



National Transportation Safety Board Aviation Accident Final Report

Location:	WEST ALTON, MO	Accident Number:	CHI99LA143
Date & Time:	05/01/1999, 1130 CDT	Registration:	N313N
Aircraft:	Narzinski AVID FLYER MARK IV	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The engine experienced an uncommanded loss of power from 6,000 rpm to 5,400 rpm over a period of 4-seconds. The pilot reported that he established the airplane on best glide speed and prepared for an off-field landing while the engine experienced a constant depletion of power, finally losing all power after a period of approximately 30 seconds. The pilot stated that he executed a forced landing into a farm field that had, 'modest furrows'. Substantial damage to the airplane was sustained during the landing. External visual inspection of the engine revealed a hole in the lower engine case on the Power Takeoff (PTO) cylinder side. Internal examination of the engine revealed metal deposits on the PTO cylinder dome, cylinder wall, and piston head. Examination of the PTO connecting rod revealed that the connecting-rod bearing had failed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the connecting rod bearing, and the rough/uneven terrain condition.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE

Findings

1. (C) ENGINE ASSEMBLY,BEARING - FAILURE

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

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

Findings

2. (C) TERRAIN CONDITION - ROUGH/UNEVEN

3. UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - ENCOUNTERED - PILOT IN COMMAND

Factual Information

On May 1, 1999, at 1130 central daylight time, a Narzinski Avid Flyer Mark IV, N313N, owned and piloted by a commercial pilot, sustained substantial damage during a forced landing, following a loss of engine power during cruise flight, near West Alton, Missouri. Visual meteorological conditions prevailed at the time of the accident. The personal flight was operating under the provisions of 14 CFR Part 91 and was not on a flight plan. The pilot reported no injuries. The local flight departed Creve Coeur Airport, Creve Coeur, Missouri at 1100.

According to the pilot's written statement, after approximately 30-minutes of flight time, at an altitude of 1,400 feet above mean sea level, the engine experienced an uncommanded loss of power from 6,000 rpm to 5,400 rpm over a period of 4-seconds. The pilot reported that he established the airplane on best glide speed and prepared for an off-field landing while the engine experienced a constant depletion of power, finally loosing all power after a period of approximately 30 seconds. The pilot stated that he executed a forced landing into a farm field that had, "modest furrows". Substantial damage to the airplane was sustained during the landing.

The Rotax 582 engine, serial number 4084252, was subjected to a tear-down inspection conducted by the NTSB Investigator-in-Charge and a representative of the engine manufacture. External visual inspection of the engine revealed a hole in the lower engine case on the Power Takeoff (PTO) cylinder side. Internal examination of the engine revealed metal deposits on the PTO cylinder dome, cylinder wall, and piston head. Examination of the PTO connecting rod revealed that the connecting-rod bearing had failed. Photos of the hole in the lower engine case, cylinder dome, cylinder wall, piston head, and connecting-rod are attached to this factual report.

Pilot Information

Certificate:	Commercial	Age:	49, Male
Airplane Rating(s):	Multi-engine Land; 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:	05/04/1998
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1421 hours (Total, all aircraft), 112 hours (Total, this make and model), 1155 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Narzinski	Registration:	N313N
Model/Series:	AVID FLYER MARK IV AVID FLYER	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	12350
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	05/03/1998, Annual	Certified Max Gross Wt.:	1050 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	112 Hours	Engine Manufacturer:	Rotax
ELT:	Installed, not activated	Engine Model/Series:	582
Registered Owner:	DANIEL PAUL NARZINSKI	Rated Power:	65 hp
Operator:	DANIEL PAUL NARZINSKI	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SET, 436 ft msl	Distance from Accident Site:	60 Nautical Miles
Observation Time:	1054 CDT	Direction from Accident Site:	12°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	18°C / 17°C
Precipitation and Obscuration:			
Departure Point:	CREVE COEUR, MO (1H0)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1100 CDT	Type of Airspace:	Class G

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): ANDREW T FOX **Report Date:** 01/18/2001

Additional Participating Persons: JOEL PETTUS; ST. ANN, MO

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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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](#).