



AIRCRAFT ACCIDENT REPORT FINAL REPORT

Loss of Control after Landing

Air Ambulance by Air Trek

Westwind WW-1124

N475AT

Moss Town, Exuma, Bahamas

May 24, 2006

FSI FILE # A0620215



Flight Standards Inspectorate Bahamas Department of Civil Aviation

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August 20, 2007

Mr. Cyril Saunders
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 Westwind WW-1124 aircraft N-475AT, registered to Air Ambulance by Air Trek. This accident occurred at Exuma International Airport, Exuma, Bahamas on May 24, 2006.

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
Flight Standards Inspectorate
Department of Civil Aviation (Bahamas)



Participants in the Investigation

Delvin R. Major
Philip Romer
Walter V. Evans

Flight Standards Inspectorate
Flight Standards Inspectorate
Flight Standards Inspectorate

IIC
Airworthiness
Airworthiness

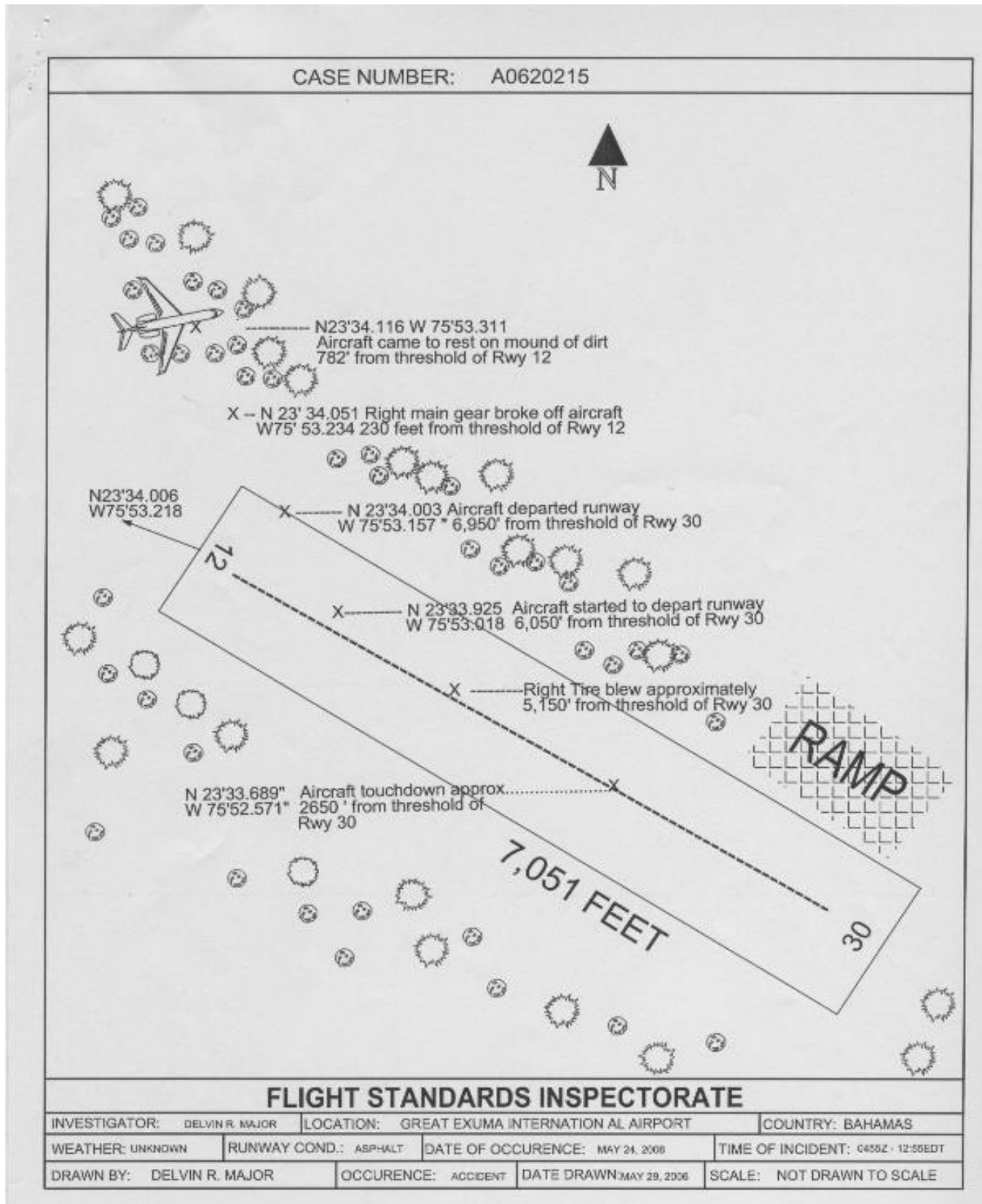
Illana Podlovsky
Hagay Koren

Israel Aircraft Industries
Israel Aircraft Industries

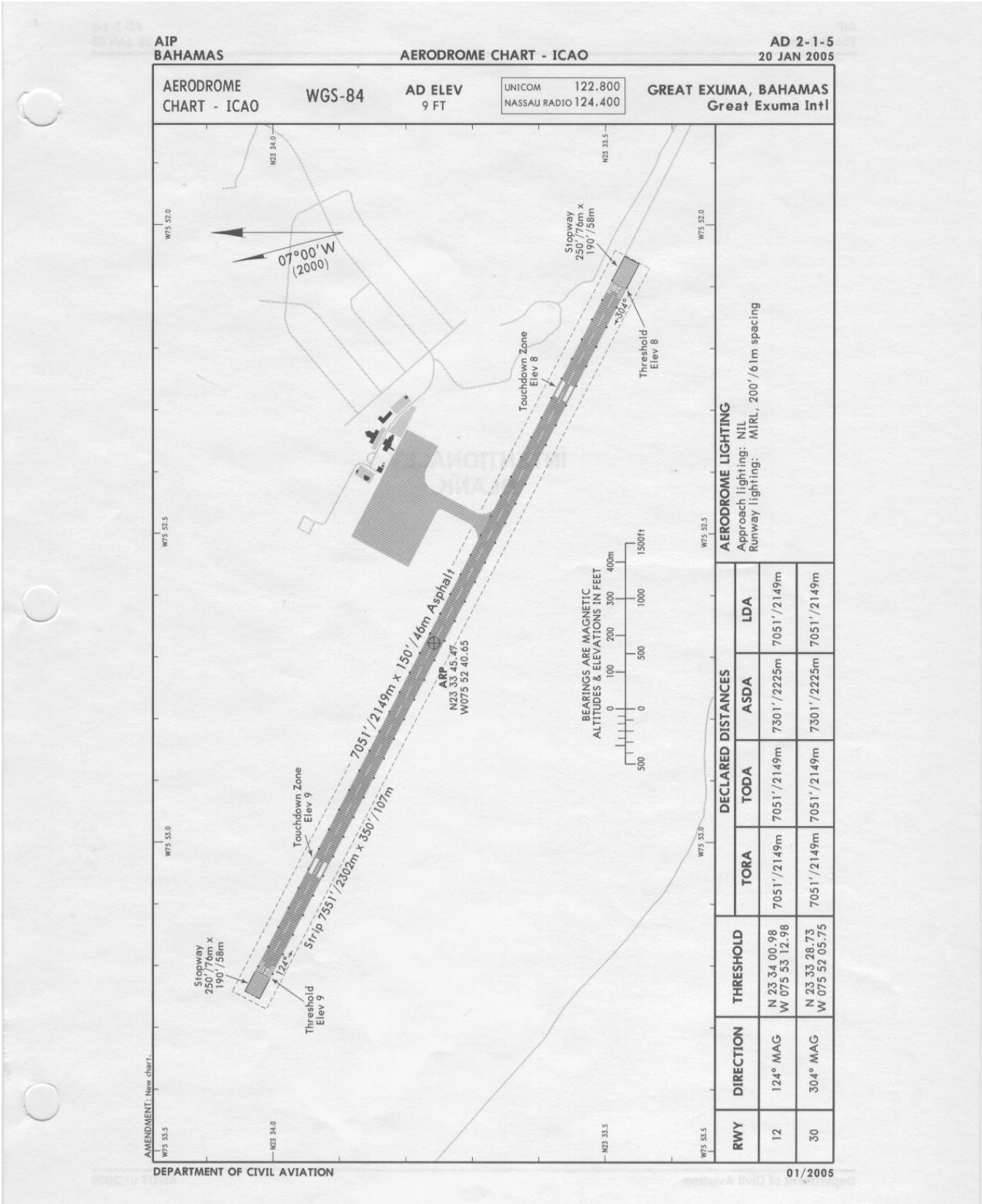
Chief Test Pilot



CRASH SCENE DIAGRAM:



Aerodrome Information



Air Ambulance by Air Trek
Westwind WW-1124
N475AT
Moss Town, Exuma



Rear view of disabled aircraft

[illegible]

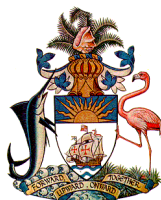
Front view of damaged aircraft.

[illegible]

Side view of Damaged Aircraft.

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FLIGHT STANDARDS INSPECTORATE
BAHAMAS CIVIL AVIATION DEPARTMENT

AIRCRAFT ACCIDENT
FINAL REPORT No.A0620215

Westwind WW-1124 N-475AT
May 24, 2006

SYNOPSIS

Operator: Air Ambulance by Air Trek

Manufacturer: Israel Aircraft Industries

Model: Westwind WW-1124

Nationality: United States of America

Registration: N475AT

Place of Accident: Moss Town International Airport, Exuma Bahamas

Date of Accident: May 24, 2006

Investigating Authority: Flight Standards Inspectorate

Investigator in Charge: Delvin R. Major- Flight Standards Inspectorate

Notification: Aircraft Manufacturer – Israel Aircraft Industries
Federal Aviation Administration (FAA)
National Transportation Safety Board (NTSB)
Honeywell Aerospace – Engine Manufacturers

Releasing Authority: Bahamas Civil Aviation Department
Mr. Cyril Saunders - Director

Date of Report: November 30, 2006



ABBREVIATIONS, TERMINOLOGY

AIS	Automatic Information Services
AMM	Aircraft Maintenance Manual
AMT	Aviation Maintenance Technician
ATS	Air Traffic Services
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
DFDR	Digital Flight Data Recorder
DOO	Director of Operations
DRTL	Disaster Response Team Leader
DS	Director of Safety
CAD	Civil Aviation Department
EDT	Eastern Daylight Time (-5 hours (-4DT) to convert from UTC)
ERM	Emergency Response Manual
FAA	Federal Aviation Administration
FSI	Flight Standards Inspectorate
ICAO	International Civil Aviation Organization
ILS	Instrument Landing System
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Condition
LH	Left Hand
MLG	Main Landing Gear
MALSF	Medium-intensity Approach Lighting System (with sequenced flashers)
MD	Manager of Dispatch
MCM	Maintenance Control Manual
MM	Maintenance Manual
MET	Meteorological Office / Department
MIRL	Medium Intensity Runway Lights
MM	Maintenance Manual
MYEM	ICAO Airport Designation – Governors Harbour
NM or nm	Nautical Miles
NTSB	National Transportation Safety Board
RCA	Root Cause Analysis
RH	Right Hand
RII	Required Inspection Item
SEP	Survival and Emergency Procedures Training
T/L	Technical Log
TSBC	Transportation Safety Board of Canada
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



DEFINITIONS When the following terms are used in this report, they have the following meanings as per CASR 2001;

"Aircraft Accident" – means 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 and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage or the aircraft is missing or completely inaccessible.

"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" - means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

"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.

"Response Time" - Response time is considered to be the time between the initial call to the rescue and fire fighting service and the time when the first responding vehicle(s) is (are) in position to apply foam at a rate of at least 50 percent of the discharge rate specified in ICAO Annex 14 Chapter 9, Table 9-2. (Table 9-2 not included in this report however it can be found in Annex 14, Chapter 9).

"Serious injury" - means any injury which:

- Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received;
- Results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
- Causes severe hemorrhages, nerve, muscle, or tendon damage;
- Involves any internal organ; or
- Involves second or third degree burns, or any burns affecting more than 5 percent of the body surface.
- Involves verified exposure to infectious substances or injurious radiation.

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

"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.



OVERVIEW

At 0444Z On May 24 2006, Miami Centre (George Town Sector) informed Nassau ATC That Lifeguard Flight N475AT, a Westwind Jet (WW-1124), en-route from San Juan, Puerto Rico to Norfolk, Virginia reported that it had developed generator problems and the aircraft was looking to land at the nearest airport to its position.

Miami Air Traffic Center vectored the aircraft to Exuma International Airport at Great Exuma, Bahamas, as that was the nearest airport. Attempts were made by Nassau ATC to contact the authorities at Exuma International Airport to have the runway lights turned on.

At 0454Z, Miami ATC reported loss of contact with the aircraft; therefore, N475AT proceeded with an emergency landing, before Miami ATC could give further instructions.

The owner, was interviewed after the accident and stated, *“The pilot contacted him via satellite phone after the accident and reported that he lost one of his generators, and the other one was putting out 67amps. At some point as the flight progressed, he said funny things started happening with the radios. He then checked the battery and it was reading 14 volts. He declared an emergency and was vectored to Exuma International Airport. There were no runway lights on at the time and no landing lights were available on the aircraft. Pilot stated he picked up the runway at the last moment. Landing was hard and the right tire blew out after touchdown.”*

The uncontrolled aircraft came to rest approximately 800 feet beyond the end of runway 30 and approximately 300 feet right of the extended centre line of the runway. The aircraft landing gears were sheered off when the aircraft exited the runway, hence traveling into the clearing and then eventually into the bushes on the right side of the runway. The right wing of the aircraft collided with a mound of dirt, causing it to spin uncontrollably, resulting in it coming to rest on an easterly heading at an approximate 30 degree incline.

The occupants were evacuated from the wreckage and received minor injuries while making their way thru the thick brush and shrubbery while being led to safety. All Crew members were ATP rated and both proficiency checks found to be were valid and current neither of the pilots was available for an interview at the time of the field investigation at Exuma International Airport.

FACTUAL INFORMATION:

1.1 HISTORY OF THE FLIGHT

At 0444Z on may 24 2006, Miami Centre (George town sector) informed Nassau ATC that lifeguard flight N475AT, a Westwind Jet (WW-1124), en-route from San Juan, Puerto Rico to Norfolk Virginia reported that it had developed generator problems and the aircraft was looking to land at the nearest airport to its position.

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At 0454Z, Miami ATC reported lost of contact with the aircraft.



1.2 INJURIES TO PERSONS

No Injuries were sustained as a result of the incident. However, minor injuries were reported as a result of the passengers walking thru bushes to reach the runway.

1.3 DAMAGE TO AIRCRAFT

Aircraft substantially damaged.

1.4 OTHER DAMAGE

No other damage reported.

1.5 PERSONNEL INFORMATION

1.5.1 Captain Chad Balentine

100 Cloverdale Court
Winchester, VA 22602
540-678-0717

1.5.2 Curtis Johnson

645 G Street
Ste 100 #834
Anchorage, AK 99501
425-454-7690

1.6 AIRCRAFT INFORMATION – GENERAL

Aircraft was a fixed wing, multi-engine, turbo jet, Israeli Aircraft Industries Aircraft, Westwind WW-1124. Historical information and records were never presented despite repeated requests by this department. Requests were made of the owners for the records of the aircraft by the NTSB and FAA, also to no avail.

1.7 METEOROLOGICAL INFORMATION

Weather information not available for Exuma International at the time of the incident

1.8 AIDS TO NAVIGATION

Navigational Aids were not installed at this airport at the time of this accident. Aircraft was vectored to this airport by Miami Center

1.9 COMMUNICATIONS

Communications was established between Miami Center and the aircraft up to the point where the aircraft was too low to receive further communication.



1.10 AERODROME INFORMATION

Exuma Int'l Airport ICAO identifier (MYEF) is located at 23°33'45.47N and 075°52'40.65W coordinates. Elevation measured at 9 feet. Magnetic Variation of 7°W. The airport is under the administration of the Bahamas Civil Aviation Department. The airport can be used for IFR as well as VFR traffic.

Aerodrome administration available Monday to Friday 1400 to 2200AIS, Flight Service, Met Briefing and ATS are not available at the airport but can be received via Nassau AIS, FSS, MET and ATS respectively. There is Avgas and Jet A fuel available.

The runway physical characteristics include;

- Runway 12, magnetic direction 124° and 7,051' x 350' asphalt, strength unknown. Threshold coordinates 23°34'00.98N and 075°53'12.98W and elevation of 9 feet.
- Runway 33, magnetic direction 304° and 7,051' x 350' asphalt, strength unknown. Threshold coordinates 23°33'28.73N and 075°52'05.75W and elevation of 8 feet.
- Stopways Dimension 250' x 190' paved on Runways 12 and 30.

ATS communication facilities listed as Nassau Radio on frequency 124.20MHz and 122.80 MHz 24 hours when airborne.

White MIRL (200/61m spacing) and other apron edge and flood lights available.

(Above aerodrome information obtained from Department of Civil Aviation – AIP, the Bahamas, and Amendment 2-1-5 01 / 2005).

1.11 FLIGHT RECORDERS

Cockpit Voice Recorder

CVR was removed without Authorization by the Owners. It was in their possession and when finally sent to the NTSB for reading, it was found to contain no useful information

1.12 WRECKAGE AND IMPACT INFORMATION

For detailed wreckage and impact information refer to Onsite Investigation **APPENDIX 12.**

1.13 MEDICAL AND PATHOLOGICAL INFORMATION

Not Applicable

1.14 FIRE

There was no post impact fire after the incident; however, as the right engine was unable to be shut off, heat from the running engine started a fire with surrounding brush. Fire was contained by Branch of the Fire Department.

1.15 SURVIVAL ASPECTS

Not Applicable

1.16 TESTS AND RESEARCH

Not Applicable

ANALYSIS

Not Applicable

CONCLUSIONS:

Findings and Probable Cause could not be determined as the aircraft was stripped of its components, instrumentations, manuals and CVR by the owners of the aircraft, without permission or authorization from the Accident Investigation Personnel (Department of Civil Aviation)

Documents and manuals requested of the owners were never obtained. The help of the NTSB as well as the FAA were enlisted in an effort to retrieve documents from the owners. All attempts were fruitless.

Note: This Company has had two previous accidents / incidents of this nature involving aircrafts of this type, one with fatal injuries.

Due to the scene contamination a conclusive probable cause could not be reached.

SAFETY RECOMMENDATIONS:

No recommendations can be made in this accident as the scene and equipment was severely compromised by the actions of the owners.

