



National Transportation Safety Board Aviation Accident Data Summary

Location:	Yabucoa, PR	Accident Number:	ERA11FA376
Date & Time:	07/01/2011, 1433 AST	Registration:	N8436Q
Aircraft:	CESSNA A185F	Injuries:	5 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Shortly after departure for a visual flight rules cross-country flight over ocean waters, the airplane encountered instrument meteorological conditions associated with a fast moving tropical wave. Examination of air traffic control radar data revealed that the airplane never reached a steady cruise state for any significant amount of time, and its ground track varied laterally on several occasions. This variance in altitude and ground track continued until about 17 minutes after takeoff when the airplane entered a right 270-degree turn and impacted the water while traveling downward at about 5,000 feet per minute. Examination of weather radar data and satellite imagery revealed that the tropical wave had produced overcast conditions, embedded thunderstorms with tops near 34,000 feet, heavy rain, and wind of about 47 knots. Correlation of the weather radar data to the airplane's ground track revealed that the non-instrument rated pilot was maneuvering around and through the weather, and that the airplane's position at the time of the accident correlated to the position of a thunderstorm. Examination of the wreckage after recovery from the ocean showed no evidence of preimpact mechanical failure or malfunction of the aircraft structure, flight control systems, engine, or propeller. It also revealed that the airplane was not equipped with any type of weather avoidance equipment. During the course of the investigation, no record of the pilot receiving a weather briefing was discovered.

Flight Events

Enroute-cruise - VFR encounter with IMC
Enroute-cruise - Windshear or thunderstorm
Enroute-cruise - Loss of control in flight
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate weather planning and improper decision to continue a visual flight rules flight into instrument meteorological conditions, which resulted in an encounter with a thunderstorm and subsequent loss of control.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C
Personnel issues-Task performance-Planning/preparation-Weather planning-Pilot - C
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C
Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-(general)-Effect on operation - C
Environmental issues-Conditions/weather/phenomena-Convective weather-Thunderstorm-Effect on

operation - C

Pilot Information

Certificate:	Commercial	Age:	64
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	(Estimated) 6895 hours (Total, all aircraft), 203 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N8436Q
Model/Series:	A185F	Engines:	1 Reciprocating
Operator:	Antonio Torregrosa	Engine Manufacturer:	CONT MOTOR
Air Carrier Operating Certificate:	None	Engine Model/Series:	IO-520-D
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	TJNR, 38 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Instrument Conditions	Lowest Ceiling:	Broken / 3700 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	22 knots/ 31 knots, 140°
Temperature:	26° C / 22° C	Visibility	1 Miles
Precipitation and Obscuration:	Heavy - Showers - Rain; Heavy - Thunderstorms - Rain; Mist		
Departure Point:	Isla de Culebra, PR (TJCP)	Destination:	Ponce, PR (TJPS)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	4 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Todd G Gunther	Adopted Date:	06/28/2012
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=80970		

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