

FINAL REPORT FATAL ACCIDENT C6-BGV
BOSCOBEL AERODROME 25 DECEMBER 2001

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Jamaica Civil Aviation Authority
Flight Safety Division

Final Report
Fatal Accident PA-21-350 C6-BGV 25 December 2001
Boscobel Aerodrome, St. Mary, Jamaica, W.I.

Summary

On December 25, 2001 a Bahamian registered Piper Navajo PA-31-350 "C6-BGV" left the Boscobel Aerodrome in St. Mary, Jamaica at approximately 5:00 a.m. local time, still during dark night time. Boscobel Aerodrome is certified for daytime, visual flight rules operations and has no night lighting. The aerodrome was officially closed at the time of the accident. The aircraft struck trees and wires located 200 meters east of the east end of the runway, crashed into the sea at James Bond Beach adjacent to the aerodrome and sank in 100 feet of water. The aircraft was destroyed and it was confirmed that two occupants were killed. The flight was unauthorized and was evidently being conducted for illegal purposes as coast guard divers found a quantity of compressed ganja in the wreckage.

Background

The aircraft arrived in Montego Bay from the Bahamas on December 20 2001 with seven persons on board. The aircraft left Montego Bay on December 22 2001 at about 1:15 p.m. for the Tinson Pen Aerodrome with an unknown number of persons on board. It arrived at Boscobel on December 22 at approximately 5:30 p.m. with an unknown number of persons on board and remained there until the morning of December 25th. when it took off with an unknown number of persons on board.

The pilots were identified as Bahamian citizens from papers found by coast guard divers and also from their Jamaican immigration declarations. One of the deceased, who stated to immigration that he was the pilot, apparently had no record of being issued any aviation document by the Bahamian authorities. The other listed as the copilot in Jamaican immigration documents, held a US commercial pilot license endorsed for multi-engine and instrument privileges. His US medical certificate had expired, however, he had been issued a Bahamian validation of his US license and had a current Bahamian medical certificate. No evidence was found related to the pilots' activities prior to the flight, nor is it known whether they were current with respect to flight tests nor whether any ratings were current and valid. No evidence was available neither with regard to fatigue factors nor to any drug or alcohol use related factors. The lack of evidence does not mean these were not factors in the accident, it just could not be established. Both persons who died in the crash succumbed from impact injuries or drowning.

The aircraft was registered in the Bahamas to a Bahamian investment company and held valid registration and airworthiness certificates. No evidence was found related to the aircraft's airworthiness at the time of the accident and its status remains unknown.

The aerodrome is licensed as a day VFR ICAO Annex 14 Code 2B runway and meets all related standards and the runway was in good condition. The aerodrome normally

operates from 7:00 a.m. to sunset each day and is manned by CFR personnel during operating hours (source: AIP Jamaica). There is no certified night lighting at the aerodrome nor is night flight permitted there. The aerodrome was closed at the time of the accident and no staff was present.

It is illegal in Jamaica to take off or land at an aerodrome that is closed. To take off without notification and without authorization at a closed aerodrome at night with no runway lighting and without filing a flight plan are also illegal actions.

Analysis

The aircraft departed on runway 09 that has a declared distance of 915 meters take off run available and 915 meters take off distance available. It is not known whether the aircraft used the full runway length for the take off run. After take off the aircraft failed to climb to a safe height and struck trees and bushes and the lower row of telephone and electrical wires running between poles that run beside the road some 200 meters from the end of runway pavement. The poles are 6 meters above runway end elevation and meet the obstacle zoning requirements for the daytime, visual flight rules aerodrome. The wires are lower than the pole tops. It appeared that the aircraft cut only the lower run of wires as the upper row were intact (*see exhibits 1 and 2*).

It is assumed for the purposes of this analysis that the aircraft would have taken off using the full runway-length as this is a normal pilot practice, however, the pilot practices evident in this accident render this an uncertain assumption. The nature of the flight path after take off indicates that the aircraft did not climb out of ground effect after lift off and continued its flight just above the ground for two hundred meters after the runway end before it struck the bushes, trees and wires.

There could be several reasons for the aircraft following this type of flight path on take off: poor pilot technique; take off not using the full runway length; partial power loss; improper loading resulting in aft or forward center of gravity; and, overloading of the aircraft:

- The first, poor pilot technique, was clearly a contributing factor as the aircraft was flown from a closed aerodrome with no lights at night and was possibly overloaded, improperly loaded or both. It is not known whether the gear was retracted or what the flap position was at the time of impact.

- The second, partial power loss could not be proven as the wreckage has not been recovered and the cockpit and engines will be left at the bottom of the sea.

- The third, failure to use all available runway for take off, although possible, could not be proven, as there was no eyewitness evidence.

- The fourth, improper loading, although likely, also could not be proven due to lack of evidence.

-The fifth, and most likely reason, was overloading of the aircraft and the resultant failure to obtain normal climb performance, however, this could not be proven due to lack of evidence. As only one 80-pound bale of cargo was recovered by divers the total weight of cargo carried on the aircraft is unknown.

Physical evidence recovered from the sea by coast guard divers pointed to an illegal flight with a cargo of compressed marijuana (ganja) bales. The bodies of two persons were recovered and identified from papers found on the remains. The main aircraft wreckage including the engines and cockpit remains submerged in 100 feet of seawater just off the coast and will not be recovered.

Conclusions

1. The major cause factor was the pilot's decision to take off from an unlit runway at night from a closed aerodrome in an aircraft that had its normal performance degraded by a possible combination of overloading and incorrect center of gravity.
2. Deficiencies in the licensed aerodrome condition, approved operating rules, operating environment or operational facilities were not identified as factors.
3. The aerodrome's take off and approach obstacle limitation surfaces have been surveyed and met the standards for daylight operations, and under normal flight operating circumstances the bushes, trees and power lines at the east end of the runway at Boscobel are not a hazard to aircraft operations.
4. The flight was engaged in a clandestine, illegal, criminal activity: export of drugs.
5. The accident was not a survivable occurrence.
6. The pilot and one other person were fatally injured.
7. The aircraft was completely destroyed.

Recommendations

1. Pilots should not use closed, unlit aerodromes for night flying.
2. Pilots should ensure that their aircraft are loaded and operated within the manufacturer's approved limitations.
3. Pilots should file flight plans.