



Aviation Investigation Final Report

Location:	YUMA, Arizona	Accident Number:	LAX93LA181
Date & Time:	March 15, 1993, 20:40 Local	Registration:	N733TH
Aircraft:	CESSNA U-206G	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 5 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported a loss of electrical power at night. The pilot made a precautionary landing on an unlighted runway. The pilot stated that it was 'difficult to see' and the airplane touched down midfield. During roll out, the airplane collided with a runway light, overran the runway's departure end, and entered a ditch. The airplane's electrical system was examined by an FAA airworthiness inspector. The inspector reported that no mechanical problems were observed except that the alternator's drive belt was found 'extremely loose.' An examination of the airplane's maintenance records and pilot's report revealed that since completion of the last annual inspection, the airplane had been operated for two days during which it was flown for five hours.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN INADEQUATE ANNUAL INSPECTION WHICH LED TO A LOSS OF THE ELECTRICAL SYSTEM DUE TO LOOSE ALTERNATOR BELT, AND THE PILOT'S FAILURE TO ATTAIN THE PROPER TOUCHDOWN POINT DURING A NIGHT PRECAUTIONARY LANDING ON AN UNLIT RUNWAY.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ELECTRICAL SYSTEM,ALTERNATOR - INOPERATIVE
2. ELECTRICAL SYSTEM - FAILURE,TOTAL
3. (C) MAINTENANCE,ANNUAL INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Occurrence #2: OVERRUN

Phase of Operation: LANDING - ROLL

Findings

4. LIGHT CONDITION - BRIGHT NIGHT
5. PRECAUTIONARY LANDING - INTENTIONAL - PILOT IN COMMAND
6. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

7. TERRAIN CONDITION - DITCH

Factual Information

On March 15, 1993, at 2040 Mountain standard time, a Cessna U206G, N733TH, operated by the pilot, experienced a loss of electrical current during a nighttime cross country flight. The pilot made a precautionary landing on an unlighted runway at the Laguna Army Airfield, Yuma Proving Ground, Yuma, Arizona. During roll out, the airplane collided with rough terrain and was substantially damaged. Visual meteorological conditions prevailed during the personal flight. The airline transport certificated pilot and four of the five passengers were not injured. The fifth passenger sustained minor injuries. The flight originated from Guaymas, Mexico, on March 15, 1993, at about 1630.

In the pilot's completed "Aircraft Accident Report," NTSB Form 6120.1, he wrote, in pertinent part, the following: "...I experienced an alternator failure....I made two passes over the runway I intended to land on. After exercising particular caution to possible obstacles I chose to select a descent angle to the runway slightly steeper than normal, touching down at about half length, during the flare and landing roll it was difficult to see the runway...."

During the airplane's landing roll out, it collided with a runway light. Thereafter, the airplane overran the departure end of the runway and came to a stop in a ditch.

An examination of the airplane's maintenance records and electrical system revealed that on March 13, 1993, Kanski Air, Van Nuys, California, had certified its completion of an annual inspection.

The airplane's owner reported that he authorized the pilot to fly the airplane to Mexico between March 13 and 15, 1993. The accident occurred during the pilot's return flight from Mexico after the airplane had been operated for about five hours.

An FAA airworthiness inspector reported that its examination of the airplane revealed nothing unusual except that the alternator drive belt was found "extremely loose."

Pilot Information

Certificate:	Airline transport; Commercial	Age:	32, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 17, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1923 hours (Total, all aircraft), 57 hours (Total, this make and model), 1790 hours (Pilot In Command, all aircraft), 189 hours (Last 90 days, all aircraft), 88 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N733TH
Model/Series:	U-206G U-206G	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U20604790
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	March 13, 1993 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-F
Registered Owner:	JACK JOHNSON	Rated Power:	300 Horsepower
Operator:	DANIEL GANNE	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GUAYMAS (GYM)	Type of Flight Plan Filed:	VFR
Destination:	CALEXICO, CA (CXL)	Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	Class D;Class E

Airport Information

Airport:	LAGUANA A. A. F. LGF	Runway Surface Type:	Macadam
Airport Elevation:	422 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	5024 ft / 150 ft	VFR Approach/Landing:	Full stop;Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 5 None	Latitude, Longitude:	32.720249,-114.510208(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	JOHN ELLER; SCOTTSDALE , AZ
Original Publish Date:	June 30, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=28366

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).