON CLIMB OUT AT 2,500 FEET AGL. THE PILOT MADE A FORCED LANDING BY SPIRALING DOWN OVER THE AIRPORT AND OVERSHOT THE RUNWAY. DURING THE SPIRAL THE ENGINE STARTED AND STOPPED 3 TO 4 TIMES. THE AIRPLANE TOUCHED DOWN NEAR THE END OF THE RUNWAY FAST, AND BECAME AIRBORNE AGAIN WHEN THE ENGINE STARTED AND STOPPED. THE PILOT MANEUVERED THE AIRPLANE BELOW A POWER LINE, ACROSS A ROAD AND STARTED A TURN TO AVOID A HOUSING AREA. THE AIRPLANE STALLED, COLLIDED WITH THE TERRAIN, AND NOSED OVER INTO A CANAL. REVIEW OF REFUELING RECORDS SHOWED THE AIRPLANE HAD FLOWN 7.31 HOURS ON 50.2 GALLONS OF FUEL. EXAMINATION OF THE ENGINE BY THE FAA REVEALED NO EVIDENCE OF A PRECRASH FAILURE OR MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER DECISION TO MAKE A GO-AROUND AND FAILURE TO MAINTAIN AIRSPEED (VSO) RESULTING IN AN INADVERTENT STALL. THE TOTAL LOSS OF ENGINE POWER DUE TO FUEL EXHAUSTION WAS A FACTOR.

Findings

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

Findings

1. (F) FLUID,FUEL - EXHAUSTION

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: LANDING - ABORTED

Findings

2. DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

3. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

4. GO-AROUND - ATTEMPTED - PILOT IN COMMAND

5. (C) AIRSPEED(VSO) - NOT MAINTAINED - PILOT IN COMMAND

6. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4: NOSE OVER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On September 29, 1995, about 1530 eastern daylight time, a Menear, Pitts S-1S, N21WM, registered to a private owner, operating as a 14 CFR Part 91 personal flight, experienced a reported total loss of engine power during a climb in the vicinity of Boynton Beach, Florida, and crashed during the forced landing. Visual meteorological conditions prevailed and no flight plan was filed. The airplane sustained substantial damage. The pilot reported minor injuries. The flight originated from Willis Glider Port, Boynton Beach, Florida, about 5 minutes before the accident.

The pilot stated he was climbing at 2,500 feet agl when the engine quit. He spiraled down over the airport to make a forced landing at the airport, but overshot the runway. During the spiral the engine started and stopped three to four times. He touched down near the end of the runway with a high airspeed, and became airborne again when the engine started and stopped again. He flew the airplane under a power line, across a highway, and made a left turn to avoid a housing area. During the turn the airplane stalled, collided with the terrain, and nosed over into a canal.

An airframe and powerplants mechanic stated he has been performing cosmetic restoration on the airplane since July 1994. As part of the restoration the fuel tank was drained and 13 gallons of fuel was added to the airplane on April 15, 1995, at a tach time of 370.40. Additional fuel was added on the following dates: September 14, 1995, 5.0 gallons, September 15, 1995, 7.0 gallons, September 19, 1995, 9.0 gallons, September 21, 1995, 5.0 gallons, September 25, 1995, 4.0 gallons, and September 29, 1995, 7.2 gallons.

The mechanic stated when he arrived at the crash site the fire department had placed booms in the water to keep a 6-foot fuel slick from moving. When the airplane was removed from the water, the tach time indicated 377.71, and no gas was present in the gascolator. When the mechanic asked the fire department personnel how much fuel that would equate to, they stated about 1 gallon. The Palm Beach County Fire Rescue Report states, "Aircraft apparently ran out of fuel while trying to land at Willis Glider Port, flew across SR441, crashed into empty field and bounced into canal. amount of fuel spilled was negligible".

Examination of the engine assembly and accessories by the FAA revealed no evidence of a failure.

Pilot Information

Certificate:	Private	Age:	31, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 25, 1993
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	270 hours (Total, all aircraft), 27 hours (Total, this make and model), 229 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MENEAR PITTS	Registration:	N21WM
Model/Series:	S-1S S-1S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	01
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	January 14, 1995 Annual	Certified Max Gross Wt.:	900 lbs
Time Since Last Inspection:	7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	378 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	O-360
Registered Owner:	PRICE M. BERNET	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PBI ,19 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	14:56 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 7000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	, FL	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:25 Local	Type of Airspace:	Class G

Airport Information

Airport:	WILLIS GLIDER PORT N/A	Runway Surface Type:	Grass/turf
Airport Elevation:	18 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	3000 ft / 300 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	26.510938,-80.150695(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	HAROLD TURNER; FORT LAUDERDALE, FL
Original Publish Date:	December 4, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=37836

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 [here](#).