



National Transportation Safety Board Aviation Accident Final Report

Location:	Chino, CA	Accident Number:	LAX03CA274
Date & Time:	09/01/2003, 1720 PDT	Registration:	N64580
Aircraft:	Bell 47D1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The helicopter's main rotor struck the tail boom while the pilot was practicing a run-on landing. While the student pilot was attempting to execute a landing, he touched down on the heels of the skids. The helicopter rocked forward and the pilot pulled back on the cyclic. As a result, the main rotor blades made contact with the tail boom. No mechanical problems were noted with the helicopter. The student pilot had accumulated about 58 hours in helicopters, with 7 as pilot-in-command. The operator reported that students were not permitted to practice run-on landings during solo flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the student pilot's inappropriate remedial action through the application of excessive aft cyclic during a run-on landing. A factor in the accident was the student's disregard for company procedures.

Findings

Occurrence #1: ABRUPT MANEUVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
2. RUN ON LANDING - ATTEMPTED - PILOT IN COMMAND
3. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND
4. (C) CYCLIC - EXCESSIVE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:	Class 3	Last FAA Medical Exam:	06/13/2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2024 hours (Total, all aircraft), 40 hours (Total, this make and model), 1671 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N64580
Model/Series:	47D1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	TWH-9
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Franklin
ELT:		Engine Model/Series:	6A&6V335 SER
Registered Owner:	Michael Zemlock	Rated Power:	
Operator:	Michael Zemlock	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KCNO	Distance from Accident Site:	
Observation Time:	0053 PDT	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 10000 ft agl	Visibility	7 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	28° C / 18° C
Precipitation and Obscuration:			
Departure Point:	Chino, CA (CNO)	Type of Flight Plan Filed:	None
Destination:	Chino, CA (CNO)	Type of Clearance:	Unknown
Departure Time:	PDT	Type of Airspace:	Class D

Airport Information

Airport:	Chino Airport (CNO)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	03	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	33.974722, -117.636667

Administrative Information

Investigator In Charge (IIC):	Nicole Charnon	Report Date:	11/25/2003
Additional Participating Persons:	Brad Howard; FAA FSDO; Riverside, CA		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).