



National Transportation Safety Board Aviation Accident Final Report

Location:	West Chicago, IL	Accident Number:	CHI03LA143
Date & Time:	06/01/2003, 2130 CDT	Registration:	N21737
Aircraft:	Mooney M20S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The airplane landed hard at night and bounced twice, subsequently veering off the runway and striking several airport lights and signs during an attempted aborted landing. The pilot reported he flared too high and was unable to recover from the bounced landing, he subsequently attempted to abort the landing and was unsuccessful.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare, and the pilot's failure to maintain directional control. Contributing factors were the pilot's improper flare and his inadequate recovery from a bounced landing.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - IMPROPER - PILOT IN COMMAND
2. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
3. (C) ABORTED LANDING - NOT SUCCESSFUL - PILOT IN COMMAND
4. (F) LIGHT CONDITION - NIGHT

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

5. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

6. (F) OBJECT - AIRPORT SIGN/MARKER

Factual Information

On June 1, 2003, at 2130 central daylight time, a Mooney M20S, N21737, piloted by a commercial pilot, sustained substantial damage when it veered off the side of the runway and collided with airport signs and markings after a hard landing on runway 10 (4,751 feet by 75 feet, asphalt), at Dupage Airport (DPA), West Chicago, Illinois. The pilot and two passengers were uninjured. Night visual meteorological conditions prevailed at the time of the accident. The business flight was operating under the provisions of 14 CFR Part 91 without a flight plan. The flight originated from Eagle County Regional Airport (EGE), Eagle, Colorado, at 1500 mountain daylight time.

The pilot stated, "The flare was too high, the aircraft dropped to the runway and bounced." The pilot noted the aircraft bounced twice, and on the second bounce he attempted a go-around. The pilot reported applying full throttle and raising "what was thought to be one notch of flaps." The pilot reported the aircraft swerved left and then was "overcorrected right" and subsequently swerved off the right side of the runway, striking fixed objects with the wing. The pilot reported he reduced the throttle to idle when the aircraft ran onto a taxiway. The pilot indicated the nose gear collapsed when the aircraft transitioned from the grass onto the taxiway.

The on-sight investigation revealed that the aircraft exited the left edge of runway 10 at taxiway E-6. The aircraft's right wingtip was found at the intersection of taxiway E-6 and runway 10. A runway light was found damaged near the path of the left landing gear. The wreckage pattern and markings, including eight propeller strikes, continued to the east of runway 20 right. The left main landing gear was found separated from the rest of the aircraft. The taxiway sign for taxiway C was damaged and found next to the wreckage path. The aircraft came to a stop at the intersection of taxiways C and G.

Inspection of the airplane revealed that the flap handle was in the "up" position, and the flaps were in the fully retracted position. The tail of the aircraft showed scraping along its underside, and the tailskid was damaged. The blades were broken from the propeller hub, exhibited blade twist, and were bent aft. The left main landing gear was broken off, and the nose gear was collapsed. The leading edge of the right wing was dented about two-thirds of the way up the span from the fuselage in a pattern consistent with striking an airport sign.

The weather reporting facility located at DPA, reported the winds at 2153 as 120 degrees at 4 knots.

The pilot reported no mechanical problems with the aircraft or powerplant.

Pilot Information

Certificate:	Commercial	Age:	48, 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 Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	07/01/2002
Occupational Pilot:		Last Flight Review or Equivalent:	03/16/2002
Flight Time:	1150 hours (Total, all aircraft), 103 hours (Total, this make and model), 1007 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N21737
Model/Series:	M20S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	30-0004
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	06/30/2002, Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	445 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-550G
Registered Owner:	Galloway Air LLC	Rated Power:	300 hp
Operator:	Galloway Air LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	DPA, 758 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2153 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	13° C / 3° C
Precipitation and Obscuration:			
Departure Point:	Eagle, CO (EGE)	Type of Flight Plan Filed:	None
Destination:	West Chicago, IL (DPA)	Type of Clearance:	VFR
Departure Time:	1500 MDT	Type of Airspace:	Class D

Airport Information

Airport:	Dupage Airport (DPA)	Runway Surface Type:	Asphalt
Airport Elevation:	758 ft	Runway Surface Condition:	Dry
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	4751 ft / 75 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	41.907778, -88.248611

Administrative Information

Investigator In Charge (IIC):	Jim Silliman	Report Date:	12/30/2003
Additional Participating Persons:	William Law; FAA- Dupage FSDO; West Chicago, IL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets 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.nts.gov/pubdms/ .		

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