

AAIPU# A08-28261



AIR ACCIDENT INVESTIGATION AND PREVENTION UNIT CIVIL AVIATION DEPARTMENT

NASSAU, N. P., BAHAMAS

AIRCRAFT ACCIDENT REPORT

CATASTROPHIC ENGINE FAILURE

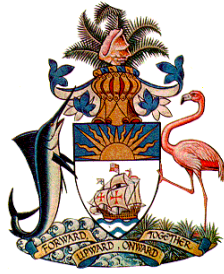
CESSNA C-182L

N42011

SPANISH WELLS, ELEUTHERA, BAHAMAS

JULY 19, 2008





**Bahamas Department of Civil Aviation
Air Accident Investigation and Prevention Unit
P. O. Box AP-59244
Lynden Pindling International Airport
Nassau N. P., Bahamas**

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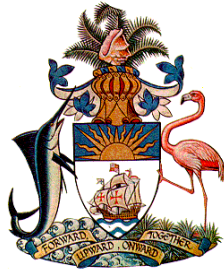
**CESSNA C-182L
N42011**

**CATASTROPHIC ENGINE FAILURE
SPANISH WELLS, ELEUTHERA, BAHAMAS
JULY 19, 2008**

**AAIPU# A09-28261
Adopted April 20, 2010**

Abstract: This report explains the circumstances surrounding the catastrophic engine failure and crash of N42011 a Cessna C182L aircraft while the aircraft was enroute from North Eleuthera Int'l Airport, Eleuthera, Bahamas to Ft Pierce Int'l Airport, Ft Pierce, Florida, USA during a climb to 8,000 feet. The aircraft attempted to return to the airport of departure but was unable and therefore was ditched in waters approximately 6 – 8 feet of water about 100 yards from the shoreline of Russell Island and Spanish Wells, Eleuthera. The pilot exited the aircraft and swam to the shore before being picked up by an observer in a boat nearby.





Bahamas Department of Civil Aviation Air Accident Investigation and Prevention Unit

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Letter to Director

April 20, 2010

Captain Patrick Rolle
Director
Civil Aviation Department
Seaban House
Crawford Street, Oakes Field
P.O. Box N-975
Nassau, N.P.,
Bahamas

Sir

The attached report summarizes the investigation into the circumstances of the accident involving N42011, a Cessna Aircraft model 182L, registered in the United States to Mr. Victor M. Cresenzo Jr. This accident occurred on July 19, 2008 at approximately 8:30 local (2130 UTC) time at approximately 6 miles from North Eleuthera Airport, Bahamas.

This report is submitted pursuant to Part XII, Regulation 80, and Schedule 19 of the Bahamas Civil Aviation (Safety) Regulation (CASR 2001) and in accordance with Annex 13 to the Convention on International Civil Aviation Organization (ICAO).

In accordance with Annex 13 to the Convention on International Civil Aviation (ICAO), and Schedule 19 of the Bahamas Civil Aviation (Safety) Regulations (CASR April 17, 2001), the fundamental purpose of such investigations is to determine the circumstances and causes of these events, with a view to the preservation of life and the avoidance of similar occurrences in the future. It is not the purpose of such investigations to apportion blame or liability.

This information is published to inform the aviation industry and the public of the circumstances surrounding this accident. The contents of this Report may be subjected to alterations or corrections if additional information becomes available.

Delvin R. Major
Investigator in Charge
Bahamas Department of Civil Aviation
Air Accident Investigation and Prevention Unit





BAHAMAS CIVIL AVIATION DEPARTMENT
AIR ACCIDENT INVESTIGATION AND PREVENTION UNIT

TITLE

Operator: Victor M. Cresenzo Jr.

Manufacturer: Cessna Aircraft

Model: 182L

Nationality: United States

Registration: N42011

Place of Accident: Spanish Wells

Date of Accident: July 19, 2008

SYNOPSIS

Notification: DCA, FSI, NTSB, FAA,

Investigating Authority: Civil Aviation Department
Air Accident Investigation and Prevention Unit

Investigator in Charge: Delvin R. Major

Accredited Representative: Mr. William Standing FAA
Mr. James Jelinski

Releasing Authority: Civil Aviation Department

Date of Report Publication: April 20th, 2010



ABBREVIATIONS and TERMINOLOGY

When the following terms are used in this report, they have the following meanings;

AAIPU	Air Accident Investigation and Prevention Unit
ADDS	Aviation Digital Data Service - Report by Meteorological Department
AIS	Automatic Information Services
ATS	Air Traffic Services
BDCA	Bahamas Department of Civil Aviation
CASR	Bahamas Civil Aviation (Safety) Regulations (April 17, 2001)
C of A	Certificate of Airworthiness
C of R	Certificate of Registration
CG	Center of Gravity
CVR	Cockpit Voice Recorder
DCA	Director of Civil Aviation
CAD	Civil Aviation Department
EST	Eastern Standard Time (-5 hours (-4DT) to convert from UTC)
FAA	Federal Aviation Administration
FSI	Flight Standards Inspectorate
FSS	Flight Service Station
ICAO	International Civil Aviation Organization
ILS	Instrument Landing System
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Condition
MALSF	Medium-intensity Approach Lighting System (with sequenced flashers)
MET	Meteorological Office / Department
METAR	Weather Report furnished by Meteorological Department
MIRL	Medium Intensity Runway Lights
NDB	Non-directional Beacon
NM or nm	Nautical Miles
NTSB	National Transportation Safety Board
PAPI	Precision Approach Path Indicator
RCA	Root Cause Analysis
SEP	Survival and Emergency Procedures Training
T/L	Technical Log
USA	United States of America
VFR	Visual Flight Rules
VOR	(Very High Frequency) Omni-directional Range Station
VMC	Visual Meteorological Conditions
UTC / Z	Universal Coordinated Time / Zulu time



DEFINITIONS

When the following terms are used in the Standards and Recommended Practices for Aircraft Accident and Incident Investigation, they have the following meaning:

Accident. An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

a) a person is fatally or seriously injured as a result of:

- being in the aircraft, or
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
- direct exposure to jet blast, except when the injuries are from natural causes, self inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

- adversely affects the structural strength, performance or flight characteristics of the aircraft, and
- would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

c) the aircraft is missing or is completely inaccessible.

Note 1.— For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury by ICAO.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

Accredited representative. A person designated by a State, on the basis of his or her qualifications, for the purpose of participating in an investigation conducted by another State.

Adviser. A person appointed by a State, on the basis of his or her qualifications, for the purpose of assisting its accredited representative in an investigation.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Causes. Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident.

Fatal injury. - means any injury which results in death within 30 days of the accident.

Flight recorder. Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident/Incident Reporting Manual (Doc 9156).

Investigation. A process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendations.

Investigator-in-charge. A person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation.

Note.— Nothing in the above definition is intended to preclude the functions of an investigator-in-charge being assigned to a commission or other body.

Maximum mass. Maximum certificated take-off mass.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.



Preliminary Report. The communication used for the prompt dissemination of data obtained during the early stages of the investigation.

Safety recommendation. A proposal of the accident investigation authority of the State conducting the investigation, based on information derived from the investigation, made with the intention of preventing accidents or incidents.

Serious incident. An incident involving circumstances indicating that an accident nearly occurred.

Note 1.— The difference between an accident and a serious incident lies only in the result.

Note 2.— Examples of serious incidents can be found in Attachment C of Annex 13 and in the Accident/Incident Reporting Manual (Doc 9156).

Serious injury. An injury which is sustained by a person in an accident and which:

- a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or
- b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- c) involves lacerations which cause severe hemorrhage, nerve, muscle or tendon damage; or
- d) involves injury to any internal organ; or
- e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- f) involves verified exposure to infectious substances or injurious radiation.

State of Design. The State having jurisdiction over the organization responsible for the type design.

State of Manufacture. The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

State of Occurrence. The State in the territory of which an accident or incident occurs.

State of the Operator. The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

State of Registry. The State on whose register the aircraft is entered.

Note.— In the case of the registration of aircraft of an international operating agency on other than a national basis, the States constituting the agency are jointly and severally bound to assume the obligations which, under the Chicago Convention, attach to a State of Registry. See, in this regard, the Council Resolution of 14 December 1967 on Nationality and Registration of Aircraft Operated by International Operating Agencies which can be found in Policy and Guidance Material on the Economic Regulation of International

“State of Design” - The State having jurisdiction over the organization responsible for the type design

“State of Manufacture” - The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

"Substantial damage" - means damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent failings or cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "substantial damage" for the purpose of this Report.



BODY

1.0 FACTUAL INFORMATION:

1.1 HISTORY OF THE FLIGHT

On Saturday, July 19, 2008 at about 8:30am local aircraft number N42011 radioed to the Nassau Radio Control on 128.0 Mhz and eventually North Eleuthera Airport fixed base operator that he was having engine trouble. The Pilot reported also, that he would be returning to the airport. The pilot subsequently reported that he would not be able to reach the airport and will have to ditch the aircraft on the beach in Spanish Wells. The authorities at North Eleuthera International Airport were notified about the aircraft in distress.

The Flight Standards Inspectorate at Lynden Pindling International Airport was notified that, at approximately 8:30 am (1230Z), N42011 aircraft came to rest, in 6-8feet of water approximately 100 yards from the beach at Russell Island, Eleuthera, Bahamas.

The private flight departed North Eleuthera Airport enroute to Fort Pierce International Airport, Fort Pierce Florida, USA. The aircraft was operating under Visual Flight Rules (VFR). The weather at the time of the accident was reported as Visual Meteorological Condition (VMC).



At 8:55am local Nassau control tower was informed that the aircraft did land in water approximately 6ft deep and 100 yards from the shore line of Russell Island. The pilot was said to be in good health. The aircraft was partially submerged in water.

The pilot later reported that while climbing to 4,000 ft he experienced a catastrophic engine failure. The pilot further stated that he was approximately 8 mile from North Eleuthera Airport when he turned back toward the airport and declared a mayday with Nassau radio. An unsuccessful attempt was made to restore engine power. When the engine would not start the pilot configured the aircraft to glide while he tried to find land on Spanish Wells beach to ditch the aircraft. The aircraft made contact with the water approximately ½ mile from Spanish Wells beach and 100yds from Russell Island shoreline. The plane settled upright in approximately 7 ft of water. The pilot exited the aircraft without incident and swam to shore where he was picked up by an observer.

The aircraft was piloted by Mr. Victor M. Cresenzo Jr. Mr. Cresenzo held a valid United States Private Pilot license. Mr. Cresenzo also held a United States valid third class medical certificate issued August 1st, 2007.

1.2 INJURIES TO PERSONS

No injuries were reported.

1.3 DAMAGE TO AIRCRAFT

The aircraft sustained minor damages from impact. Further damage was noted as a result of water submersion. It was later recovered from the crash site and taken to the dock at Spanish Wells, Eleuthera.



1.4 OTHER DAMAGE

Other than damage sustained by aircraft, no other damage was reported.



1.5 PERSONNEL INFORMATION

The aircraft was piloted by 63 yr old Victor Cresenzo Jr. of Reidsville, North Carolina, USA. Mr. Cresenzo is the holder of a valid USA Private Pilot Certificate issued on February 18th, 2005 with Airplane Single Engine Land category and Instrument class rating with no limitations. Mr. Cresenzo is also the holder of a valid USA third class medical certificate issued August 1st, 2007. Mr. Cresenzo's medical certificate has no medical restrictions.

Mr. Cresenzo's total flying experience including experience on this type of aircraft is unknown. The amount of hours flown by Mr. Cresenzo in the last 24hr, 7days or the last 30 days prior to the accident is unknown. FAA record indicates there have been no violations or prior FAA-recorded aviation accident history against Mr. Cresenzo.

1.6 AIRCRAFT INFORMATION

Aircraft N42011 a US registered aircraft is manufactured by CESSNA Aircraft, model 182L. This single engine aircraft, manufactured in 1968 with serial number 18258807 is registered to Victor Cresenzo M. Jr. (Pilot).

The aircraft was fitted with a reciprocating engine, model 0-470R series, manufactured by Cont Motor. The aircraft was listed in the normal category, standard classification. Airworthiness date of the aircraft is January 26 1968. The aircraft was registered to Cresenzo Victor M Jr., 641 Parkway Blvd, Reidsville, North Carolina.

The aircraft was operated privately. It was not known if the mass and center of gravity were within prescribed limits.

No information was available about how much fuel was uplifted prior to the departure.

1.7 METEOROLOGICAL INFORMATION

Bahamas Meteorological Department Bahamas Area Forecast dated Saturday 19th July, 2008 valid for 18 hours from 1200 GMT was reviewed.

Special Features section of the report indicated a tropical wave affecting the Central to southeast Bahamas moving westward.

Significant Weather section of the report indicated, in the Central and Southeast Bahamas scattered to broken clouds 1,500 to 2,000 feet, scattered to broken clouds 7,000 to 9,000 merging with higher layers at 22,000 to 24,000 feet were forecasted. Scattered showers and thundershowers with tops (heights) well above 20,000 feet (FL200) were expected. Cloud ceilings were forecasted to be below 1,500 feet and visibility below 3 nautical miles in heavy showers and thundershowers. Moderate to severe turbulence was reported in the vicinity of the towering cumulus and cumulonimbus clouds were expected.

Forecasted Upper Winds and Temperature for the same time period from 1200 UTC showed at 2,000 feet in the Central Bahamas the winds were forecasted from a direction of 120 degrees and a speed of 15 knots.

It was not known if the pilot received a weather report prior to departure from Lynden Pindling International Airport. It was also not known whether the pilot received any enroute weather report from Miami Center or Flight Service Station.

1.8 AIDS TO NAVIGATION

Navigational Aids available at the time was Nassau VOR on frequency 112.7 MHz. There was no report of any abnormalities with the VOR at the time of the accident.

1.9 COMMUNICATIONS

The pilot was in contact with Nassau radio upon which he declared a mayday. The pilot maintained radio contact with Nassau radio on 128.0 Mhz down to 1,300ft; then MYEH Unicom until 100 ft. above ground level.

1.10 AERODROME INFORMATION

Departure or arrival Aerodrome information not provided as the aircraft did not crash on an aerodrome. However, the nearest aerodrome to the crash site was North Eleuthera, IATA Designation ELH, ICAO Designation MYEH Location Eleuthera, Bahamas. Altitude 13 ft / 4m above mean sea level (MSL). Coordinates latitude 25°28'29.50"N and longitude 076°41'00.56"W. Runway 07/25 length 6,020 ft / 1835m Runway paved with asphalt.



1.11 FLIGHT RECORDERS

N42011 was not fitted with a flight recorder as none was required by regulations for this type of aircraft.

1.12 WRECKAGE AND IMPACT INFORMATION

N42011 landed in waters off Russell Island, in approximately 6-8 feet of water approximately 100 yards from the beach at Russell Island. Minor damage was confined mainly to the nose and propeller due to impact with the water. Other damage includes catastrophic damage to the engine which resulted in the aircraft ditching and water damage as a result of the aircraft being submerged in salt water.



1.13 MEDICAL AND PATHOLOGICAL INFORMATION

Not applicable, no injuries reported.

1.14 FIRE

No pre or post fire was reported.

1.15 SURVIVAL ASPECTS

Not applicable.

1.16 TESTS AND RESEARCH

The aircraft was recovered from waters and taken to the dock at Spanish Wells, Eleuthera. An inspection was conducted. It was evident from the inspection

that the aircraft had in fact suffered a catastrophic engine failure. No further tests were conducted.

1.17 ADDITIONAL INFORMATION

No additional information available.

2.0 ANALYSIS

2.1 GENERAL

- Pilot qualifications – The aircraft was piloted by 63 yr old Victor Cresenzo Jr. of Reidsville, North Carolina, USA. Mr. Cresenzo is the holder of a valid USA Private Pilot Certificate issued on February 18th, 2005 with Airplane Single Engine Land category and Instrument class rating with no limitations.
- Weather – Weather was Visual Meteorological condition at the time of the accident.
- ATC was in contact with the aircraft from the time it contacted ATC with a mayday at 4,000 feet until 1,300 feet where it then contacted MYEH FBO until 100 feet above the water.
- Aids to Navigation – Pilot had available to it Nassau VOR on 112.7 Mhz.

2.2 AIRCRAFT

- Aircraft performance – performance was affected as a result of catastrophic engine failure
- Mass and balance – Not a factor in this accident
- Aircraft Navigational Instrumentation – not a factor in this accident.
- Psychological and physiological factors affecting personnel involved – not a factor in this accident.



3.0 CONCLUSIONS

1. The pilot was properly certified and qualified for the flight.
2. The airplane was properly certificated in accordance with existing regulations.
3. No record could be found to determine whether aircraft was maintained in accordance with regulations.

3.1 PROBABLE CAUSE

The probable cause of this accident has been determined as catastrophic engine failure.

4.0 SAFETY RECOMMENDATIONS:

As a result of this investigation the AAIPU makes no recommendations.

