



National Transportation Safety Board Aviation Accident Final Report

Location:	Ft. Lauderdale, FL	Accident Number:	ERA14LA111
Date & Time:	02/02/2014, 2230 EST	Registration:	N979RF
Aircraft:	GATES LEARJET CORP. 35A	Aircraft Damage:	None
Defining Event:	Loss of visual reference	Injuries:	1 Serious, 4 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Medical Emergency)		

Analysis

The pilot, copilot, and two additional crewmembers were preparing to depart on a night medical transport flight. The copilot was at the controls of the airplane while the pilot monitored the airplane's systems and prepared for takeoff. During the engine start, one of the two linemen providing ground services to the airplane departed the ramp area leaving one lineman alone, which the operator allowed for normal ground servicing operations. After completing the engine start, the copilot gave the disconnect ground power hand signal to the lineman. The lineman responded with the hold hand signal and then moved to the left and rear of the airplane to disconnect the ground power unit (GPU). The pilot stated that he monitored the airplane's voltmeter to verify that the GPU was disconnected by observing a drop in the voltage current. However, although the drop in voltage could confirm that the GPU was no longer supplying power, it could not confirm that the GPU cable was disconnected. The pilot then looked out the window and realized that the airplane was moving forward. The pilot took the controls, applied the brakes, and set the parking brake. The pilot did not have visual contact with the lineman, so he asked the two crewmembers seated in the cabin to locate him, and one of the crewmembers reported that she saw him standing next to the GPU. The pilot then began to taxi the airplane for departure within the nonmovement area of the ramp; the pilot did not realize that the GPU was still connected to the airplane. As the airplane turned right, the GPU was pulled onto its side, and it then fell onto the lineman's right leg, which resulted in a serious injury. The pilot stopped the airplane and shut down the engines without further incident. The pilot should have ensured that the GPU was disconnected from the airplane via hand signals from the lineman providing ground services before taxiing the airplane and his failure to do so resulted in the lineman's injury.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to ensure that the ground power unit was disconnected from the airplane via hand signals from the lineman providing ground services before taxiing, which resulted in an

injury to the lineman.

Findings

Personnel issues	Monitoring other person - Pilot (Cause) Following instructions - Pilot (Cause)
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Factual Information

On February 2, 2014, about 2230 eastern standard time, a Gates Learjet Corporation L35A, N979RF, sustained minor damage while taxiing in preparation for a flight at Fort Lauderdale International Airport (FLL), Fort Lauderdale, Florida. The pilot, copilot, and two additional crewmembers were not injured. A lineman sustained serious injuries. The airplane was owned and operated JEDAMI Air, LLC, under 14 Code of Federal Regulations Part 135, as a medical transport flight. Night visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the flight that was destined for Owen Roberts International Airport (MWCR), Cayman Islands.

According to the pilot, he occupied the left seat and the copilot occupied the right seat. The copilot was at the controls of the airplane. During engine start, the copilot observed one of the two linemen depart the ramp area, leaving one lineman remaining to assist the airplane with ground operations. After completion of the engine start, the copilot gave the disconnect ground power hand signal to the lineman. The lineman moved to the left and rear of the airplane to disconnect the ground power unit (GPU). The pilot monitored the airplane's voltmeter to verify disconnect by observing a drop in the voltage current. After placing the airplane's two generators on line, the pilot looked up and outside to find that the airplane was rolling forward at idle power. The pilot applied the brakes and set the parking brake. After about 5 minutes, the flight crew still did not have visual contact with the lineman; however, the additional crewmembers seated in the cabin observed the lineman standing next to the GPU. The pilot took controls of the airplane and began a right turn to taxi in the ramp area. The copilot glanced out of the right cockpit window and notified the pilot that the lineman was lying on the ground. The pilot stopped the airplane and shut down the engines. When the occupants exited the airplane, they observed that the GPU was lying on top of the lineman, and were able to move lift it off of him.

According to a statement provided to police, the lineman gave the pilot the "HOLD" signal and proceeded to the GPU that was still connected to the airplane. The lineman stated that as he attempted to disconnect the GPU from the airplane, the airplane began moving forward, pulling the GPU over, and knocking him down to the ground. The GPU came to rest on his right leg.

Examination of the airplane did revealed minor damage to the GPU connector points and to the airplane skin. The lineman was transported to the hospital for further treatment.

According to the manager of the operator, normal ground servicing operations were conducted utilizing either one or two lineman depending on availability.

In the NTSB Pilot/Operator Accident Report Form, the operator noted that an observed drop in voltage confirmed that the GPU was no longer supplying power to the airplane; however, it would not confirm that the GPU cable had been disconnected.

History of Flight

Taxi	Ground handling event
	Loss of visual reference (Defining event)

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	25
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	09/05/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	10/30/2013
Flight Time:	2167 hours (Total, all aircraft), 1543 hours (Total, this make and model), 607 hours (Pilot In Command, all aircraft), 139 hours (Last 90 days, all aircraft), 32 hours (Last 30 days, all aircraft)		

Co-Pilot Information

Certificate:	Commercial	Age:	24
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	06/05/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	01/15/2014
Flight Time:	1650 hours (Total, all aircraft), 64 hours (Total, this make and model), 1461 hours (Pilot In Command, all aircraft), 141 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	GATES LEARJET CORP.	Registration:	N979RF
Model/Series:	35A A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	376
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	01/31/2014, AAIP	Certified Max Gross Wt.:	18500 lbs
Time Since Last Inspection:	167 Hours	Engines:	1 Turbo Fan
Airframe Total Time:	12555 Hours	Engine Manufacturer:	GARRETT
ELT:	C126 installed, not activated	Engine Model/Series:	TFE 731 2 2B
Registered Owner:	JEDAMI AIR LLC	Rated Power:	1550 lbs
Operator:	JEDAMI AIR LLC	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	K7YA

Meteorological Information and Flight Plan

Observation Facility, Elevation:	FLL, 9 ft msl	Observation Time:	2153 EST
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Night/Dark
Direction from Accident Site:	0°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 1800 ft agl	Temperature/Dew Point:	23° C / 22° C
Lowest Ceiling:	Broken / 4000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	10 knots, 110°	Visibility (RVR):	
Altimeter Setting:	30.09 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ft. Lauderdale, FL (KFL)	Type of Flight Plan Filed:	IFR
Destination:	Grand Cayman, FN (MWCR)	Type of Clearance:	IFR
Departure Time:	2300 EST	Type of Airspace:	Class C

Airport Information

Airport:	Fort Lauderdale International (KFL)	Runway Surface Type:	N/A
Airport Elevation:	9 ft	Runway Surface Condition:	Dry
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	None
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 4 None		

Administrative Information

Investigator In Charge (IIC):	Patrick M Murray	Adopted Date:	09/24/2014
Additional Participating Persons:	Jim Piccoli; FAA/FSDO; Miramar, FL		
Publish Date:	09/24/2014		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=88753		

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