



Aviation Investigation Final Report

Location:	LAS VEGAS, Nevada	Accident Number:	LAX00LA265
Date & Time:	July 14, 2000, 20:47 Local	Registration:	N738XP
Aircraft:	Cessna TR182	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot's logbook, on July 10, the pilot flew the accident airplane for 1.8 hours for the start of a formal checkout with a flight instructor. According to refueling records, the accident airplane was topped off with fuel on July 13, at a Hobbs meter reading of 4,042.0 hours. On July 14, the pilot completed his checkout with the instructor in the accident airplane within 42 minutes and 4 landings. According to the Hobbs meter reading at the accident site (4,046.6), the airplane had operated 4.6 hours since refueling. The Cessna Aircraft Company Information Manual's endurance profile states that the endurance will be 5.3 hours. The example profile flight is at 18,000 feet msl, 75 percent engine power at maximum takeoff weight, and proper leaning of the fuel/air mixture. According to flight plan information, the pilot listed an en route flight time of 3 hours 15 minutes, with 5.0 hours fuel onboard. The pilot filed for an en route altitude of 20,000 feet msl. The loss of engine power occurred during approach to landing. According to an FAA inspector on scene the fuel tanks were empty.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to refuel the airplane and his improper fuel consumption calculations.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. TERRAIN CONDITION - NONE SUITABLE
3. (C) FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
4. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Factual Information

On July 14, 2000, about 2047 hours Pacific daylight time, a Cessna TR182, N738XP, collided with telephone wires and poles during a forced landing on a city street while on final approach to McCarran International Airport, Las Vegas, Nevada. The forced landing was precipitated by a total loss of engine power. The airplane was operated by Flatirons Aviation of Boulder, Colorado, and rented by the pilot for a cross-country flight. The airplane was substantially damaged during the collision sequence. The private pilot received serious injuries and two passengers received minor injuries. Visual meteorological conditions prevailed for the personal flight conducted under 14 CFR Part 91, and an IFR flight plan was filed. The flight originated at Boulder about 1630.

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According to flight plan information, the pilot listed an en route flight time of 3 hours 15 minutes, with 5.0 hours fuel onboard. The pilot filed for an en route altitude of 20,000 feet msl. The loss of engine power occurred during approach to landing. According to a Federal Aviation Administration inspector on scene, the fuel tanks were empty. During postaccident examination of the airplane the engine was provided fuel and successfully run.

Neither the pilot nor the operator returned the Safety Board Pilot/Operator Aircraft Accident Report, form 6120.1/2.

Pilot Information

Certificate:	Private	Age:	20, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	September 15, 1998
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	272 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N738XP
Model/Series:	TR182 TR182	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	R18200974
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-540-L3C5D
Registered Owner:	DAVIS, LAWRENCE R.	Rated Power:	235 Horsepower
Operator:	FLATIRONS AVIATION	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:	Day
Observation Facility, Elevation:	LAS ,2177 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	21:03 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Scattered / 16000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	97°C / 41°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BOULDER , CO (1V5)	Type of Flight Plan Filed:	VFR
Destination:	(LAS)	Type of Clearance:	IFR
Departure Time:	16:30 Local	Type of Airspace:	Class B

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	KIP SHOEMAKER; LAS VEGAS , NV
Original Publish Date:	November 1, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49713

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](#).