



National Transportation Safety Board

Aviation Accident Final Report

Location:	WOOSTER, OH	Accident Number:	CHI85FA035
Date & Time:	10/31/1984, 1835 EST	Registration:	N2937A
Aircraft:	GULFSTREAM 690C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

WHILE ON FINAL APPROACH TO RWY 09 THE ACFT STRUCK A 42 FT POWER POLE WITH THE RIGHT WING. THE WING WAS TORN FROM THE ACFT. THE ACFT LANDED INVERTED 400 FT EAST OF THE POLE. THE RWY THRESHOLD LIGHTS ARE DISPLACED 165 FT FROM THE RWY END FOR NIGHT OPERATIONS. REIL LIGHTS ARE LOCATED AT THE RWY END. A POWER LINE CROSSES THE EXTENDED CENTERLINE 825 FEET WEST OF THE RWY END. RED OBSTRUCTION LIGHTS MARK THE TOPS OF THE POLES. ON THE NIGHT OF THE ACCIDENT THE OBSTRUCTION LIGHTS WERE INOPERATIVE. WITNESSES REPORTED THAT THE ACFT APPEARED TO BE FLYING LOWER THAN NORMAL IN THE TRAFFIC PATTERN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
2. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) LIGHT CONDITION - DARK NIGHT
4. (F) OBJECT - UTILITY POLE
5. (F) WING - SEPARATION
6. (F) AIRPORT FACILITIES, OBSTRUCTION MARKING - NOT OPERATING

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	52, 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):	Airplane Multi-engine; Airplane Single-engine; Glider	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	05/31/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	9715 hours (Total, all aircraft), 2665 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	GULFSTREAM	Registration:	N2937A
Model/Series:	690C 690C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	11670
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	08/01/1984, 100 Hour	Certified Max Gross Wt.:	10325 lbs
Time Since Last Inspection:	54 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	1157 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TPE3315254K
Registered Owner:	H&H INDUSTRIAL SALES INC.	Rated Power:	715 hp
Operator:	H&H INDUSTRIAL SALES INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	CAK, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1750 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12°C / 8°C
Precipitation and Obscuration:			
Departure Point:	ERIE, PA (ERI)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1730 EST	Type of Airspace:	

Airport Information

Airport:	WAYNE COUNTY (BJJ)	Runway Surface Type:	
Airport Elevation:	0 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WILLIAM S COOPER	Report Date:
Additional Participating Persons:	MICHAEL CONLEY; CLEVELAND, OH BOB L CATES; OKLAHOMA CITY, OK PETER BAKER; PHOENIX, AZ DAVID KEEGAN; PHOENIX, AZ	
Publish Date:		
Investigation Docket:	NTSB accident and incident docket 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.ntsb.gov/pubdms/ .	

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).