



National Transportation Safety Board Aviation Accident Final Report

Location:	CASTROVILLE, CA	Accident Number:	LAX84LA041
Date & Time:	11/02/1983, 0830 PST	Registration:	N9092T
Aircraft:	Continental Copters TOMCAT MARK 5A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE HELICOPTER LANDED HARD DURING A FORCED LANDING AFTER A POWER LOSS. THE ACCIDENT OCCURRED ON THE LAST SWATH RUN. WHEN THE ENGINE STOPPED THE ACFT WAS 6 FT AGL. THE PILOT REPORTED THAT THE ENGINE STOPPED FROM FUEL STARVATION. ON RECOMMENDATION FOR PREVENTION THE PILOT STATED 'ALLOWING MORE FUEL RESERVE AND NOT RELYING ON FUEL GAUGES'.

Probable Cause and Findings

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

Findings

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

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) FUEL SUPPLY - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (F) AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) FLARE - NOT POSSIBLE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	35, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
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--no waivers/lim.	Last FAA Medical Exam:	02/28/1983
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7225 hours (Total, all aircraft), 1200 hours (Total, this make and model), 6985 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Continental Copters	Registration:	N9092T
Model/Series:	TOMCAT MARK 5A TOMCAT MAR	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	CCI-78-4
Landing Gear Type:	Skid	Seats:	1
Date/Type of Last Inspection:	03/01/1983, Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	61 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2381 Hours	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1E
Registered Owner:	GOMES FARM AIR SERVICE	Rated Power:	425 hp
Operator:	GOMES FARM AIR SERVICE	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	145°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16 °C / 7 °C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class G

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 None	Aircraft Damage:	Substantial
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):	M. W FUNK	Report Date:	
Additional Participating Persons:			
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](#).