



Aviation Investigation Final Report

Location:	Guantanamo Bay, Other Foreign	Accident Number:	ERA23LA081
Date & Time:	December 1, 2022, 21:08 Local	Registration:	N979RF
Aircraft:	Learjet 35	Aircraft Damage:	Substantial
Defining Event:	Dragged wing/rotor/float/other	Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Positionin	g	

Analysis

The flight crew reported that during a civilian positioning flight to pick up a medical patient, they were cleared to land via a visual approach at night. During the base segment in the traffic pattern, the first officer, who was the pilot flying, lost sight of the runway and transferred the flight controls to the captain at an altitude of about 900 ft mean sea level. The first officer stated that after the exchange of the flight controls, the "aircraft was on short final and passed over the threshold at an angle." Subsequently, during the captain's landing flare and touchdown, the stick shaker activated, and the left wing dropped and impacted the runway. The captain completed the landing roll, stopped the airplane on the runway, and all of the occupants exited without incident. The impact with the runway resulted in substantial damage to the left wing. The flight crew did not report any preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The flight crew's continuation of an unstable approach which resulted in abnormal runway contact during the landing flare and touchdown.

Findings	
Personnel issues	Incorrect action performance - Flight crew
Aircraft	Landing flare - Incorrect use/operation

Factual Information

History of Flight

Landing-flare/touchdown

Dragged wing/rotor/float/other (Defining event)

Pilot Information

Certificate:	Airline transport; Foreign	Age:	46,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	September 20, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 1, 2022
Flight Time:	9732 hours (Total, all aircraft), 210 hours (Total, this make and model), 8753 hours (Pilot In Command, all aircraft), 151 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Commercial; Flight instructor	Age:	38,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	April 11, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 16, 2022
Flight Time:	1458 hours (Total, all aircraft), 146 hours (Total, this make and model), 1141 hours (Pilot In Command, all aircraft), 66 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Learjet	Registration:	N979RF
Model/Series:	35 A	Aircraft Category:	Airplane
Year of Manufacture:	1981	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	376
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	November 3, 2022 AAIP	Certified Max Gross Wt.:	18500 lbs
Time Since Last Inspection:	46 Hrs	Engines:	2 Turbo fan
Airframe Total Time:	16719 Hrs at time of accident	Engine Manufacturer:	GARRETT
ELT:	C126 installed, not activated	Engine Model/Series:	TFE 731-2C-2B
Registered Owner:	JEDAMI AIR LLC	Rated Power:	3500 Lbs thrust
Operator:	REVA, Inc.	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	02JA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	MUGM,131 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	21:51 Local	Direction from Accident Site:	98°
Lowest Cloud Condition:	Scattered / 6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 8000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	26°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Lauderdale, FL (FXE)	Type of Flight Plan Filed:	IFR
Destination:	Guantanamo Bay, Cuba	Type of Clearance:	IFR
Departure Time:	19:43 Local	Type of Airspace:	Military operation area;Special

Airport Information

Airport:	GUANTANAMO BAY NAVAL AIR STATION MUGM	Runway Surface Type:	Asphalt
Airport Elevation:	61 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	Visual
Runway Length/Width:	8000 ft / 200 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	19.906227,-75.199584(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Kenneth Reyes; FAA (Miami International Field Office); Miami, FL
Original Publish Date:	June 6, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=106436

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>.