



Aviation Investigation Final Report

Location:	GRAND LEDGE, Michigan	Accident Number:	CHI91LA131
Date & Time:	April 11, 1991, 21:50 Local	Registration:	N294Q
Aircraft:	ENSTROM F-28A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE CFI AND HIS STUDENT WERE TAXIING BACK TO THE RAMP AFTER A NIGHT INSTRUCTIONAL HELICOPTER LESSON WHEN THE ACCIDENT OCCURRED. THE CFI STATED THE STUDENT ASCENDED TO AN ALTITUDE OF APPROXIMATELY 15 FEET DURING THE TAXI AT WHICH TIME THE CFI INSTRUCTED THE STUDENT TO DECREASE ALTITUDE. THE STUDENT DESCENDED TOO LOW AND THE SKID CONTACTED THE TAXIWAY RESULTING IN A DYNAMIC ROLL OVER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE STUDENT'S FAILURE TO MAINTAIN A PROPER ALTITUDE AND CLEARANCE FROM THE TERRAIN ALONG WITH THE CFI'S FAILURE TO ADEQUATELY SUPERVISE THE STUDENT'S ACTIONS. A FACTOR CONTRIBUTING TO THE ACCIDENT WAS THE INADEQUATE VISUAL LOOKOUT AVAILABLE DUE TO THE NIGHT LIGHT CONDITIONS.

Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: HOVER

Findings

1. (F) VISUAL LOOKOUT - INADEQUATE - DUAL STUDENT
2. (F) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND(CFI)

3. (C) PROPER ALTITUDE - NOT MAINTAINED - DUAL STUDENT
4. (C) CLEARANCE - INADEQUATE - DUAL STUDENT
5. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2: ROLL OVER
Phase of Operation: TAXI - AERIAL

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	34, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 28, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1400 hours (Total, all aircraft), 300 hours (Total, this make and model), 750 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ENSTROM	Registration:	N294Q
Model/Series:	F-28A F-28A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	314
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	April 1, 1991 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2950 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	H10-360-C1B
Registered Owner:		Rated Power:	205 Horsepower
Operator:	PAUL CONCINNE	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:	Night/dark
Observation Facility, Elevation:	LAN ,860 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	21:52 Local	Direction from Accident Site:	70°
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Broken / 14000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	21:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	ABRAMS 4D0	Runway Surface Type:	Asphalt
Airport Elevation:	842 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	3200 ft / 75 ft	VFR Approach/Landing:	Full stop

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:	42.749069,-84.740921(est)

Administrative Information

Investigator In Charge (IIC):	Hruban, John
Additional Participating Persons:	WILL ELIOT; GRAND RAPIDS , MI
Original Publish Date:	March 24, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15042

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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](#).