



Aviation Investigation Final Report

Location:	RIALTO, California	Incident Number:	LAX97IA161
Date & Time:	April 16, 1997, 21:10 Local	Registration:	N930UA
Aircraft:	Boeing 737-500	Aircraft Damage:	None
Defining Event:		Injuries:	1 Minor, 99 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

The aircraft was on a standard instrument arrival when the captain, who was on the controls, noticed a green light illuminating the aircraft. It appeared to him that the light was tracking the aircraft, but as he pointed out that fact to the first officer, the light disappeared. The captain reported that although the light caused a minimal yet persistent loss of night vision, he was able to maintain control of the aircraft throughout the remainder of the flight. He told ATC that the light appeared to emanate from the western edge of the city. A medical examination by Air Force specialists revealed no permanent evidence of eye damage. Investigators were unable to locate the source of the light. There were no NOTAMs for laser light activity at the time of the incident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: a laser light source of undetermined origin, directed by unknown person(s) toward the cockpit window of the aircraft, while the aircraft was on an approach to land.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: APPROACH - IAF TO FAF/OUTER MARKER (IFR)

- Findings
1. LIGHT CONDITION - BRIGHT NIGHT

2. (C) LIGHT CONDITION - OTHER
3. (C) MISCELLANEOUS - INTENTIONAL - UNKNOWN

Factual Information

On April 16, 1997, at 2110 hours Pacific daylight time, the captain on United Airlines Flight 2327 was exposed to a laser beam during a descent into Ontario, California. The aircraft, a Boeing 737-500, N930UA, was operated by United Airlines as a regularly scheduled domestic passenger flight under 14 CFR Part 121 when the incident occurred. The flight originated in San Francisco, California, at 2029 on the evening of the incident. Visual meteorological conditions prevailed at the assigned altitude and an IFR flight plan was filed.

The aircraft was at 13,000 feet msl about 5 DME from Hitop intersection on the Ziggy 3 arrival when the incident occurred. The captain was on the controls when he noticed a green light illuminating the aircraft. It appeared to him that the light was tracking the aircraft, but as he was pointing out that fact to the first officer, the light disappeared. He reported that, although his exposure to the light caused a minimal yet persistent loss of night vision, he was able to maintain control of the aircraft throughout the remainder of the flight. He told air traffic control (ATC) that the source of the light seemed to emanate from the western edge of the city of Rialto. He was advised that there were no reports of laser activity in the area. After landing, he notified United Airlines dispatch of the incident.

The captain was subsequently examined by the staff at the Visual Psychophysics Branch, Armstrong Laboratory, Brooks AFB, Texas. Their examination revealed no evidence of permanent effects from the exposure.

Investigators from the FDA, FBI, and the San Bernardino County Sheriff's Aero Bureau were notified; however, the source of the light remains undetermined. According to the FAA, there were no NOTAMs in effect for laser light activity in the Ontario area at the time of the incident.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	34, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Glider; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 27, 1997
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5661 hours (Total, all aircraft), 1160 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N930UA
Model/Series:	737-500 737-500	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	26655
Landing Gear Type:	Retractable - Tricycle	Seats:	132
Date/Type of Last Inspection:	April 16, 1997 Continuous airworthiness	Certified Max Gross Wt.:	130000 lbs
Time Since Last Inspection:	1 Hrs	Engines:	2 Turbo fan
Airframe Total Time:	15042 Hrs	Engine Manufacturer:	Cfm
ELT:	Not installed	Engine Model/Series:	CFM56-3C
Registered Owner:	UNITED AIRLINES	Rated Power:	20000 Lbs thrust
Operator:		Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	UALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	ONT ,943 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	20:50 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SAN FRANCISCO (SFO)	Type of Flight Plan Filed:	IFR
Destination:	ONTARIO (ONT)	Type of Clearance:	IFR
Departure Time:	20:29 Local	Type of Airspace:	Class C

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor, 4 None	Aircraft Damage:	None
Passenger Injuries:	95 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 99 None	Latitude, Longitude:	34.099372,-117.379364(est)

Administrative Information

Investigator In Charge (IIC):	Crispin, Robert
Additional Participating Persons:	SCOTT BURTON; RIVERSIDE , CA
Original Publish Date:	September 30, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=29644

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).