

Aviation Investigation Final Report

Location:	Houston, Texas	Accident Number:	CEN11LA223
Date & Time:	March 4, 2011, 04:00 Local	Registration:	XA-TWH
Aircraft:	Learjet 25	Aircraft Damage:	Substantial
Defining Event:	Landing area overshoot	Injuries:	6 None
Flight Conducted Under:	Part 129: Foreign		

Analysis

During an instrument landing in night instrument meteorological conditions, the airplane exited the far end of the runway and struck the instrument landing system localizer antenna system. The pilot and the co-pilot both reported that, due to fog and low visibility, the pilot flared the airplane too high and landed too long on the runway. The pilot applied maximum braking and reverse thrust, but could not stop the airplane before exiting the runway. The reported weather was visibility of 3/4 mile in mist and an indefinite ceiling at 200 feet. The operator reported that there was no mechanical malfunction or failure of the airplane that would have precluded normal operation. Both pilots were likely influenced by the mission pressure to land because of medical considerations for a passenger on board.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flying pilot's failure to attain the proper touchdown point in low-visibility conditions, which resulted in a runway overrun. Contributing to the accident was mission pressure to land at that airport.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Lack of action - Pilot
Personnel issues	Motivation/respond to pressure - Pilot
Environmental issues	Fog - Contributed to outcome

Factual Information

History of Flight	
Landing-flare/touchdown	Landing area overshoot (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

On March 4, 2011, about 0400 central standard time, a Learjet 25D, XA-TWH, was substantially damaged when it impacted obstructions while landing at William P. Hobby Airport (HOU), Houston, Texas. The two pilots, two medical crewmembers, and two passengers were not injured. The airplane was registered to Grupo Desarrollador Mares del Pacifico, S.A. de C.V., and operated by Personas y Paquetes Por Aire, S.A. de C.V. under the provisions of 14 Code of Federal Regulations Part 129 as a foreign air carrier air ambulance flight. Night instrument meteorological conditions prevailed and an instrument flight rules flight plan was filed. The flight originated about 0140 from Angel Albino Corzo International Airport (MMTG) Tuxtla Gutiérrez, Chiapas, México.

During the landing on runway 12R, the airplane exited the southeast end of the runway, struck, and damaged the instrument landing system (ILS) localizer antenna system. The airplane continued traveling about 1,000 feet past the end of the runway and came to rest upright in a flat grassy area.

The pilot and the co-pilot both stated that due to the fog and low visibility they could not see the far end of the runway and flared the airplane too high. After landing long on the runway the pilot said he applied maximum braking and reverse thrust but could not stop the airplane before colliding with the ILS antenna system. The operator reported that there was no mechanical malfunction or failure.

The operator stated that the decision not to delay the flight and to land in marginal conditions was influenced by medical considerations for the passenger, who needed immediate specialized medical treatment.

A review of recorded data from the HOU automated weather observation station, revealed the conditions at 0353 were wind from 200 degrees at 3 knots, visibility of 3/4 mile in mist, an indefinite ceiling at 200 feet, temperature of 19 degrees Celsius (C), dew point of 18 degrees C, and an altimeter setting of 29.90 inches of Mercury.

Pilot Information

Certificate:	Airline transport	Age:	32,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 30, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 26, 2010
Flight Time:	(Estimated) 5475 hours (Total, all aircraft), 1723 hours (Total, this make and model), 2700 hours (Pilot In Command, all aircraft), 67 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all		

aircraft), 4 hours (Last 24 hours, all aircraft)

Co-pilot Information

Certificate:	Commercial	Age:	27,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	April 19, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 26, 2010
Flight Time:	(Estimated) 828 hours (Total, all aircraft), 533 hours (Total, this make and model), 57 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Learjet	Registration:	XA-TWH
Model/Series:	25 D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	289
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	January 5, 2011 Continuous airworthiness	Certified Max Gross Wt.:	15000 lbs
Time Since Last Inspection:		Engines:	2 Turbo jet
Airframe Total Time:	7098 Hrs at time of accident	Engine Manufacturer:	GENERAL ELECTRIC
ELT:	C91A installed, not activated	Engine Model/Series:	CJ610
Registered Owner:	GRUPO DESARROLLADOR MARES DEL PACIFICO S A DE C V	Rated Power:	2850 Lbs thrust
Operator:	PERSONAS Y PAQUETES POR AIRE S A DE C V	Operating Certificate(s) Held:	Foreign air carrier (129)
Operator Does Business As:	USMX AIRLINK	Operator Designator Code:	QP6F

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	KHOU,46 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	03:53 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	200 ft AGL	Visibility	0.75 miles
Lowest Ceiling:	Indefinite (V V) / 200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	19°C / 18°C
Precipitation and Obscuration:	Heavy - None - Mist		
Departure Point:	Tuxla Gutierrez (MMTG)	Type of Flight Plan Filed:	IFR
Destination:	Houston, TX (KHOU)	Type of Clearance:	IFR
Departure Time:	01:40 Local	Type of Airspace:	

Airport Information

Airport:	William P Hobby Airport KHOU	Runway Surface Type:	Asphalt
Airport Elevation:	46 ft msl	Runway Surface Condition:	Dry
Runway Used:	12R	IFR Approach:	ILS
Runway Length/Width:	7602 ft / 150 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	29.640556,-95.273887(est)

Administrative Information

Investigator In Charge (IIC):	Latson, Thomas
Additional Participating Persons:	Jimmy D Stahl; FAA Houston FSDO; Houston, TX
Original Publish Date:	January 31, 2013
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=78537

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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 <u>here</u>.