



# National Transportation Safety Board

## Aviation Incident Preliminary Report

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<b>Location:</b>	Savannah, GA	<b>Incident Number:</b>	ERA19IA178
<b>Date &amp; Time:</b>	05/09/2019, 1228 EDT	<b>Registration:</b>	N744AT
<b>Aircraft:</b>	Cessna 550	<b>Injuries:</b>	7 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Discretionary)		

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On May 9, 2019, at 1228 eastern daylight time, a Cessna C550, N744AT, experienced a total loss of engine power to both engines and diverted to Savannah/Hilton Head International Airport (SAV), Savannah, Georgia, where it landed without further incident. Both airline transport pilots, two medical crew, and three passengers onboard were not injured. The flight was operated by Air Ambulance by Air Trek Inc as a Title 14 Code of Federal Regulations Part 135 air medical flight. Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the flight, which originated from Naples Municipal Airport (APF), Naples, Florida, around 1100 with an intended destination of Niagara Falls International Airport (IAG), Niagara Falls, New York.

The airplane was based at Punta Gorda Airport (PGD), Punta Gorda, Florida. According to fueling records at PGD, on the morning of the incident, the airplane was fueled with 480 gallons of Jet A fuel with a fuel system icing inhibitor (FSII) additive mixed at the time of fueling. Then, the flight crew completed the 47-nautical-mile flight from PGD to APF without anomaly.

According to the pilots, about 1 hour and 20 minutes into the flight from APF to IAG, while cruising at 35,000 ft mean sea level (msl), the pilot-in-command was trying to set the N1 speed around 103%, but moments after adjusting power, the N1 speed would decrease. Following a few repeated occurrences of the N1 speed decreasing in this manner, all the engine gauges "read regular," then the left engine began to "spool down very slowly." After unsuccessfully attempting to recover engine power, the crew requested a lower altitude from air traffic control and began a descent with the left engine at idle power. The pilot-in-command then noticed that the left engine displayed no oil pressure and subsequently shut it down.

Several minutes passed as the airplane descended with the right engine at 65% fan speed, and while preparing to perform a single-engine approach into SAV, about 8,000 ft msl, the right engine became unresponsive and then began "spooling down." The pilot-in-command declared an emergency and the flight crew performed a straight-in approach to runway 19. The airplane landed without incident and was towed to the ramp.

The second-in-command noted that the left fuel filter bypass light did not illuminate but that the right fuel filter bypass light did illuminate.

According to a lineman who worked for the fixed based operator at PGD, the evening before the incident, he noticed that the FSII was low on a fuel truck and he intended to refill it. He went to a shed where the FSII was located and noted that the FSII bottle was partially filled, and that there was another bottle next to it that was partially filled. He combined the two bottles and then refilled the fuel truck FSII reservoir. Several days after the incident, the lineman realized that he had inadvertently combined a 5-gallon FSII bucket and a 2.5-gallon diesel exhaust fluid (DEF) container instead of two partially-empty containers of FSII.

Fuel samples, fuel system filters, and fuel screens from the airplane were obtained and sent for laboratory testing. Analysis of the fuel contaminants indicated the presence of urea, the primary chemical found in DEF.

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N744AT
Model/Series:	550 No Series	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	Air Ambulance By Air Trek Inc	Operating Certificate(s) Held:	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SAV, 51 ft msl	Observation Time:	1653 UTC
Distance from Accident Site:	0 Nautical Miles	Temperature/Dew Point:	26 °C / 19 °C
Lowest Cloud Condition:	Few / 2700 ft agl	Wind Speed/Gusts, Direction:	12 knots / , 120°
Lowest Ceiling:	Broken / 3200 ft agl	Visibility:	10 Miles
Altimeter Setting:	30.1 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Naples, FL (APF)	Destination:	Niagara Falls, NY (IAG)

## Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	None
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	7 None	Latitude, Longitude:	32.129167, -81.200833 (est)

## Administrative Information

**Investigator In Charge (IIC):** Heidi Kemner

**Additional Participating Persons:** Mark Rumizen; FAA; Burlington, MA

**Note:** The NTSB did not travel to the scene of this incident.