



National Transportation Safety Board Aviation Accident Final Report

Location:	FOND DU LAC, WI	Accident Number:	CHI96LA267
Date & Time:	08/01/1996, 1610 CDT	Registration:	N33UA
Aircraft:	Yakovlev YAK-3UA	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot stated that he originally planned a direct flight at 11,500 feet, but had to descend to 1,500 feet to avoid weather for 10 to 15 minutes, then he climbed back to 11,500 feet. He said this accounted for his arrival in the vicinity of the destination airport with a low fuel level. When he contacted the control tower at the destination airport, he declared 'minimum fuel' but did not declare an emergency. There were approximately 20 other airplanes on the frequency. The pilot was cleared straight-in to the landing runway; however, the engine lost power, and the airplane was landed about three-quarters of a mile short of the intended runway. The pilot said that in order to avoid other aircraft during the approach, he slowed his airplane by lowering the flaps, which he said prevented him from reaching the runway. During a subsequent postaccident examination of the airplane, no mechanical anomaly was found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inaccurate fuel consumption calculations, and his inadequate in-flight planning and decision making. The pilot's failure to declare an emergency fuel condition (inadequate communication) was a related factor.

Findings

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

Findings

1. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
2. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. (F) COMMUNICATIONS - INADEQUATE - PILOT IN COMMAND

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

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

Factual Information

On August 1, 1996, at 1610 central daylight time, a Yak-3UA, N33UA, sustained substantial damage during a forced landing following a loss of engine power 3/4 miles south of the Fond Du Lac Airport, Fond Du Lac, Wisconsin. The pilot told responding authorities that he had run out of fuel. The pilot reported no injuries. The personal 19 CFR Part 91 flight was operating in visual meteorological conditions. No flight plan was on file. The flight departed Tulsa, Oklahoma, at 1345.

The pilot said in a written statement, that he had calculated the fuel burn based on a direct flight at 11,500 feet. He said he encountered weather en route and was forced to descend to 1,500 feet for 10 to 15 minutes and then climbed again to 11,500 feet. When he arrived in the Fond du Lac area he contacted the air traffic control tower and requested landing instructions. According to his statement he declared a fuel emergency. To this, he said he was cleared to land on runway 36; however, was asked to "deviate" to follow a Citation jet on short final. He said that he was unable to "deviate" because he had lost engine power. He said that in order to avoid the possibility of a mid-air collision he slowed his airplane by lowering the flaps which he said prevented him from reaching the end of the runway.

Both the local controller and the ground controller working in the Federal Aviation Administration, Air Traffic Control Tower, at Fond du Lac, were interviewed and they said that the airplane reported 11 miles southwest for a landing with "minimum fuel." The local controller had initially told the pilot to enter a downwind for runway 36, but having heard the fuel state, amended that to a straight in approach for runway 36. They indicated that the airplane reported two miles west and was cleared to land although not in sight, of the local controller. When the airplane was observed it was in a descending left turn and landed short of runway 36. Neither controller heard at anytime a declaration of an emergency by the pilot. When asked about the instruction to follow the Citation, the ground controller said that the airplane was cautioned about the possibility of wake turbulence and told to follow the Citation. He said that when he saw the accident airplane that there existed a one-quarter to one-half mile separation from the jet. He said that although the accident airplane landed short of the intended runway, the Citation jet made a go-around maneuver due to its closing on a landing airplane on runway 36. He did not feel that the Citation was at anytime in conflict with the accident airplane. Both controllers said that the frequency was congested and that there were about 20 airplanes on the frequency at the time. They stated that had the pilot called and reported an emergency it is problematical whether they would have heard him or not.

The airport manager for Fond du Lac Airport was one of the first individuals to arrive at the scene of the accident. He said he asked the pilot if he was all right and then if there was any danger of a fire. The pilot responded in a way that lead this individual to believe that the airplane was out of fuel. He said that the pilot did not mention any difficulty with air traffic control or the airplane, at that time.

The first police officer to arrive at the scene made a report in which he stated that during his initial interview with the pilot, the pilot indicated that he thought during his preflight planning he would have enough fuel to reach his destination, but that he had indeed run out of gas. He did not mention to this office any mechanical difficulties with the airplane or air traffic control problems.

A subsequent examination of the airplane by Federal Aviation Administration, inspectors failed

to reveal any mechanical difficulties.

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	11/30/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1600 hours (Total, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Yakovlev	Registration:	N33UA
Model/Series:	YAK-3UA YAK-3UA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental	Serial Number:	170-406
Landing Gear Type:	Retractable - Tailwheel	Seats:	1
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	5421 lbs
Time Since Last Inspection:	49 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Allison
ELT:	Not installed	Engine Model/Series:	V-1710-63
Registered Owner:	THOMAS A. DODSON	Rated Power:	1325 hp
Operator:	THOMAS A. DODSON	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FLD, 807 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1658 CDT	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 11000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	21° C / 15° C
Precipitation and Obscuration:			
Departure Point:	TULSA, OK (RVS)	Type of Flight Plan Filed:	None
Destination:	(FLD)	Type of Clearance:	VFR
Departure Time:	1345 CDT	Type of Airspace:	Class D

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	04/29/1997
Additional Participating Persons:	EDWARD C STACONIS; MILWAUKEE, WI		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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