



# National Transportation Safety Board Aviation Incident Final Report

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<b>Location:</b>	HOUSTON, TX	<b>Incident Number:</b>	FTW92IA010
<b>Date &amp; Time:</b>	10/17/1991, 1406 CDT	<b>Registration:</b>	PHBUU
<b>Aircraft:</b>	BOEING 747-300	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	154 None
<b>Flight Conducted Under:</b>	Part 129: Foreign		

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## Analysis

THE PILOT ALLOWED THE RIGHT OUTBOARD ENGINE POD TO DRAG ON THE RUNWAY WHILE LANDING. THE INTERNATIONAL FLIGHT EXECUTED A ILS APPROACH TO RUNWAY 14 AND WHEN THEY WERE HANDED OVER TO THE TOWER, THEY REQUESTED A VISUAL APPROACH TO RUNWAY 8. THE TOWER CLEARED THE FLIGHT FOR THE SIDE STEP MANEUVER. THE CAPTAIN DELAYED INITIATING THE SIDE STEP MANEUVER UNTIL HE WAS 350 FEET AGL, AND BANKED THE AIRPLANE TO THE LEFT, ATTAINING A BANK OF 32.6 DEGREES, FOLLOWED BY 20.8 DEGREES BANK TO THE RIGHT AT 18 FEET AGL. FINAL APPROACH ALIGNMENT WAS NOT OBTAINED CAUSING THE ENGINE TO DRAG ON THE RUNWAY. A FIRE ERUPTED IN THE BOTTOM AFT SECTION OF THE ENGINE COWLING AS A RESULT OF A BROKEN FUEL FILTER DRAIN LINE. THE FIRE WAS EXTINGUISHED WITH ONBOARD FIRE SUPPRESSANTS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE PILOT'S FAILURE TO ATTAIN PROPER RUNWAY ALIGNMENT PRIOR TO TOUCHDOWN AND HIS FAILURE TO INITIATE A GO AROUND TO REMEDY THE SITUATION. A FACTOR WAS THE LOW ALTITUDE AT WHICH HE INITIATED THE SIDE STEP MANEUVER FOR WHICH HE WAS CLEARED.

## Findings

Occurrence #1: ABRUPT MANEUVER

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. MANEUVER - DELAYED - PILOT IN COMMAND
2. (F) ALTITUDE - INADEQUATE - PILOT IN COMMAND
3. (C) PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND
4. (C) GO-AROUND - NOT PERFORMED - PILOT IN COMMAND

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Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. TERRAIN CONDITION - RUNWAY
6. ENGINE ASSEMBLY - OPEN

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Occurrence #3: FIRE

Phase of Operation: LANDING - ROLL

Findings

7. FUEL SYSTEM, DRAIN - CRACKED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Foreign	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	06/26/1991
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	11969 hours (Total, all aircraft), 2494 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	PHBUU
<b>Model/Series:</b>	747-300 747-300	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	290
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	610000 lbs
<b>Time Since Last Inspection:</b>	0 Hours	<b>Engines:</b>	4 Turbo Fan
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	GE
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	CF6-50
<b>Registered Owner:</b>	KLM ROYAL DUTCH AIRLINE	<b>Rated Power:</b>	52500 hp
<b>Operator:</b>	KLM ROYAL DUTCH AIRLINE	<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	KRDF

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	12 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29° C / 17° C
Precipitation and Obscuration:			
Departure Point:	MEXICO CITY, MX (MEX)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1226 CDT	Type of Airspace:	Class E

## Airport Information

Airport:	HOUSTON (IAH)	Runway Surface Type:	Concrete
Airport Elevation:	96 ft	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	Sidestep
Runway Length/Width:	9401 ft / 150 ft	VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	15 None	Aircraft Damage:	Minor
Passenger Injuries:	139 None	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	154 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	HECTOR R CASANOVA	Adopted Date:	05/05/1993
Additional Participating Persons:	N. R DA SILVA; HOUSTON, TX TERRI S PASIEWICZ; HOUSTON, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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