



Aviation Investigation Final Report

Location:	Fort Lauderdale, Florida	Accident Number:	DCA21LA082
Date & Time:	February 8, 2021, 08:30 Local	Registration:	N918NK
Aircraft:	Airbus A320	Aircraft Damage:	None
Defining Event:	Abrupt maneuver	Injuries:	1 Serious, 95 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

The airplane experienced an abrupt maneuver during initial descent and a flight attendant fractured their ankle.

According to the flight crew, just prior to top of descent the captain informed the flight attendants to prepare the cabin early because there was weather in the vicinity of the arrival airport. Shortly after that, the first officer (FO), who was the pilot flying, initiated the descent. Air traffic control then cleared the flight to a lower altitude and requested they increase their descent. The FO complied, and increased their vertical speed, however, at some point, he engaged "open descent" mode. The FO saw the airspeed increasing towards red line and he pulled back on the stick and the autopilot disengaged. The captain said he then took control using the autopilot disconnect/priority switch and applied aft stick pressure to return the airplane to a normal descent pitch attitude to prevent an overspeed. According to the flight crew, the airplane was in clear air and smooth flight conditions when the event occurred.

Two flight attendants (FA) in the aft galley, were thrown into the air and onto the floor. The captain was notified that one of the FAs had been injured and would need assistance when they got to the gate. A deadheading FA assumed the injured FAs duties for the remainder of the flight. After landing, the FA was transported to a local hospital and diagnosed with a fractured ankle.

Probable Cause and Findings

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

An abrupt flight control input by the flight crew during descent that caused a flight attendant to fall and fracture their ankle.

Findings

Personnel issues	Aircraft control - Flight crew
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Factual Information

History of Flight

Enroute-descent	Abrupt maneuver (Defining event)
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Pilot Information

Certificate:	Airline transport	Age:	62,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	August 11, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 8, 2020
Flight Time:	34400 hours (Total, all aircraft), 12000 hours (Total, this make and model), 34375 hours (Pilot In Command, all aircraft), 255 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport	Age:	57,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	5-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:	March 21, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 10, 2020
Flight Time:	3402 hours (Total, all aircraft), 103 hours (Total, this make and model), 2089 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Airbus	Registration:	N918NK
Model/Series:	A320 271N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	09259
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	Spirit Airlines	Rated Power:	
Operator:	Spirit Airlines	Operating Certificate(s) Held:	Flag carrier (121)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class A

Wreckage and Impact Information

Crew Injuries:	1 Serious, 5 None	Aircraft Damage:	None
Passenger Injuries:	90 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious, 95 None	Latitude, Longitude:	26.683,-80.095(est)

Administrative Information

Investigator In Charge (IIC): Lovell, John

Additional Participating Persons:

Original Publish Date: July 19, 2022

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=102620>

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](#).