



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	IMPERIAL, California	<b>Accident Number:</b>	LAX93LA163
<b>Date &amp; Time:</b>	April 3, 1993, 15:00 Local	<b>Registration:</b>	N34205
<b>Aircraft:</b>	CESSNA 177RG	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

DURING THE LANDING ROLL-OUT THE AIRPLANE ENCOUNTERED A DUST DEVIL WHICH LIFTED AND TURNED THE AIRPLANE TO THE LEFT. THE PILOT APPLIED FULL POWER AND BEGAN A TAKEOFF. SHORTLY AFTER LIFT-OFF THE AIRPLANE'S LEFT LANDING GEAR STRUCK THE LEADING EDGE OF A PARKED AIRPLANE. THE PILOT RETURNED TO THE AIRPORT AND INTENTIONALLY LANDED ADJACENT TO THE RUNWAY WITH ITS LANDING GEARS RETRACTED. A GROUND WITNESS CONFIRMED THE DUST DEVIL PHENOMENA.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FLIGHT'S ENCOUNTER WITH A DUST DEVIL.

## Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) WEATHER CONDITION - UNFAVORABLE WIND  
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Occurrence #2: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING - ABORTED

Findings

2. OBJECT - AIRCRAFT PARKED/STANDING

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Occurrence #3: GEAR NOT EXTENDED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

## Factual Information

On April 3, 1993, at about 1500 hours Pacific standard time, a Cessna 177RG, N34205, executed an emergency landing adjacent to Imperial County Airport, Imperial, California, after colliding with a parked airplane. The pilot was completing a local visual flight rules personal flight. The airplane, registered to and operated by the pilot, sustained substantial damage. Neither the certificated private pilot nor his passenger was injured. Visual meteorological conditions prevailed.

The pilot told Mr. Nick Weber, Aviation Safety Inspector, Federal Aviation Administration (FAA), San Diego [California] Flight Standards District Office, that prior to landing the surface winds were calm. The touch down was normal, but during the landing roll out the airplane made an abrupt swerve to the left and exited the 100 foot wide runway.

After exiting the runway the airplane was heading toward a parked Cessna 175, N7378M. The pilot applied power and began a go-around. The airplane lifted off, but its left wheel struck the parked Cessna's leading edge wing and separated from the airplane.

The pilot executed a fly by over the runway and elected to land, gear up, on the dirt area adjacent to the runway.

A ground witness confirmed that the winds were calm as the airplane touched down. A "dust devil," however, developed as the airplane was rolling out. After encountering the dust devil, the airplane lifted off the runway and turned to the left.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	50,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 29, 1992
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	936 hours (Total, all aircraft), 600 hours (Total, this make and model), 900 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N34205
<b>Model/Series:</b>	177RG 177RG	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	177RG0982
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-360
<b>Registered Owner:</b>	MCDONALD, ARNOLD C.	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 3000 ft AGL	<b>Visibility</b>	30 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	30°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(IPL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(IPL )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:05 Local	<b>Type of Airspace:</b>	Class D;Class E

## Airport Information

<b>Airport:</b>	IMPERIAL COUNTY AIRPORT IPL	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	-56 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	14	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5304 ft / 100 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	32.859931,-115.650115(est)

## Administrative Information

**Investigator In Charge (IIC):** Llorente, A.  
**Additional Participating Persons:** NICK F WEBER; SAN DIEGO , CA

**Original Publish Date:** June 30, 1994

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=28361>

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