



Aviation Investigation Final Report

Location:	KANKAKEE, Illinois	Accident Number:	CHI91LA185
Date & Time:	June 8, 1991, 17:05 Local	Registration:	N4374K
Aircraft:	RYAN NAVION A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE AIRPLANE WAS WITHIN 10 MILES OF THE DESTINATION AIRPORT WHEN THE ENGINE QUIT DUE TO FUEL EXHAUSTION. THE PILOT MADE A HARD FORCED LANDING IN A CORNFIELD. THE PILOT STATED THAT THE MAIN FUEL TANKS WERE TOPPED OFF (40 GALLONS) WHEN THE FLIGHT ORIGINATED. HIS FLIGHT PLANNING INDICATED THE TRIP WOULD TAKE 2 1/3 HOURS, AND HIS ESTIMATED FUEL FLOW WAS 13.1 GALLONS PER HOUR. THE ACCIDENT OCCURRED 2 1/4 HOURS AFTER TAKEOFF. THE PILOT NOTED THAT THE FUEL QUANTITY GAUGE WAS INDICATING LOWER THAN HE EXPECTED DURING THE FLIGHT, BUT HE CONTINUED TOWARD HIS DESTINATION, JUDGING HIS AVAILABLE FUEL BY THE DURATION OF THE FLIGHT. HE STATED THAT THE AIRPLANE'S FUEL SYSTEM WAS SUCH THAT THE MAIN FUEL TANKS COULD APPEAR FULL BEFORE THEY ACTUALLY WERE, AND MISLEAD REFUELLERS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S POOR IN FLIGHT PLANNING/DECISION MAKING AND MISJUDGED FUEL SUPPLY. A RELATED FACTOR IS THE INADEQUATE EMERGENCY PROCEDURE.

Findings

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

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
 2. FLUID,FUEL - EXHAUSTION
 3. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

4. (F) EMERGENCY PROCEDURE - INADEQUATE - PILOT IN COMMAND
 5. GEAR EXTENSION - SELECTED - PILOT IN COMMAND
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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 18, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1500 hours (Total, all aircraft), 125 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RYAN	Registration:	N4374K
Model/Series:	NAVION A NAVION A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	1374
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 22, 1990 Annual	Certified Max Gross Wt.:	3150 lbs
Time Since Last Inspection:	40 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1665 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-470-H
Registered Owner:		Rated Power:	260 Horsepower
Operator:	MERTON L. TOWNSEND	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TRAVERSE CITY , MI (TVC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:50 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	41.109531,-87.859848(est)

Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	GEORGE BEAN; WEST CHICAGO , IL
Original Publish Date:	May 5, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15090

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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](#).