

NATIONAL TRANSPORTATION SAFETY BOARD
Office of Aviation Safety
Washington, D.C. 20594

April 21, 2006

GROUP CHAIRMAN'S FACTUAL REPORT

OPERATIONS GROUP

DCA06MA010

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A. ACCIDENT

Accident Number: DCA06MA010
Operator: Flying Boat, Inc. dba Chalk's Ocean Airways
Location: Miami Seaplane Base (X44), Miami, Florida
Date: December 19, 2005
Time: 1439 Eastern Standard Time¹ (est)
Airplane: Grumman Mallard G-73T, N2969

B. OPERATIONS GROUP

Kenneth L. Egge
Group Chairman
National Transportation Safety Board
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Malcolm Brenner, Ph.D.
National Resource Specialist
National Transportation Safety Board
Washington, D.C.

Adalberto Munet
Principal Operations Inspector
Federal Aviation Administration
Miami, Florida

Alex Larsen
Chief Pilot
Chalk's Ocean Airways
Fort Lauderdale, Florida

¹ All times are Eastern Standard Time based on a 24-hour clock, unless otherwise noted. Actual time of accident is approximate.

C. SUMMARY

On December 19, 2005, at 2:39 pm eastern standard time, a Grumman Mallard G73T, N2969, operated by Flying Boat Inc. as Chalk's Ocean Airways flight 101, crashed into a shipping channel adjacent to the Port of Miami shortly after takeoff. The aircraft, a seaplane, had departed from the Miami Seaplane Base (X44), and took off from the shipping channel with 2 crew and 18 passengers (including 3 infants). The scheduled flight was destined to Bimini, Bahamas, operating under the provisions of Title 14 Code of Federal Regulations Part 121. The seaplane was retrofitted with Pratt & Whitney PT-6 turboprop engines. Witness and video recordings indicated a fire on the right wing and showed the wing separating prior to impacting the water. All 20 occupants suffered fatal injuries. Visual meteorological conditions prevailed at the time of the accident.

D. DETAILS OF THE INVESTIGATION

The Operations Group Chairman arrived at Miami, Florida, on December 19, 2005, to begin the field phase of the accident investigation. Upon arrival at Miami, Florida, the NTSB team immediately went to the accident site.

On December 20, the Operations Group was formed, consisting of the Group Chairman, Kenneth L. Egge; Malcolm Brenner, Ph.D., NTSB; Adalberto Munet, FAA; Alex Larsen, Chalk's Ocean Airways. An interview was conducted by Mr. Egge and Dr. Brenner with the Chief Inspector for Chalk's Ocean Airways and the Chief Pilot of Chalk's Ocean Airways.

On December 21, 2005, the Operations Group examined a sister ship (N142PA) of the accident airplane for familiarization purposes. The Operations Group conducted interviews with a captain and first officer that had previously flown with the accident flight crewmembers. Interviews were also conducted by the Operations Group with a first officer that had flown the accident airplane on an acceptance flight after a maintenance inspection and then continued to fly it for 10 flight segments in revenue service. An interview was also conducted by the Operations Group with the Chief Pilot of Chalk's Ocean Airways.

Manuals and documents were obtained from Chalk's Ocean Airways and the Federal Aviation Administration (FAA).

The Operations Group concluded the field phase of the accident investigation at 1430 on December 22, 2005.

1.0 HISTORY OF FLIGHT

On December 19, 2005, the accident flight crew flew the accident airplane from Fort Lauderdale/Hollywood International Airport (FLL), Fort Lauderdale, Florida, to X44 as flight number 110. The flight was then scheduled to board passengers at X44 for flight 101 to Bimini, Bahamas (the accident flight). According to the accident airplane flight log,² the flight departed FLL at 1305 and landed at X44 at 1321. It had been scheduled to depart FLL at 0815 but in an interview conducted by the Operations Group, the Chief Pilot stated that the flights that morning had been delayed because of weather.

Eighteen passengers (including 3 infants) were boarded on flight 101. The airplane departed from X44 and crashed into a shipping channel adjacent to the Port of Miami.

2.0 WEATHER

The following METAR³ for MIA was issued on December 19, 2005, at 1443 (about four minutes after the accident): Wind from 340 degrees at 7 knots, visibility 4 statute miles, overcast at 1,200 feet, temperature 23 degree Celsius, dew point 18 degrees Celsius, with an altimeter setting of 30.09 inches of mercury.

² Flight Log number 6395.

³ Aviation Routine Weather Report.

3.0 FLIGHT CREW INFORMATION

On the day of the accident, the accident flight crew was scheduled to fly seven flight segments for a total of 4.1 hours of flying time. The accident occurred on the second flight segment.

3.0.1 The Captain, Michele L. Marks

Age: 37

Date of hire with Flying Boat, Inc.: March 10, 2003

Airman certificates and ratings:

Airline Transport Pilot (issued May 10, 2005)

Airplane Multiengine Land and Sea

Type Ratings: G-73T

Commercial Privileges - Airplane Single Engine Land and Sea

G-73T (VFR Only)

Flight Instructor (Issued November 5, 2003)

Airplane Single Engine/CFI

Limitations: Valid only when accompanied by pilot certificate.

Expires February 29, 2006

Medical certificate:

First Class (issued September 27, 2005)

Limitations: Holder shall wear corrective lenses

A review of FAA records indicated no history of failures or re-tests for FAA pilot certificates and ratings.

A search of FAA and company records revealed no FAA enforcement actions, incidents, or company disciplinary actions.

The accident captain was appointed Director of Safety for Chalk's Ocean Airways effective August 24, 2005.

A review of FAA airman records indicated the following chronology of acquired airman certificates:

AIRMAN CERTIFICATE	ORIGINAL ISSUE DATE
Private Pilot – Airplane Single Engine Land	January 29, 1999
Private Pilot – Instrument Airplane	May 13, 2000
Commercial Pilot – Airplane Single Engine Land	July 14, 2000
Commercial Pilot – Instrument	July 14, 2000
Commercial Pilot – Multiengine Land	September 22, 2000
Flight Instructor – Airplane Single Engine Land	February 18, 2002
Commercial Pilot – Airplane Single Engine Sea	June 3, 2002
Commercial Pilot – Multiengine Sea	March 7, 2003
Airline Transport Pilot – Airplane Multiengine Land	December 7, 2003
G-73T Type Rating	May 10, 2005

Flight experience according to Flying Boat, Inc., records:

FLIGHT TIME⁴	HOURS
Total	2,830
Total PIC (Pilot-in-Command)	1,330
Total Grumman Mallard G-73T	1,630
Total PIC Grumman Mallard G-73T	430
Last 24 hours	3.1
Last 30 days	84.5
Last 90 days	203.4
Last 12 Months	722.6

Training and checks:

TRAINING / CHECKS	DATE
Initial G-73T type rating	May 10, 2005
Last G-73T proficiency check	May 10, 2005
Last line check	August 14, 2005

According to the Flying Boat, Inc., records, prior to joining Flying Boat, Inc., Ms. Marks was employed as a flight instructor for Angel Air Flight Training at Chandler, Arizona, from May 2002 until February 2003. Before that, she was a charter coordinator for Scottsdale Flyers, Scottsdale, Arizona, from March 2000 until March 2002. Before that, she worked as a floor manager for Barona Casino in San Diego, California, from May 1995 until January 1998.

⁴ Not including accident flight.

3.0.2 The First Officer, Paul J. DeSanctis

Age: 34

Date of hire with Flying Boat, Inc.: April 15, 2005

Airman certificates and ratings:

Airline Transport Pilot (issued March 3, 2004)

Airplane Multiengine Land

Type Ratings: CE-500

Flight Instructor (issued November 18, 2002)

Airplane Single Engine/CFI

Limitations: Valid only when accompanied by pilot certificate.

Expires November 30, 2004

Medical certificate:

First Class (issued January 31, 2005)

Limitations: None

A search of FAA and company records revealed no FAA enforcement actions, incidents, accidents, or company disciplinary actions.

A review of FAA airman records indicated the following chronology of acquired airman certificates:

AIRMAN CERTIFICATE	ORIGINAL ISSUE DATE
Private Pilot – Airplane Single Engine Land	July 16, 1999
Private Pilot – Multiengine	April 4, 2001
Private Pilot – Instrument	September 9, 2001
Commercial Pilot – Airplane Single Engine Land	June 20, 2002
Commercial Pilot – Multiengine Land	June 20, 2002
Commercial Pilot – Airplane Single Engine Sea	May 18, 2005
Commercial Pilot – Multiengine Sea	May 18, 2005

Flight experience according to Flying Boat, Inc., records:

FLIGHT TIME⁵	HOURS
Total	1,420
Total PIC	1,200
Total SIC (Second-in-Command)	100
Total Grumman Mallard G-73T	70.9
Last 24 hours	1.1
Last 30 days	57.6
Last 90 days	70.9
Last 12 Months (with Flying Boat, Inc.)	70.9

Training and checks:

TRAINING / CHECKS	DATE
Last G-73T proficiency check	October 19, 2005
Initial Operating Experience (IOE) completion	November 21, 2005

According to company records, prior to joining Flying Boat, Inc., Mr. DeSanctis was employed as a pilot/dispatcher for Quest Diagnostics Flight Operations in Reading, Pennsylvania, from June 2002 until April 2005. He was also employed as a laborer for Skimski Plumbing and Heating in Reading, Pennsylvania, from June 1992 to April 2005. He was employed by Reading Flite Academy in Reading, Pennsylvania, as a line service technician from April 2002 until August 2002.

⁵ Not including accident flight.

4.0 AIRPLANE INFORMATION

4.0.1 Weight and Balance, and Speeds

AIRPLANE WEIGHTS	
	WEIGHT (Pounds)
Basic Operating Weight	9,413
Baggage	600
Passengers	2,475
Zero Fuel Weight	12,488
Maximum Zero Fuel Weight*	12,800
Fuel	1,340
Takeoff Weight	13,828
Maximum Takeoff Weight*	14,000

* Manufacturer's Airplane Flight Manual limitation

CENTER OF GRAVITY (CG) AND SPEEDS	
Takeoff CG	21.8 percent mean aerodynamic chord (MAC)
CG Limits	17.7 to 26 percent MAC
Takeoff Speeds	$V_1=82$ knots, $V_2=90$ knots

5.0 AIRPORT INFORMATION

The company built a terminal on a newly created landfill named Watson Island in 1926. That same location, between downtown Miami and the South Beach tourist district, is now adjacent to the Port of Miami, a cruise ship port.

Miami Seaplane Base (X44), Miami, Florida, is located about two miles east of Miami, Florida. The airport is served by a runway oriented northwest/southeast, which is 15,000 feet long and 600 feet wide. The runway surface is water with a field elevation of zero feet mean sea level (MSL). There are no published instrument procedures at X44. Chalk's Ocean Airways seaplanes shared the deep water channel and turning basin with oceangoing freighters and passenger cruise liners.

6.0 COMPANY INFORMATION

Chalk's Ocean Airways was originally founded by Arthur B. Chalk in 1919 as Chalk's Flying Service in Miami, Florida. The airline was purchased in the 1980's by Resorts International, a hotel and casino property development company. The company converted the piston-engine Grumman Mallard airplanes to Pratt & Whitney PT6 turboprop engines, upgraded the avionics equipment, and created the 17-seat interior.

After being sold by Resorts International, Chalk's Flying Service was owned by several South Florida investors, and operated for a time in conjunction with the restarted Pan Am, under the Pan Am Air Bridge name. In conjunction with the bankruptcy filing of one of the airline's investors, the company reorganized and recapitalized in July 1999 when bought by a Florida businessman. The company then operated under the name, Chalk's Ocean Airways. At the time of the accident, the company had 82 employees, including 10 pilots.

7.0 FAA SURVEILLANCE AND OVERSIGHT

The Flying Boat, Inc. Operating Certificate has been managed by the FAA at the South Florida Certificate Management Office.

A review of the FAA's PTRS records revealed that a total of 24 and 49 entries, respectively, were made for Fiscal Years 2004 and 2005 in the following areas of Operations activities at Flying Boat, Inc.: Airmen Certification (1500 series), Surveillance (1600 series), and Investigations (1700 series).

E. LIST OF ATTACHMENTS

Attachment 1

Interview Summaries 1-1

 Luis Carrillo, Flying Boat Inc., Chief Inspector 1-1

 Erik A. Larsen, Flying Boat Inc., Chief Pilot 1-2

 Robert J. Lutz, Flying Boat Inc., Grumman Mallard Captain, 1-3

 Robert S. Higgs, Flying Boat, Inc., Grumman Mallard First Officer 1-6

 Scott S. Adams, Flying Boat, Inc., Grumman Mallard First Officer 1-8

 Erik A. Larsen, Flying Boat Inc., Chief Pilot 1-10