



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	BRAWLEY, California	Accident Number:	LAX92LA270
Date & Time:	June 28, 1992, 19:30 Local	Registration:	N1794W
Aircraft:	BEECH A36	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE AIRCRAFT WAS AT 4,000 FEET DESCENDING TOWARD THE AIRPORT WHEN THE PILOT INTENTIONALLY RAN THE RIGHT FUEL TANK DRY, THEN SWITCHED TO THE LEFT TANK. THE PILOT COULD NOT AFFECT AN ENGINE RESTART AND THE AIRCRAFT LANDED IN A PLOWED FIELD ABOUT 2 MILES SHORT OF THE AIRPORT AND ENCOUNTERED SOFT EARTH WHICH SHEARED THE LANDING GEAR OFF THE AIRCRAFT, DAMAGING THE WINGS. FAA INSPECTORS FOUND THAT THE RIGHT FUEL TANK CONTAINED LESS THAN 1 GALLON WHILE THE LEFT TANK HELD 10 GALLONS. EACH OF THE FUEL TANKS HOLDS 40 GALLONS TOTAL. THE FLIGHT MANUAL FOR THE AIRCRAFT CAUTIONS AGAINST TAKEOFFS, LANDINGS OR MANEUVERING WITH LESS THAN ONE QUARTER OF FUEL IN THE TANK SELECTED. THE FUEL PICK UP PORTS WERE NOTED TO BE IN THE REAR CORNER OF EACH FUEL TANK. THE FUEL SYSTEM WAS FUNCTIONALLY TESTED WITH NO ABNORMALITY IN SYSTEM FUNCTION FOUND. THE PILOT STATED THAT HE MADE TWO TRIPS BETWEEN BRAWLEY AND SAN DIEGO WITHOUT REFUELING THE AIRCRAFT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL STARVATION DUE TO THE PILOT'S; 1) FAILURE TO REFUEL THE AIRCRAFT, 2) IMPROPER USE OF THE FUEL SYSTEM, AND 3) HIS DELAYED POSITIONING OF THE FUEL SELECTOR VALVE TO A TANK CONTAINING FUEL. A FACTOR IN THE ACCIDENT WAS THE PILOT'S FAILURE TO ADHERE TO THE PROCEDURES SPECIFIED IN THE AIRCRAFT FLIGHT MANUAL.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: CRUISE

Findings

1. (C) FLUID,FUEL - STARVATION
2. (C) FUEL SYSTEM - IMPROPER USE OF - PILOT IN COMMAND
3. (C) FUEL TANK SELECTOR POSITION - DELAYED - PILOT IN COMMAND
4. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
5. (F) FLIGHT MANUALS - NOT USED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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

Phase of Operation: LANDING - ROLL

Findings

6. TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Private	Age:	61, 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 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 5, 1992
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3598 hours (Total, all aircraft), 986 hours (Total, this make and model), 3598 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N1794W
Model/Series:	A36 A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	E380
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	February 4, 1992 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	9 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1871 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-BA2
Registered Owner:	CLYDE SHIELDS ENTOMOLOGICAL SV	Rated Power:	300 Horsepower
Operator:	CLYDE E. SHIELDS	Operating Certificate(s) Held:	None
Operator Does Business As:	CLYDE SHIELDS ENTOMOLOGICAL SV	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	38°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SAN DIEGO (MYF)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.019229,-115.450065(est)

Administrative Information

Investigator In Charge (IIC): Rich, Jeff

Additional Participating Persons: JOHN HYNDMAN; SAN DIEGO , CA
NICK WEBER; SAN DIEGO , CA

Original Publish Date: August 26, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=27667>

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