



# Aviation Investigation Final Report

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

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## 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

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

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Landing area overshoot (Defining event)
<b>Landing-landing roll</b>	Runway excursion
<b>Landing-landing roll</b>	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

<b>Certificate:</b>	Airline transport	<b>Age:</b>	32, Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	June 30, 2010
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	May 26, 2010
<b>Flight Time:</b>	(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

<b>Certificate:</b>	Commercial	<b>Age:</b>	27, Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 19, 2010
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	May 26, 2010
<b>Flight Time:</b>	(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

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

## Meteorological Information and Flight Plan

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

## Airport Information

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

## Wreckage and Impact Information

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

## Administrative Information

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

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 [here](#).