	NTSB ID: CHI02LA179	Aircraft Registration Number: N877TC
	Occurrence Date: 06/30/2002	Most Critical Injury: None
	Occurrence Type: Accident	Investigated By: NTSB

Location/Time

Nearest City/Place Omaha	State NE	Zip Code 68144	Local Time 1230	Time Zone CDT	
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Airport Proximity: Off Airport/Airstrip	Distance From Landing Facility: 4.3
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Aircraft Information Summary

Aircraft Manufacturer Waltz	Model/Series RV-8	Type of Aircraft Airplane
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Revenue Sightseeing Flight: No

Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On June 30, 2002, at 1230 central daylight time, an amateur-built Waltz RV-8, N877TC, owned and piloted by an airline transport pilot, sustained substantial damage during a forced landing to a soybean field near Omaha, Nebraska. Visual meteorological conditions prevailed at the time of the accident. The personal flight was operating under the provisions of 14 CFR Part 91 without a flight plan. The pilot and his passenger reported no injuries. The flight originated at Creve Couer Airport, St. Louis, Missouri, at 0950 and had the intended destination of Millard Airport (MLE), Omaha, Nebraska.


The pilot reported the airplane experienced a propeller overspeed condition during a descent, with the propeller speed increasing to 3,170 revolutions per minute (rpm). The oil pressure subsequently began to fluctuate between 17 and 26 pounds per square inch (psi). The pilot noted he monitored engine indications for approximately two minutes and did not observe any changes in engine condition. The pilot stated that "loud banging noises began emanating from the engine area" and that other pilot's could hear the sound over the airplane's radio. The pilot reported that the engine lost power about 20 seconds after the "banging" noise began. The pilot stated he picked a field for an emergency landing into the wind. The pilot noted the gear collapsed on touchdown and the airplane slid approximately 150 feet before coming to a stop.


A Federal Aviation Administration airworthiness inspector conducted the on-scene examination of the engine. The examination revealed the engine case was damaged near the number four engine cylinder.

A subsequent teardown examination of the engine revealed the number four connecting rod cap and the connecting rod cap bolts had fractured. A portion of a connecting rod bolt was found impacted into the bottom of another piston.

The number four connecting rod bolts and connecting rod cap were sent to the NTSB investigator-in-charge (IIC) for further examination. The IIC submitted the artifacts to Packer Engineering Inc., Naperville, Illinois, for a materials laboratory examination. The examination revealed that the nut on one of the connecting rod cap bolts was partially engaged. The connecting rod cap showed evidence of fatigue cracking on both the inner and outer edges of the fracture. Fracture features of both connecting rod cap bolts indicated the bolts had separated due to overload.

The materials laboratory factual report is included with the docket material associated with this accident report.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: CHI02LA179			
		Occurrence Date: 06/30/2002			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name Millard Airport	Airport ID: MLE	Airport Elevation 1220 Ft. MSL	Runway Used	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Approach/Arrival Flown: NONE					
VFR Approach/Landing: Forced Landing					
Aircraft Information					
Aircraft Manufacturer Waltz		Model/Series RV-8		Serial Number 80775	
Airworthiness Certificate(s): Experimental (Special)					
Landing Gear Type: Tailwheel					
Amateur Built Acft? Yes	Number of Seats: 2	Certified Max Gross Wt. 1800 LBS	Number of Engines: 1		
Engine Type: Reciprocating	Engine Manufacturer: Lycoming	Model/Series: IO-360-A1B6	Rated Power: 200 HP		
- Aircraft Inspection Information					
Type of Last Inspection Annual	Date of Last Inspection 04/2002	Time Since Last Inspection 35 Hours	Airframe Total Time 222 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?/Type Yes /	ELT Operated? Yes	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner Joe A. Waltz		Street Address 6610 Point Clear Dr.			
		City Houston	State TX	Zip Code 77069	
Operator of Aircraft Joe A. Waltz		Street Address 6610 Point Clear Dr.			
		City Houston	State TX	Zip Code 77069	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI02LA179
	Occurrence Date: 06/30/2002
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 50
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Sex: M	Seat Occupied: Front	Occupational Pilot? Unknown	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Instructor; Flight Engineer

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): Airplane Multi-engine; Airplane Single-engine; Instrument Airplane

Current Biennial Flight Review? 06/2002

Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 06/2002
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	13000	222	1000	12000	6000	2000	100			
Pilot In Command(PIC)	9000	222	900	8100	4500	1500	50			
Instructor	4000		100	2000	200	200	50			
Instruction Received										
Last 90 Days	125	61	61	64	9	10				
Last 30 Days	32	15	15	27	4	4				
Last 24 Hours	10	10	10							

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? No
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Flight Plan/Itinerary

Type of Flight Plan Filed: None

Departure Point St. Louis	State MO	Airport Identifier 1H0	Departure Time 0950	Time Zone CDT
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Destination Omaha	State NE	Airport Identifier MLE	
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Type of Clearance: None

Type of Airspace: Class G

Weather Information

Source of Wx Information:

No record of briefing

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI02LA179
	Occurrence Date: 06/30/2002
	Occurrence Type: Accident

Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
OFF	1255	CDT	1048 Ft. MSL	17 NM	57 Deg. Mag.

Sky/Lowest Cloud Condition: Few	5500 Ft. AGL	Condition of Light: Day
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Lowest Ceiling:	Ft. AGL	Visibility: 7	SM	Altimeter: 30.01	"Hg
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Temperature: 34 °C	Dew Point: 20 °C	Weather Conditions at Accident Site: Visual Conditions
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Wind Direction: 190	Wind Speed: 7	Wind Gusts:
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Visibility (RVR): Ft.	Visibility (RVV) SM	
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Precip and/or Obscuration:

Accident Information

Aircraft Damage: Substantial	Aircraft Fire: None	Aircraft Explosion: None
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- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers				1	1
- TOTAL ABOARD -				2	2
Other Ground					
- GRAND TOTAL -				2	2

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: CHI02LA179

Occurrence Date: 06/30/2002

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Andrew T. Fox

Additional Persons Participating in This Accident/Incident Investigation:

Bob Johnson
FAA- Lincoln FSDO
Lincoln, NE