



National Transportation Safety Board

Aviation Accident Data Summary

Location:	HYANNIS, MA	Accident Number:	NYC99LA151
Date & Time:	07/01/1999, 2224 EDT	Registration:	N219FX
Aircraft:	Learjet 60	Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Executive/Corporate		

Analysis

The pilot in command (PIC) and first officer (FO) were on a return flight. While being vectored for the Runway 24 ILS approach, as the flaps were selected to 20 degrees and the landing gear was extended, the crew noted that the left and right amber HYDR PRESS lights began to illuminate. When the lights began to flash with more regularity, the crew discussed whether to continue or divert to another airport. The captain decided to proceed to the destination airport, with a 5,425-foot runway. After touchdown, the captain applied normal braking, but the brakes did not respond. Additionally, the crew attempted to use the reverse thrusters, which also did not respond. The captain then attempted to apply emergency braking, but the emergency brake lever would not move. The captain then requested the FO to apply emergency braking. The captain then declared he was aborting the landing, immediately after which, the FO successfully engaged the emergency brakes. The airplane proceeded off the departure end of the wet runway, struck a localizer antenna, and came to rest in a fence. Examination of the airplane revealed that the left main landing gear actuator extend hose leaked hydraulic fluid and was not torqued to specifications. According to a work item sheet, a corrective action was entered on the sheet on June 14, 'Replaced main gear actuator extend pressure hoses. Replaced uplock main gear hoses with new [Teflon] hoses.' The Airplane Flight Manual (AFM) stated that in the event of a hydraulic pressure loss, 'With no flaps, no spoilers, no thrust reversers, and no anti-skid, the landing distance will be greatly increased.' Multiply the Actual Landing Distance for Anti-Skid ON shown in Section V by a factor of 3.' The calculated landing distance, uncorrected, was 3,690 feet. The factor of three required an 11,000-foot runway. No abnormal or emergency quick reference checklists were found in the cockpit, and there was no mention of abnormal or emergency procedures in the cockpit voice recorder (CVR) transcript. An AFM, which contained an abnormal checklist and procedures section, was found in a side pocket next to the captain. Examination of company personnel files revealed that the captain had been issued an 'Employee Warning Notice,' in August 1998, for failure to follow instructions and rudeness to employees or customers. The notice also stated that numerous FO's reported that the pilot was rude and discourteous when he addressed them, and that he was not promoting good cockpit resource management (CRM). The captain had not received company CRM training. The airplane was part of a fractional ownership program and was operated under 14 CFR Part 91.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flightcrew's inadequate coordination and their failure to utilize checklists. Also causal was the captain's improper decision to continue the approach to a runway with insufficient length. A factor in the accident was the improper maintenance.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: APPROACH

Findings

1. HYDRAULIC SYSTEM,FITTING - LOOSE
2. (F) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

Occurrence #2: OVERRUN

Phase of Operation: LANDING - ROLL

Findings

3. LIGHT CONDITION - NIGHT
4. (C) CHECKLIST - NOT USED - FLIGHTCREW
5. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - WET
6. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
7. (C) CREW/GROUP COORDINATION - INADEQUATE - FLIGHTCREW

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

8. OBJECT - APPROACH LIGHT/NAVAID
9. OBJECT - FENCE

Pilot Information

Certificate:	Airline Transport	Age:	43
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	7806 hours (Total, all aircraft), 1431 hours (Total, this make and model), 6619 hours (Pilot In Command, all aircraft), 129 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Learjet	Registration:	N219FX
Model/Series:	60 60	Engines:	2 Turbo Jet
Operator:	BOMBARDIER AEROSPACE CORP.	Engine Manufacturer:	P&W
Operating Certificate(s) Held:	None	Engine Model/Series:	PW300
Flight Conducted Under:	Part 91: General Aviation - Executive/Corporate		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	HYA, 55 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 1000 ft agl	Wind Speed/Gusts, Direction:	18 knots / 25 knots, 230°
Temperature:	23° C	Visibility	7 Miles
Precipitation and Obscuration:			
Departure Point:	HERDON, VA (IAD)	Destination:	, MA (HYA)

Airport Information

Airport:	BARNSTABLE MUNICIPAL (HYA)	Runway Surface Type:	Asphalt
Runway Used:	24	Runway Surface Condition:	Wet
Runway Length/Width:	5425 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	STEPHEN M DEMKO	Adopted Date:	08/31/2000
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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