



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	HORSEHEADS, NY	<b>Accident Number:</b>	BF092FA020
<b>Date &amp; Time:</b>	01/18/1992, 1028 EST	<b>Registration:</b>	N964VJ
<b>Aircraft:</b>	DOUGLAS DC-9-30	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Serious, 39 None

**Flight Conducted Under:** Part 121: Air Carrier - Scheduled

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## Analysis

AT THE TIME OF THE ACCIDENT, GUSTY WINDS WERE FORECAST FOR THE SURFACE TO HIGHER ALTIUTDES. THE COPILOT WAS FLYING AND CONFIGURED THE AIRPLANE ABOUT FOUR MILES OUT FOR LANDING ON RUNWAY 24. THE FLIGHTCREW RECIEVED PROGRESSIVE WIND INFORMATION DURING THE APPROACH; THE LAST REPORT WAS WIND AT 310 DEGRESS AND 25 KNOTS. THE APPROACH SPEED WAS V REF + 10. ACCORDING TO THE FLIGHTCREW, DURING THE LANDING FLARE A WIND GUST OCCURRED, AND THE AIRPLANE LIFTED IN A NOSE DOWN ATTITUDE. THE GUST STOPPED AND THEN THE AIRPLANE DESCENDED TO THE RUNWAY AND LANDED HARD. THE EXAMINATION OF THE AIRPLANE REVEALED THE FUSELAGE CRACKED NEAR WHERE THE WINGS WERE ATTACHED AND THE AFT FUSELAGE WAS BENT DOWN ABOUT SEVEN DEGREES.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE AIRCRAFT ENCOUNTERED A SUDDEN WIND GUST DURING LANDING FLARE, WHICH RESULTED IN A HARD LANDING.

## Findings

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Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

1. FLARE - INITIATED - COPILOT/SECOND PILOT
2. (C) WEATHER CONDITION - GUSTS
3. (C) DESCENT - EXCESSIVE
4. (F) LEVEL OFF - NOT ATTAINED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	52, Male
<b>Airplane Rating(s):</b>	Multi-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--w/ waivers/lim.	<b>Last Medical Exam:</b>	07/09/1991
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	19000 hours (Total, all aircraft), 9500 hours (Total, this make and model), 117 hours (Last 90 days, all aircraft), 49 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	DOUGLAS	<b>Registration:</b>	N964VJ
<b>Model/Series:</b>	DC-9-30 DC-9-30	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	47373
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	116
<b>Date/Type of Last Inspection:</b>	01/17/1992, Continuous Airworthiness	<b>Certified Max Gross Wt.:</b>	106000 lbs
<b>Time Since Last Inspection:</b>	3 Hours	<b>Engines:</b>	2 Turbo Fan
<b>Airframe Total Time:</b>	59251 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	JT8D-7B
<b>Registered Owner:</b>	USAIR	<b>Rated Power:</b>	15000 lbs
<b>Operator:</b>	USAIR	<b>Air Carrier Operating Certificate:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	USAIR	<b>Operator Designator Code:</b>	USAA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ELM, 955 ft msl	Observation Time:	0950 EST
Distance from Accident Site:	999 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	-7° C / -16° C
Lowest Ceiling:	Broken / 4000 ft agl	Visibility	30 Miles
Wind Speed/Gusts, Direction:	14 knots/ 19 knots, 300°	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	ITHACA, NY (ITH)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1020 EST	Type of Airspace:	Class E

## Airport Information

Airport:	ELMIRA/CORNING REGIONAL (ELM)	Runway Surface Type:	Asphalt
Airport Elevation:	955 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	ILS
Runway Length/Width:	6999 ft / 150 ft	VFR Approach/Landing:	Straight-in

## Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Serious, 34 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 39 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	ALBERT G REITAN	Adopted Date:	05/26/1993
Additional Participating Persons:	P. IDE; ROCHESTER, NY E. DICK; ROCHESTER, NY P. MUNOZ; ROCHESTER, NY BILL STEELHAMMER; LONG BEECH, CA		
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:pubinq@ntsb.gov">pubinq@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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