



Aviation Investigation Final Report

Location:	Palmyra, Wisconsin	Accident Number:	CHI02LA230
Date & Time:	August 3, 2002, 10:50 Local	Registration:	N94431
Aircraft:	Ercoupe (Eng & Research Corp.) G	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot was conducting a practice power-off approach as part of a flight review. The approach was initiated "abeam the numbers" on downwind (in the traffic pattern). The pilot reported that as the airplane was about to enter the landing flare, at an altitude of approximately 6 feet agl, "the aircraft quit flying totally." The resulting hard landing caused the nose gear to collapse and the aircraft skidded to a stop on the runway. The pilot and flight instructor reported winds of 15 knots, gusting to 20 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure by the pilot-in-command to properly compensate for the wind conditions, as well as an improper landing flare. Contributing factors were the inadequate supervision by the flight instructor and the wind gusts.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING

Findings

1. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
2. (C) FLARE - IMPROPER - PILOT IN COMMAND
3. (F) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. (F) WEATHER CONDITION - GUSTS

Occurrence #2: NOSE GEAR COLLAPSED
Phase of Operation: LANDING

Factual Information

On August 3, 2002, at 1050 central daylight time, an Ercoupe Model G, N94431, piloted by a private pilot, was substantially damaged during a hard landing on runway 9 (2,150ft x 200ft, turf) at the Palmyra Municipal Airport (88C), Palmyra, Wisconsin. The flight originated from the East Troy Municipal Airport (57C), East Troy, Wisconsin, at 1010 cdt and intended to return there after practicing takeoffs and landings at Palmyra. The pilot, with a certified flight instructor on board, was intending to complete a biennial flight review. The local flight was being conducted under the provisions of 14 CFR Part 91 and was not on a flight plan. Visual meteorological conditions prevailed. The pilot and flight instructor did not report any injuries.

As part of a flight review, the pilot initiated a power-off approach from "abeam the numbers" on downwind in the traffic pattern. On short final, at an altitude of approximately 6 feet agl, the pilot noted that "the aircraft quit flying and skidded to a stop." The flight instructor on-board, in his written statement, reported "without warning or any indication, the aircraft quit flying totally." The resulting hard landing collapsed the nose gear.

The pilot and flight instructor's statements indicated that no stall warning system was installed in the aircraft. They also reported no malfunctions or failures associated with the airplane or engine prior to the accident.

Weather conditions at the scene, as reported by the pilot and flight instructor, were clear skies and 8 miles visibility. They noted winds from 100 degrees at 15 knots, gusting to 20 knots. The Rock County Airport (JVL) AWOS, 24 miles to the southwest, reported at 1045 cdt, clear skies, 10 miles visibility and winds from 110 degrees at 8 knots.

Pilot Information

Certificate:	Private	Age:	64, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 17, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 1, 2001
Flight Time:	311 hours (Total, all aircraft), 173 hours (Total, this make and model), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft)		

Flight instructor Information

Certificate:	Airline transport; Flight instructor	Age:	67, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 20, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 23, 2001
Flight Time:	16429 hours (Total, all aircraft), 8 hours (Total, this make and model), 15166 hours (Pilot In Command, all aircraft), 85 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe (Eng & Research Corp.)	Registration:	N94431
Model/Series:	G	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5077
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	July 12, 2002 Annual	Certified Max Gross Wt.:	1400 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2794 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C85 Series
Registered Owner:	On file	Rated Power:	85 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	JVL,808 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	10:45 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	27°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	East Troy, WI (57C)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:10 Local	Type of Airspace:	Class G

Airport Information

Airport:	Palmyra Municipal 88C	Runway Surface Type:	Grass/turf
Airport Elevation:	851 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	2150 ft / 200 ft	VFR Approach/Landing:	Simulated forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.883335,-88.597503

Administrative Information

Investigator In Charge (IIC):	SORENSEN, TIM
Additional Participating Persons:	Harold Eubank; FAA – Milwaukee FSDO; Milwaukee, WI
Original Publish Date:	February 25, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=55441

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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](#).