National Transportation Safety Board
Aviation Incident Data Summary

Location:	Atlanta Hartsfield Intl. Apt. (KATL), GA	**Incident Number:**	OPS10IA001
Date & Time:	10/19/2009, 0605 EDT	**Registration:**	
Aircraft:	BOEING 767	**Injuries:**	194 None
Flight Conducted Under:			

Analysis

During the flight one of the three required flight deck crew members became ill and was considered to be incapacitated. The remaining two crew members conducted the entire night flight without the benefit of a customary break period. Throughout the flight the crew made comments indicating that they were fatigued and identified fatigue as their highest threat for the approach, but did not discuss strategies to mitigate the consequences of fatigue. At the time of the incident, the crew had been on duty for about 12 hours and the captain had been awake for over 22 hours, while the first officer had been awake for at least 14 hours.

During the descent and approach, the flight crew was assigned a number of runway changes; the last of which occurred near the final approach fix for runway 27L. While the flight was on final approach, the crew was offered and accepted a clearance to sidestep to runway 27R for landing. Although the flight crew had previously conducted an approach briefing for two different runways, they had not briefed the approach for runway 27R and were not aware that the approach light system and the instrument landing system (ILS) were not available to aid in identifying that runway. When the crew accepted the sidestep to runway 27R, the captain, who was the flying pilot, saw the precision approach path indicator and lined the airplane up on what he said were the brightest set of lights he could see. During the final approach, the first officer was preoccupied with attempting to tune and identify the ILS frequency for runway 27R. Just prior to the airplane touching down, the captain realized they were landing on a taxiway. The airplane landed on taxiway M, 200 feet north of, and parallel to, runway 27R.

Postincident flight evaluations of the airport lighting indicated that there were a number of visual cues that could have misguided the captain to align with taxiway M instead of runway 27R while on final approach. These cues included numerous taxiways signs along the sides of taxiway M which, from the air, appeared to be white and could be perceived as runway edge lights. In addition, the blue light emitting diode (LED) lights used on the eastern end of taxiway M were perceived to be brighter than the adjacent incandescent lights on the airfield and the alternating yellow and green lights in the ILS critical area provided the appearance of a runway centerline. The postincident flight evaluations indicated that when the approach lights or the ILS for runway 27R were available and used, it was clearlyevident when the airplane was not aligned with the runway.

Flight Events

Approach - Airport occurrence
Landing - Miscellaneous/other

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be:

The flight crew's failure to identify the correct landing surface due to fatigue. Contributing to the cause of the incident were (1) the flight crew's decision to accept a late runway change, (2) the unavailability of the approach light system and the instrument landing system for the runway of intended landing, and (3) the combination of numerous taxiway signs and intermixing of light technologies on the taxiway.

Findings

Personnel issues-Action/decision-Info processing/decision-Identification/recognition-Flight crew - C
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Flight crew - F
Personnel issues-Physical-Impairment/incapacitation-Illness/injury-Instructor/check pilot
Personnel issues-Physical-Alertness/Fatigue-(general)-Flight crew - C
Environmental issues-Operating environment-Approach aid coverage/avail-Localizer-Availability of related info - F
Environmental issues-Operating environment-Approach aid coverage/avail-Approach lighting-Availability of related info - F
Environmental issues-Operating environment-Airport facilities/design-Taxiway lighting-Contributed to outcome - F
Environmental issues-Operating environment-Airport facilities/design-Taxiway markings/signage-Decision related to condition - F

Pilot Information

Certificate:	Airline Transport	**Age:**	47
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Instrument Rating(s):**	
Other Aircraft Rating(s):		**Instructor Rating(s):**	
Flight Time:	9122 hours (Total, all aircraft), 3131 hours (Total, this make and model), 71 hours (Last 90 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BOEING	**Registration:**	
Model/Series:	767 332	**Engines:**	2 Turbo Fan
Operator:		**Engine Manufacturer:**	Pratt & Whitney
Operating Certificate(s) Held:	Flag carrier (121)	**Engine Model/Series:**	PW4000 Series
Flight Conducted Under:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Night
Observation Facility, Elevation:	ATL	**Weather Information Source:**	Weather Observation Facility
Lowest Ceiling:		**Wind Speed/Gusts, Direction:**	Calm / ,
Temperature:	3°C	**Visibility**	10 Miles
Precipitation and Obscuration:			
Departure Point:	Rio de Janeiro (SBGL)	**Destination:**	Atlanta, GA (KATL)

Airport Information

Airport:	Atlanta Hartsfield Internation (KATL)	**Runway Surface Type:**	
Runway Used:	N/A	**Runway Surface Condition:**	
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	12 None	**Aircraft Damage:**	None
Passenger Injuries:	182 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	David Helson	**Adopted Date:**	11/15/2010
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=74928		

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