



National Transportation Safety Board Aviation Accident Data Summary

Location:	Delano, CA	Accident Number:	LAX05LA253
Date & Time:	08/01/2005, 1730 PDT	Registration:	N870BM
Aircraft:	Malechek Q-200	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

A propeller blade separated while the airplane was cruising at 9,500 feet mean sea level. The pilot then experienced a severe vibration and he shut off the engine. During the ensuing forced landing, the airplane impacted objects short of the runway and came to rest inverted. A subsequent examination of the wood propeller revealed that it had separated at glue joints and delaminated. The pilot had torqued the propeller's attachment bolts to the 18-foot-pound value placarded on the propeller. The previous owner of the airplane had recommended torquing the bolts to 15-foot-pounds. A hair-line crack was found emanating from one of the propeller's attachment bolt holes. The FAA coordinator reported that the attachment bolt torquing sequence for the experimental airplane's propeller was not specified by the manufacturer.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the in-flight delamination and separation of a propeller blade for undetermined reasons.

Findings

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

Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES, BLADE - SEPARATION

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. OBJECT - FENCE
3. OBJECT - UTILITY POLE

Pilot Information

Certificate:	Private	Age:	50
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	325 hours (Total, all aircraft), 130 hours (Total, this make and model), 285 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 12 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Malechek	Registration:	N870BM
Model/Series:	Q-200	Engines:	1 Reciprocating
Operator:	Philip S. Lankford	Engine Manufacturer:	Continental
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-200A
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	BFL, 507 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	12 knots, 320°
Temperature:	38° C / 9° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Modesto, CA (MOD)	Destination:	RAMONA, CA (RNM)

Airport Information

Airport:	Delano Municipal (DLO)	Runway Surface Type:	Asphalt
Runway Used:	14	Runway Surface Condition:	Dry
Runway Length/Width:	5650 ft / 75 ft		

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Wayne Pollack

Adopted Date: 02/26/2007

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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