



Aviation Investigation Final Report

Location:	YIPSILANTI, Michigan	Accident Number:	CHI96LA081
Date & Time:	January 24, 1996, 20:08 Local	Registration:	N4108S
Aircraft:	BEECH 58	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot was taxiing onto a parking ramp when his airplane collided with a parked airplane. The pilot said a hangar on the ramp's edge had 15 floodlights along its top edge, and a dark area on its middle section. He said the flood lights, his airplane's taxilight, and falling snow caused light reflection that made it difficult to see the parked airplane. He said the dark color of the airplane his airplane struck blended in with the hangar's dark area. An FAA PMI confirmed the pilot's statement about the floodlights and the fact that no taxiway or ramp markings were available.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: was the pilot not maintaining visual separation with the parked airplanes. A factor in this accident was the pilot's over- confidence in his personal ability to taxi onto the parking ramp with the snowfall he was encountering.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: TAXI - FROM LANDING

Findings

1. OBJECT - AIRCRAFT PARKED/STANDING
2. UNSAFE/HAZARDOUS CONDITION - ENCOUNTERED - PILOT IN COMMAND

3. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
4. WEATHER CONDITION - SNOW
5. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND
6. LIGHT CONDITION - DARK NIGHT

Factual Information

On January 24, 1996, at 2008 eastern standard time, a Beech 58 Baron, N4108S, operated by Welch Aviation, Incorporated, of Alpena, Michigan, and piloted by an airline transport rated pilot, was substantially damaged when it collided with a parked airplane as it taxied onto a parking ramp. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 135 flight was not operating on a flight plan. The pilot reported no injuries. The flight had departed Grand Rapids, Michigan, exact time unknown.

The pilot said he taxied onto the airport's west ramp from taxiway "C." He said he turned his airplane 60 degrees to the left after taxiing onto the ramp. According to the pilot, his intention was to line up with his intended parking area next to the hangar's office area. The pilot said he did not see Learjet N44CP that his airplane collided with until it was too late to stop. He said the Learjet was parked directly in front of the hangar's office section that was not illuminated by the hangar lights.

The hangar the pilot was taxiing toward had about 15 flood lights along its roof line which shine down on portions of the ramp. The hangar has four doors on either side of an office area. According to the pilot, these are doors to individual aircraft bays. Each door has windows across their front that are below the door's middle section. Airplanes parked in front of these doors were visible to the pilot.

The office area is located in the middle of the hangar. The office area and adjacent ramp are not lighted. According to the pilot, the Learjet was a dark color and blended into the dark area on the hangar and ramp.

The pilot of N4108S said the flood lights, falling snow, and the Learjet's position made it impossible to see the Learjet. The pilot said his airplane's taxi light was illuminated and caused light reflection off the falling snow. He said the flood lamps also caused light reflection with the falling snow. The pilot said there were no taxiway or ramp guidance lines to aid in taxiing and parking.

A Federal Aviation Administration Principal Maintenance Inspector (PMI) confirmed the pilot's statement about hangar flood lights. He said the lights were about 40 feet above the ground. The PMI said there were no markings on the taxiway or ramp that could provide guidance to arriving and departing airplanes.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	36, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4900 hours (Total, all aircraft), 1600 hours (Total, this make and model), 4500 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N4108S
Model/Series:	58 58	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TH-605
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 23, 1996 AAIP	Certified Max Gross Wt.:	5400 lbs
Time Since Last Inspection:	4 Hrs	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:		Engine Model/Series:	IO-520-C-7
Registered Owner:	WELCH AVIATION, INC.	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	EAPA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	YIP ,716 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:45 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Unknown	Visibility	3 miles
Lowest Ceiling:	Overcast / 1700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-5°C / -7°C
Precipitation and Obscuration:	N/A - Blowing - Snow		
Departure Point:	GRAND RAPIDS , MI (GRR)	Type of Flight Plan Filed:	Unknown
Destination:		Type of Clearance:	VFLF
Departure Time:	00:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	WILLOW RUN AIRPORT YIP	Runway Surface Type:	
Airport Elevation:	716 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.279747,-83.589157(est)

Administrative Information

Investigator In Charge (IIC):	Gattolin, Frank
Additional Participating Persons:	ROBERT SUTTON; BELLEVILLE , MI
Original Publish Date:	December 16, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=10190

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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](#).