



National Transportation Safety Board Aviation Accident Final Report

Location:	TUCSON, AZ	Accident Number:	LAX93GA053
Date & Time:	11/26/1992, 1915 MST	Registration:	N5429J
Aircraft:	CESSNA 404	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Public Aircraft

Analysis

DURING A 2 HOUR AND 40 MINUTE TRAINING MISSION, THE PILOT MAINTAINED A LOW POWER SETTING WITH THE FUEL MIX AT FULL RICH. AFTER THE MISSION, THE PILOT CLIMBED THE AIRPLANE TO 9,000 FEET AGL TO CLEAR OBSTACLES BETWEEN HIS LOCATION AND HIS DESTINATION. DURING THE DESCENT, THE PILOT SAID HE REDUCED POWER MORE RAPIDLY THAN USUAL AND DESCENDED FASTER THAN NORMAL AT ABOUT 180 KIAS. ABOUT 800 TO 1,000 FEET AGL, IN THE TRAFFIC PATTERN, THE PILOT APPLIED POWER. BOTH ENGINES LOST TOTAL POWER. HE SET UP AN 85 KIAS GLIDE; COMPETED EMERGENCY PROCEDURES; AND RETRACTED THE LANDING GEAR. THE ENGINES DID NOT RE START. HE DID NOT FEATHER THE PROPELLERS. HE EXTENDED THE LANDING GEAR PRIOR TO TOUCHDOWN. THE PILOT SAID HE DID NOT FLARE THE AIRPLANE DURING LANDING WHICH RESULTED IN THE AIRPLANE COLLIDING WITH THE GROUND. THE ENGINE MANUAL AND THE POH RECOMMEND ADJUSTING THE FUEL MIXTURE FOR CRUISE. AN ENGINE MANUAL NOTE STATES LONG DESCENTS AT LOW POWER SHOULD BE AVOIDED BECAUSE THE ENGINES MAY COOL EXCESSIVELY AND MAY NOT ACCELERATE SATISFACTORILY WHEN POWER IS RE APPLIED. THE POH RECOMMENDS FEATHERING PROPELLERS AND GLIDING AT 120 KIAS FOR DUAL ENGINE FAILURE. SOOT WAS NOTED ON ALL SPARK PLUGS DURING ENGINE EXAM. BOTH ENGINES STARTED AND RAN NORMALLY FROM IDLE TO FULL ACCELERATION DURING THE EXAM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INFLIGHT DECISION TO DEVIATE FROM THE AIRPLANE'S ENGINE MANUAL AND THE PILOT'S OPERATING HANDBOOK BY MAINTAINING THE FUEL MIXTURE AT FULL RICH THROUGHOUT THE MISSION AND RAPIDLY DESCENDING THE AIRPLANE WHICH RESULTED IN BOTH ENGINE'S LOSING TOTAL POWER. FACTORS IN THIS ACCIDENT WERE 1) THE PILOT NOT FOLLOWING THE EMERGENCY PROCEDURE FOR BOTH ENGINES FAILING AS OUTLINED IN THE PILOT'S OPERATING

HANDBOOK, AND 2) THE PILOT NOT PERFORMING A FLARE DURING THE LANDING SEQUENCE WHICH RESULTED IN THE AIRPLANE COLLIDING WITH THE TERRAIN.

Findings

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

Findings

1. 2 ENGINES
2. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
3. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - EMERGENCY

Findings

4. (F) EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
5. (F) FLARE - NOT PERFORMED - PILOT IN COMMAND
6. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
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:	11/16/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4981 hours (Total, all aircraft), 685 hours (Total, this make and model), 4154 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N5429J
Model/Series:	404 404	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	4040107
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	10/26/1992, Continuous Airworthiness	Certified Max Gross Wt.:	8400 lbs
Time Since Last Inspection:	38 Hours	Engines:	2 Reciprocating
Airframe Total Time:	4011 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	GSTIO-520-M2B
Registered Owner:	UNITED STATES CUSTOMS SERVICE	Rated Power:	375 hp
Operator:	U. S. CUSTOMS SERVICE	Operating Certificate(s) Held:	None
Operator Does Business As:	TUCSON AIR BRANCH	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	TUS, 2641 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	1850 MST	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12° C / -11° C
Precipitation and Obscuration:			
Departure Point:	(DMA)	Type of Flight Plan Filed:	Company VFR
Destination:	(DMA)	Type of Clearance:	VFR
Departure Time:	1635 MST	Type of Airspace:	Class D; Class E

Airport Information

Airport:	DAVIS MONTHAN AFB (DMA)	Runway Surface Type:	Concrete
Airport Elevation:	2705 ft	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	13645 ft / 200 ft	VFR Approach/Landing:	Forced Landing; Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): RICHARD V CHILDRESS **Report Date:** 08/26/1993

Additional Participating Persons: W.J. AKRIDGE; SCOTTSDALE, AZ
BRIAN FINNEGAN; WICHITA, KS
R.S. BOYLE; MOBILE, AL
RALPH GIBSON; TUCSON, AZ

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/>.

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