

# National Transportation Safety Board Aviation Accident Final Report

Location:	Atlantic Ocean, AO	Accident Number:	ERA19LA096
Date & Time:	02/08/2019, 1216 EST	Registration:	N145GT
Aircraft:	Convair C131	Aircraft Damage:	Destroyed
Defining Event:	Loss of engine power (partial)	Injuries:	1 Fatal, 1 Serious
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

## Analysis

According to the first officer, during the first cargo flight of the day, the left engine propeller control was not working properly and the captain indicated that they would shut down the airplane and contact maintenance if the left engine propeller control could not be reset before the return flight. For the return flight, the engines started normally, and both propellers were cycled. The captain and the first officer were able to reset the left propeller control, so the airplane departed with the first officer as the pilot flying.

The takeoff and initial climb were normal; however, as the airplane climbed through 4,000 ft, the left engine propeller control stopped working and the power was stuck at 2,400 rpm. The captain tried to adjust the propeller control and inadvertently increased power to 2,700 rpm. The captain then took control of the airplane and tried to stabilize the power on both engines. He leveled the airplane at 4,500 ft, canceled the instrument flight rules flight plan, and flew via visual flight rules direct toward the destination airport. The first officer suggested that they return to the departure airport, but the captain elected to continue as planned (The destination airport was located about 160 nautical miles from the departure airport). The first officer's postaccident statements indicated that he did not challenge the captain's decision.

When the flight began the descent to 1,500 ft, the right engine began to surge and lose power. The captain and the first officer performed the engine failure checklist, and the captain feathered the propeller and shut down the engine. Shortly afterward, the left engine began to surge and lose power. The captain told the first officer to declare an emergency.

The airplane continued to descend, and the airplane impacted the water "violently," about 32 miles east of the destination airport. The captain was unresponsive after the impact and the first officer was unable to lift the captain from his seat. Because the cockpit was filling rapidly with water, the first officer grabbed the life raft and exited the airplane from where the tail section had separated from the empennage.

The first officer did not know what caused both engines to lose power. The airplane was not recovered from the ocean, so examination and testing to determine the cause of the engine

failures could not be performed. According to the operator, the flight crew should have landed as soon as practical after the first sign of a mechanical issue. Thus, the crew should have diverted to the closest airport when the left engine propeller control stopped working and not continued the flight toward the destination airport.

### **Probable Cause and Findings**

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

The captain's decision to continue with the flight with a malfunctioning left engine propeller control and the subsequent loss of engine power on both engines for undetermined reasons, which resulted in ditching into the ocean. Contributing to the accident was the first officer's failure to challenge the captain's decision to continue with the flight.

Findings	
Aircraft	Propeller governor - Failure (Cause)
	Engine (turbine/turboprop) - Failure (Cause)
Personnel issues	Decision making/judgment - Pilot (Cause)
	Lack of action - Copilot (Factor)
Not determined	Not determined - Unknown/Not determined (Cause)

## **Factual Information**

On February 8, 2019, at 1216 eastern standard time, a General Dynamics Convair 340 (C-131B), N145GT, was destroyed during a ditching in the Atlantic Ocean about 32 miles east of Miami-Opa Locka Executive Airport (OPF), Miami, Florida. The captain was fatally injured, and the first officer was seriously injured. The airplane was registered to and operated by Conquest Air, Inc., as a Title 14 *Code of Federal Regulations* Part 135 cargo flight. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed. The flight departed Lynden Pindling International Airport (MYNN), Nassau, Bahamas, at 1113.

The accident occurred during a return trip to OPF. The first officer stated that, for the first flight of the day (from OPF to MYNN), the preflight inspection, engine start, taxi, and engine run-up were normal and that about 900 gallons of fuel was on board. The flight to MYNN was normal until the first officer, who was the pilot monitoring, attempted to adjust the left engine propeller control for the speed for cruise flight, yet there was no movement on the gauge, and the power was stuck at 2,400 rpm. The first officer tried to reset the propeller control circuit breaker but was unable to do so. The captain stabilized power on both engines, and the remainder of the flight to MYNN was uneventful. After the airplane landed, the captain asked the first officer to send a text message to maintenance control, but the message did not transmit. The captain told the first officer not to worry and indicated that, if they were unable to reset the propeller control on the ground during the engine run-up, then they would shut down the airplane and call maintenance.

The first officer stated that, before the accident flight began, the engines started normally, and both propellers were cycled. The captain and the first officer were able to reset the left propeller control, so the airplane departed for OPF. The first officer was the pilot flying, and he stated that the airplane was operating normally during the takeoff and initial climb; however, as the airplane climbed through 4,000 ft, the left engine propeller control stopped working, and the power was again stuck at 2,400 rpm. The captain tried to adjust the propeller control and inadvertently increased power to 2,700 rpm. The captain then took control of the airplane and stabilized the power on both engines. He leveled the airplane at 4,500 ft, canceled the IFR flight plan, and flew via visual flight rules direct to OPF. The first officer suggested that they return to MYNN, but the captain wanted to continue to OPF (OPF was located about 160 nautical miles west-northwest of MYNN). The first officer indicated that he did not want to disagree with the captain's decision given the captain's "extensive" experience.

The flight proceeded normally until the beginning of the descent (the first officer did not remember the altitude) to 1,500 ft, when the right engine began to surge and lose power. The first officer stated that the captain turned on both boost pumps and tried to stabilize the right engine with the mixture and throttle but that the engine began to backfire and shake "violently" with variations in the brake mean effective pressure (BMEP), fuel pressure, fuel flow indications, rpm, and manifold pressure. At that point, the flight crew performed the engine failure emergency checklist. As part of the checklist, the right engine was feathered, and the mixture was brought to the cutoff position. The first officer reported that, shortly afterward, the left engine also began to surge and shake "violently" with the same variations experienced

after the right engine began to surge. At that point, the captain tried to control the left engine, and the first officer declared an emergency.

The first officer stated that, as the captain maneuvered the airplane to ditch, the airplane impacted the water "violently." During the impact, the first officer struck his head hard on the instrument panel. The first officer unbuckled his harness and saw the captain slumped over in his seat and unresponsive. He tried to lift the captain from his seat but was not able to do so. The first officer realized that he needed to get out of the airplane when the water inside the cockpit was chest high. The first officer stated that he kicked open the cockpit door and saw that the tail had separated from the empennage. He grabbed the life raft and exited from the tail of the airplane. He was rescued by a US Coast Guard helicopter.

The first officer stated that he did not know what caused the engines to lose power. According to the operator, "at the first sign of a mechanical malfunction the crew should have landed as soon as practicable."

#### PERSONNEL INFORMATION

The captain held an airline transport pilot certificate with ratings for airplane single- and multiengine land and instrument airplane. He held type ratings for the Boeing 727 and 737; the Convair 240, 340, and 440; and LR-JET. The operator reported that the captain had 23,000 hours total flight experience, of which 725 hours were in the accident airplane make and model. The captain also held a Federal Aviation Administration (FAA) first-class medical certificate dated January 22, 2019.

The first officer held a commercial pilot certificate with ratings for airplane single- and multiengine land and instrument airplane. He held type ratings in the Convair 240, 340, and 440 (second-in-command privileges only). The operator reported that the first officer had 650 hours total flight experience, of which 305 hours were in the accident airplane. The first officer also held an FAA first-class medical dated August 25, 2018.

#### AIRCRAFT INFORMATION

The airplane was equipped with two Pratt & Whitney R-2800CB3 radial engines and two Hamilton Sunstrand 43E60-377 propellers that were being maintained under an approved aircraft inspection program. The airplane's last inspection was on the day before the accident. At that time, the left engine had accrued 1,943 hours, the right engine had accrued about 417 hours, and the airframe had accrued about 12,701 hours.

#### WRECKAGE AND IMPACT INFORMATION

The left wing washed ashore. The rest of the airplane was not recovered from the ocean. Thus, the engines could not be examined and tested to determine the cause of the failures.

## History of Flight

Enroute-cruise	Loss of engine power (partial) (Defining event)	
	Engine shutdown	
Emergency descent	Loss of engine power (partial)	
Landing-flare/touchdown	Ditching	

## Pilot Information

Certificate:	Commercial	Age:	68, Male
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):	None	Toxicology Performed:	No
Medical Certification:	Class 1 None	Last FAA Medical Exam:	01/22/2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/09/2018
Flight Time:	23000 hours (Total, all aircraft), 725 Command, all aircraft)	hours (Total, this make and model), 2	21000 hours (Pilot In

## **Co-Pilot Information**

Certificate:	Commercial	Age:	28, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Waiver Time Limited Special	Last FAA Medical Exam:	08/25/2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	06/16/2018
Flight Time:	650 hours (Total, all aircraft), 305 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Convair	Registration:	N145GT
Model/Series:	C131 B	Aircraft Category:	Airplane
Year of Manufacture:	1955	Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	256
Landing Gear Type:	Retractable - Tricycle	Seats:	3
Date/Type of Last Inspection:	02/07/2019, AAIP	Certified Max Gross Wt.:	47000 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	12701.2 Hours at time of accident	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	R2800CB3
Registered Owner:	Conquest Air Inc	Rated Power:	2400 hp
Operator:	Conquest Air Inc	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	Q0UA

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OPF, 6 ft msl	Distance from Accident Site:	32 Nautical Miles
Observation Time:	1253 EST	Direction from Accident Site:	90°
Lowest Cloud Condition:		Visibility	10 Miles
Lowest Ceiling:	Broken / 3600 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	26°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipita	tion	
Departure Point:	Nassau, AO (NAS)	Type of Flight Plan Filed:	IFR
Destination:	Miami, FL (OPF)	Type of Clearance:	IFR; VFR Flight Following
Departure Time:	1113 EST	Type of Airspace:	Unknown

### Wreckage and Impact Information

Crew Injuries:	1 Fatal, 1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Serious	Latitude, Longitude:	25.000000, -79.000000 (est)

#### Administrative Information

Investigator In Charge (IIC):	Leah D Read	Report Date:	04/08/2020
Additional Participating Persons:	Carlos Enriquez; FAA/FSDO; Mirimar, FL		
Publish Date:	04/08/2020		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockL	ist.cfm?mKey=989	<u>65</u>

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 <u>here</u>.