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NATIONAL TRANSPORTATION SAFETY BOARD

AIRCRAFT ACCIDENT REPORT

Puerto Rico International
Airlines (PRINAIR), Inc.
DeHavilland DH-114, N554PR
Ponce, Puerto Rico
June 24, 1972



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Puerto Rico International
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Adopted: December 20, 1972

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6. Abstract At approximately 2317, eastern standard time, June 24, 1972, Prinair Flight 191, a DeHavilland Heron DH-114, N554PR, crashed on the Mercedita Airport, Ponce, Puerto Rico, during an attempted go-around after landing on Runway 29. The captain, copilot, and three of the 18 passengers were fatally injured. Fifteen other passengers received injuries ranging from minor to severe. The aircraft was destroyed. The National Transportation Safety Board determines that the probable cause of this accident was the presence of an unauthorized vehicle on the runway which caused the pilot to attempt a go-around after touchdown to avoid a collision. The maneuver resulted in an overrotation of the aircraft at too low an airspeed to sustain flight.					
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TABLE OF CONTENTS

	<u>Page</u>
Synopsis	1
Investigation	2
Analysis and Findings	4
Probable Cause	5

Appendices

Appendix A - Crew Information

Appendix B - Aircraft Information

S P E C I A L N O T I C E

This report contains the essential items of information relevant to the probable cause and safety message to be derived from this accident/incident. However, for those having a need for more detailed information, the original factual report of the accident/incident is on file in the Washington office of the National Transportation Safety Board. Upon request, the report will be reproduced commercially at an average cost of 15¢ per page for printed matter and 85¢ per page for photographs, plus postage. (Minimum charge is \$2.00.)

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NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D. C. 20591
AIRCRAFT ACCIDENT REPORT

Adopted: December 20, 1972

PUERTO RICO INTERNATIONAL AIRLINES (PRINAIR), INC.
DEHAVILLAND DH-114, N554PR
PONCE, PUERTO RICO
JUNE 24, 1972

SYNOPSIS

At approximately 2317 eastern standard time, June 24, 1972, Puerto Rico International Airlines, Inc., scheduled passenger Flight 191, a DeHavilland Heron, DH-114, N554PR, crashed on the Mercedita Airport, Ponce, Puerto Rico, while the crew was executing a go-around after landing on Runway 29.

The captain, the copilot, and three of the 18 passengers were fatally injured. Seven passengers were injured seriously, and eight received minor injuries.

The National Transportation Safety Board determines that the probable cause of this accident was the presence of an unauthorized vehicle on the runway which caused the pilot to attempt a go-around after touchdown to avoid a collision. This maneuver resulted in an overrotation of the aircraft at too low an airspeed to sustain flight.

INVESTIGATION

Fuerto Rico International Airlines (Prinair), Inc., Flight 191 departed from San Juan, Fuerto Rico, at 2052 e.s.t. 1/ on June 24, 1972, on an instrument Flight Rules flight plan for Mercedita Airport, Ponce, Puerto Rico. There were 18 passengers and a crew of two on board.

The Mercedita Control Tower is closed from 2230 until 0645. It is Prinair procedure for all inbound and outbound crews to monitor the tower frequency and to keep other Prinair flights advised of existing traffic during the times when the tower is closed.

At approximately 2255, the captain of Flight 190, which was scheduled to depart from Ponce just prior to the arrival of Flight 191, transmitted that his flight was ready to depart on Runway 11. Flight 191 advised that they were 15 miles east-northeast of the airport at this time and requested the existing wind conditions. They were advised that the wind was calm. Flight 190 took off when Flight 191 was approximately 4 miles due east of Ponce. The accident occurred at approximately 2317.

The aircraft crashed approximately 2,200 feet inside the threshold and 260 feet south of Runway 29. It came to rest 74 feet southwest of the initial impact after knocking down several sections of chain link fence and striking a power line pole at the perimeter of the airfield.

The aircraft cockpit was completely destroyed. The empennage, with the exception of the control cables, separated from the aircraft and was at a 90° angle to the right of the fuselage. The right side of the fuselage was split open from the vertical stabilizer to the cockpit and was folded left. Both wings had received substantial damage but remained attached to the fuselage. The Nos. 1 and 4 propellers had separated from their engines. All four firewall-mounted propeller governor electric actuators were in the low pitch (high r.p.m.) position.

The right main landing gear was retracted and locked. The left main gear was retracted and unlocked. The gear handle was midway between the up and down position. Examination of the wreckage disclosed black tire marks on the lower wing surfaces at the aft edge of the wheel wells. These black rubber ridges and scrapes paralleled the trailing edge of the wing. Similar marks were found on the inside circumference of both wheel wells. The marks showed heavy rubber deposits with the scratches and marks spiraling upward. The main landing gear on the DH-114 retracts outboard into a wheel well in the wing of the aircraft.

1/ All times herein are eastern standard, based on the 24-hour clock.

Examination of 10 other Prinair Herons disclosed that when the landing gear is retracted, the tires do not touch the wing or any portion of the wheel well. None of the 10 aircraft had tire marks on the wing or in the wheel wells.

The wing flaps were not damaged. All wing flap components were in an operating condition. The DH-114 flaps operate pneumatically; therefore, it was not possible to ascertain their preimpact position. However, the flaps were between the 20° and 60° position and resting on the ground. The flap selector handle was between the 20° and 60° detents.

The captain, the copilot, and three of the 18 passengers were fatally injured. Seven passengers were injured seriously and eight received minor injuries.

Three surviving passengers stated that the aircraft touched down on the runway in a normal manner, then took off again in a nose-high attitude and with high engine power. They felt the aircraft rock from side to side, then settle level to the ground, and crash.

A number of witnesses who were located on or near the airport observed the aircraft as it approached for landing on Runway 29. They stated that the approach appeared normal and that three white lights were visible from the aircraft as it descended toward the runway. Most of the witnesses agreed that the aircraft touched down on the runway, and then almost immediately pulled up in a steep climbing attitude. The sound of high engine power was heard concurrently with this maneuver. Some of the witnesses observed the aircraft rock from side to side and then settle back to the ground in a near-level attitude.

One couple, driving east on a highway adjacent to the south boundary of the airport, stated that they saw two sets of lights from what appeared to be two aircraft making an approach to the runway at the same time. According to these witnesses one set of lights was on the runway, while the other set of lights was still airborne and descending to the runway. They became alarmed that the aircraft were landing so close together and felt certain they would crash. The driver stopped the car so that they could continue watching the landing aircraft, but it disappeared behind some trees, and they did not see it again. However, their two sons, seated in the back seat of the car, were looking out of the rear window and observed the aircraft pull up steeply but thought it was just going around. These witnesses estimated the time of their observation as between 2315 and 2320. When queried whether the first set of lights they observed might have been a vehicle on the runway, they said it was possible, but thought it was another aircraft.

Witnesses located in the vicinity of the terminal said that they did not see any aircraft depart or arrive between the departure of Prinair Flight 190 and the arrival of Prinair Flight 191. These witnesses observed an airport firetruck leave the terminal area and proceed to the runway shortly after the accident. Two of these witnesses (Puerto Rican special police agents) observed the airport firetruck depart from its assigned parking place at the firehouse subsequent to the accident and proceed to the runway in search of the crashed aircraft. They saw no other vehicles in this vicinity or with the firetruck when it departed for the runway. After a short time they saw the firetruck return, stop at the airport gate, and then proceed down the highway to the crash site. The special police agents stated that at this time, they observed a port authority pickup truck coming down the runway with its headlights out and the right-hand door open. They watched the truck proceed off of the runway and park at the firehouse. One of the agents who recognized the driver of the truck stated that he called to the driver and asked him what had happened. He said that the driver did not acknowledge him or reply to his question.

The driver of the truck, a port authority employee, was later interviewed by the investigation group concerning his activities on that evening. The driver stated that at the time of the accident, he was at home watching television and that he was not driving the truck on the runway or anywhere else on the airport at the time reported by the special agents. He denied seeing the agent, hearing his call, or being anywhere in this vicinity at the time.

In subsequent interviews the special agents again reiterated their observations of the sequence of events involving the port authority truck as previously described.

The maintenance records indicated that the aircraft had been maintained in accordance with Federal Aviation Regulations and company procedures.

Both pilots were qualified for the flight. (See Appendix A.)

There was no evidence of a preimpact malfunction of the airframe, powerplants or associated components.

Following the event
 Postmortem and toxicological examination of the fatally injured flight crewmembers revealed no evidence of disease or physical impairment which would have adversely affected the performance of their duties.

ANALYSIS AND FINDINGS

The investigation revealed the pilot attempted a go-around after the aircraft had touched down on the runway at a point where the aircraft could have been stopped within the confines of the runway. The go-around was attempted, but the aircraft stalled and settled back to the ground as a result of the slow airspeed and high angle of attack.

The tire marks on the lower wing surfaces and the wheel well area indicate tire rotation as the gear was retracting at impact. Rotation of the wheels confirmed the initial touchdown on the runway.

The only plausible reason for the pilot to attempt a go-around after touchdown would be the presence of an obstruction on the runway. All other factors that would dictate a go-around would be negated when the aircraft touched down on the runway.

Although the family driving on the highway initially identified the lights on the runway as another aircraft, they agreed that it could have been a vehicle on the runway. There were witnesses on the ramp in front of the terminal from the time Flight 190 departed until the accident, and they did not see another aircraft land or take off. Additionally, a check of all aircraft-controlling agencies did not disclose any aircraft traffic at Mercedita Airport at the time of the accident. The two special police agents who saw the firetruck leave the firehouse just subsequent to the accident stated that the port authority pickup truck was not with the firetruck as it proceeded to the runway nor was it anywhere in their vicinity during this time. However, after the firetruck returned from the runway and was going to the accident scene, these agents observed the pickup truck proceeding down the runway with its headlights off and with the right side door open. They stated that as the truck went by their position toward its regular parking place at the firehouse, they called to the driver, whom they recognized, but did not receive any acknowledgment. The pickup truck driver has maintained that he was not at the airport during this time.

The Board was unable to make a positive determination regarding the location of the pickup truck, the lights on the runway, and the attempted go-around after touchdown by the crew of Flight 191. However, it is believed that the go-around was attempted to avoid an obstruction on the runway and that the obstacle they were trying to avoid was probably the port authority pickup truck.

PROBABLE CAUSE

The National Transportation Safety Board determines that the probable cause of this accident was the presence of an unauthorized vehicle on the runway which caused the pilot to attempt a go-around after touchdown to avoid a collision. This maneuver resulted in an overrotation of the aircraft at too low an airspeed to sustain flight.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ **JOHN H. REED**
Chairman

/sf **FRANCIS H. McADAMS**
Member

/sf **LOUIS M. THAYER**
Member

/sf **ISABEL A. BURGESS**
Member

/sf **WILLIAM R. HALEY**
Member

December 20, 1972

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APPENDIX A

CREN INFORMATION

Captain Donald Price, aged 28, was initially employed by Puerto Rico International Airlines on June 1, 1970. He held an Airline Transport Pilot's certificate No. 1626184 with ratings in the DHC-6, DH-114, DC-3,4, E-7, B-99 and C-46.

He had passed his last examination for a Federal Aviation Administration first-class medical certificate on June 9, 1972. He had accumulated 8,297 hours of flying time as of June 24, 1972, of which 253 hours were accumulated in the preceding 90 days. He had acquired 3,017 total hours in the DH-114, 1,610 hours of night flying and 1,098 hours of instrument flying. His last proficiency check was completed April 8, 1972, and his last en route check was completed May 12, 1972.

Flight Officer Gary Belejeu, aged 27, was initially employed by Puerto Rico International Airlines on October 20, 1971. He held Commercial certificate No. 1775429 with instrument, multi- and single-engine land ratings.

He had passed his last examination for a Federal Aviation Administration first-class medical certificate on May 26, 1972. He had accumulated 1,434 hours of flying time as of June 24, 1972, of which 102 hours were accumulated in the preceding 90 days. He had acquired 102 hours in the DH-114, 290 hours of night flying and 45 hours of instrument flying. His initial and latest proficiency check was completed May 30, 1972, and his initial and latest flight check was completed May 29, 1972.

APPENDIX B

AIRCRAFT INFORMATION

N554PR, was a DeHavilland Model DH-114, Serial No. 14085.

The aircraft was acquired by Prinair from the British Government as a standard DeHavilland Model 114. A U.S. Airworthiness Certificate was issued by the FAA Flight Standards District Office, San Juan, Puerto Rico, on May 30, 1968, at a total aircraft time of 2,907:10 hours.

In 1970, the aircraft was modified by Carribean Aircraft Development, Inc., Opa Locka, Florida, holder of several supplemental type certificates for the DH-114. This modification entailed the installation of Continental IO-520E engines and Hartzell 3 blade, constant speed propellers in accordance with supplemental type certificate 1685WE. At the same time, the seating capacity was increased from 15 to 20 and other fuselage modifications were made in accordance with supplemental type certificates SA-1729WE and SA-1828WE. A new airworthiness certificate was issued on June 3, 1970.

The aircraft total time at the time of the accident was 11,364 hours. The most recent inspection prior to the accident was a 2,400-hour phase inspection. The annual inspection was completed on June 6, 1972.

The No. 1 engine, S/N 164131, had a total time of 3,453:10. The No. 2 engine, S/N 164161, had a total time of 2,115:50. The No. 3 engine, S/N 164043, had a total time of 1640:43. The No. 4 engine, S/N 164024, had a total time of 6,573:55.

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