



National Transportation Safety Board Aviation Accident Final Report

Location:	MEXICALI, Mexico	Accident Number:	LAX88FA045
Date & Time:	11/15/1987, 1815 PST	Registration:	N2484B
Aircraft:	CESSNA 441	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Public Aircraft		

Analysis

A CESSNA 441 OPERATED BY THE USCS COLLIDED WITH TERRAIN WHILE ON A AUTHORIZED NIGHT TACTICAL FLIGHT. THE COPILOT DID NOT MEET THE CURRENCY STANDARDS AS REQUIRED BY USCS AND WAS NOT QUALIFIED IN THE ACFT. THE FLIGHT ORIGINATED DURING THE DAYLIGHT HOURS AND CONTINUED TO ASTRONOMICAL TWILIGHT. THE PILOTS DID NOT DARK ADAPT PREVIOUS TO THE NIGHT CONDITIONS. DARK ADAPTION WAS IMPEDED BY FLIGHT THROUGH VARIOUS LIGHT CONDITIONS CREATED BY TERRAIN AND AMBIENT LIGHT LEVELS. WITH NIGHT VISION IMPEDED THE PILOT WOULD NOT HAVE BEEN ABLE TO DINSTINGUISH RELIEF OF THE TERRAIN. THE ACFT COLLIDED WITH A SMALL RIDGE THAT ABRUPTLY ROSE 300 FT.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

Findings

1. (F) TERRAIN CONDITION - UPHILL
2. (C) ALTITUDE - MISJUDGED - PILOT IN COMMAND
3. (F) EXCESSIVE WORKLOAD (TASK OVERLOAD) - PILOT IN COMMAND
4. (F) LIGHT CONDITION - NIGHT
5. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
6. (F) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
7. (F) VISUAL/AURAL DETECTION - PILOT IN COMMAND
8. (F) VISUAL LOOKOUT - INADEQUATE - COPILOT/SECOND PILOT
9. (F) VISUAL/AURAL DETECTION - COPILOT/SECOND PILOT
10. (F) LACK OF RECENT INSTRUMENT TIME - COPILOT/SECOND PILOT
11. (F) INADEQUATE TRANSITION/UPGRADE TRAINING - COPILOT/SECOND PILOT
12. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
13. (F) CREW/GROUP COORDINATION - INADEQUATE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	41, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/09/1987
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	8000 hours (Total, all aircraft), 68 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N2484B
Model/Series:	441 441	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	441-0112
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	11/05/1987, Continuous Airworthiness	Certified Max Gross Wt.:	9925 lbs
Time Since Last Inspection:	7 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	1461 Hours	Engine Manufacturer:	GARRETT
ELT:	Installed	Engine Model/Series:	TPE331-8-4025
Registered Owner:	U. S. CUSTOMS SERVICE	Rated Power:	635 hp
Operator:	U. S. CUSTOMS SERVICE	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	IPL, 56 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	1752 PST	Direction from Accident Site:	27°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	50 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14° C / -5° C
Precipitation and Obscuration:			
Departure Point:	SAN DIEGO, CA (NZY)	Type of Flight Plan Filed:	Company VFR
Destination:	PALM SPRINGS, CA (PSP)	Type of Clearance:	None
Departure Time:	1520 PST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	THOMAS H WILCOX	Report Date:	10/07/1988
Additional Participating Persons:	RON WILKERSON KARL J PFITEER ANDREW HALL		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).