



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Trinity Bay, Texas	Accident Number:	DCA19MA086
Date & Time:	February 23, 2019, 12:39 Local	Registration:	N1217A
Aircraft:	Boeing 767	Aircraft Damage:	Destroyed
Defining Event:	Loss of control in flight	Injuries:	3 Fatal
Flight Conducted Under:	Part 121: Air carrier - Non-scheduled		

Analysis

The Safety Board's full report is available at <http://www.nts.gov/investigations/AccidentReports/Pages/aviation.aspx>. The Aircraft Accident Report number is NTSB/AAR-20/02.

On February 23, 2019, at 1239 central standard time, Atlas Air Inc. flight 3591, a Boeing 767-375BCF, N1217A, was destroyed after it rapidly descended from an altitude of about 6,000 ft mean sea level and crashed into a shallow, muddy marsh area of Trinity Bay, Texas, about 41 miles east-southeast of George Bush Intercontinental/Houston Airport (IAH), Houston, Texas. The captain, first officer, and a nonrevenue pilot riding in the jumpseat died. Atlas operated the airplane as a Title 14 Code of Federal Regulations Part 121 domestic cargo flight for Amazon.com Services LLC, and an instrument flight rules flight plan was filed. The flight departed from Miami International Airport, Miami, Florida, about 1033 (1133 eastern standard time) and was destined for IAH.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inappropriate response by the first officer as the pilot flying to an inadvertent activation of the go-around mode, which led to his spatial disorientation and nose-down control inputs that placed the airplane in a steep descent from which the crew did not recover. Contributing to the accident was the captain's failure to adequately monitor the airplane's flightpath and assume positive control of the airplane to effectively intervene. Also contributing were systemic deficiencies in the aviation industry's selection and performance measurement practices, which failed to address the first officer's aptitude-related deficiencies and maladaptive stress response. Also contributing to the accident was the Federal Aviation Administration's failure to implement the pilot records database in a sufficiently robust and timely manner.

Findings

Personnel issues	Incorrect action performance - Copilot
Aircraft	(general) - Unintentional use/operation
Personnel issues	Use of automation - Copilot
Organizational issues	Personnel records - Not specified
Organizational issues	Personnel records - FAA/Regulator
Personnel issues	Qualification/certification - Copilot
Personnel issues	(general) - Copilot
Personnel issues	(general) - Copilot
Personnel issues	Personality - Copilot
Personnel issues	Attention - Pilot
Aircraft	Data recorders (flight/maint) - Design
Aircraft	(general) - Design

Factual Information

History of Flight

Enroute-descent	Loss of control in flight (Defining event)
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Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N1217A
Model/Series:	767 375	Aircraft Category:	Airplane
Year of Manufacture:	1992	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	25865
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	400998 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:		Engine Manufacturer:	General Electric
ELT:		Engine Model/Series:	CF6-80C2B6F
Registered Owner:		Rated Power:	24995 Horsepower
Operator:		Operating Certificate(s) Held:	Supplemental

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	KIAH,95 ft msl	Distance from Accident Site:	41 Nautical Miles
Observation Time:	12:35 Local	Direction from Accident Site:	290°
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:			
Departure Point:	Miami (KMIA)	Type of Flight Plan Filed:	IFR
Destination:	Houston, TX (KIAH)	Type of Clearance:	IFR
Departure Time:	11:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	George Bush Intercontinental KIAH	Runway Surface Type:	
Airport Elevation:	95 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	29.77,-94.660003(est)

Administrative Information

Investigator In Charge (IIC):	English, William		
Additional Participating Persons:			
Original Publish Date:	August 4, 2020	Investigation Class:	1
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99013		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).