



Aviation Investigation Final Report

Location:	MESA, Arizona	Accident Number:	LAX00LA195
Date & Time:	May 11, 2000, 13:34 Local	Registration:	N851HW
Aircraft:	Eurocopter AS350B2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor was giving flight instruction to a new-hire pilot in preparation for his 14 CFR Part 135 check ride. Another new-hire pilot was seated in the back to observe the training. The pilot trainee was performing a hydraulics-off, run-on landing. As the student approached the touchdown point the instructor reminded him to keep his airspeed up. He reported that just prior to touchdown, the aircraft controls became very stiff. At that point, the flight instructor directed the pilot trainee to re-engage the hydraulics isolation switch on the collective control. The student re-engaged the hydraulics but reported that the controls remained stiff and he was having difficulty applying forward cyclic. As the instructor got on the controls it started a slow turn to the left. As the instructor attempted to counteract the turn rate increased. The helicopter impacted the ground in a left turn with rear lateral movement. The landing gear skids collapsed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the instructor pilot's failure to maintain control of the helicopter.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Factual Information

On May 11, 2000, at 1334 hours mountain standard time, a Eurocopter AS350B2, N851HW, sustained substantial damage during a hard landing at Falcon Field, Mesa, Arizona. The helicopter was being operated by Rocky Mountain Helicopters, Provo, Utah, as an instructional flight under 14 CFR Part 91. The commercial rated certified flight instructor, commercial rated pilot trainee, and commercial rated passenger were not injured. The local area flight originated at Falcon Field at an unspecified time. Visual meteorological conditions prevailed and no flight plan was filed.

The flight instructor reported that he was giving flight instruction to a new-hire pilot in preparation for his 14 CFR Part 135 check ride. Another new-hire pilot was seated in the back to observe the training. The pilot trainee was performing a hydraulics-off, run-on landing. As the student approached the touchdown point the instructor reminded him to keep his airspeed up. He reported that just prior to touchdown, the aircraft controls became very stiff. At that point, the flight instructor directed the pilot trainee to re-engage the hydraulics isolation switch on the collective control. The student re-engaged the hydraulics but reported that the controls remained stiff and he was having difficulty applying forward cyclic. As the instructor got on the controls it started a slow turn to the left. As the instructor attempted to counteract the turn rate increased. The helicopter impacted the ground in a left turn with rear lateral movement. The landing gear skids collapsed.

The operator, Rocky Mountain Helicopters, failed to respond to several attempts by the Safety Board to file an aircraft accident report, form 6120.1/2.

Pilot Information

Certificate:	Airline transport	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 2, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10800 hours (Total, all aircraft), 4500 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Eurocopter	Registration:	N851HW
Model/Series:	AS350B2 AS350B2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2622
Landing Gear Type:	Skid	Seats:	6
Date/Type of Last Inspection:	April 15, 2000 AAIP	Certified Max Gross Wt.:	4300 lbs
Time Since Last Inspection:	23 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	4595 Hrs	Engine Manufacturer:	Turbomeca
ELT:	Not installed	Engine Model/Series:	ARRIEL 1B1
Registered Owner:	AMERICAN EUROCOPTER CORP.	Rated Power:	529 Horsepower
Operator:	ROCKY MOUNTAIN HELICOPTERS	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	R7MA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FFZ ,1392 ft msl	Distance from Accident Site:	
Observation Time:	13:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	, AZ (FFZ)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	00:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	FALCON FFZ	Runway Surface Type:	Asphalt
Airport Elevation:	1392 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Simulated forced landing

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	33.439403,-111.850334(est)

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	LARRY L BUCHANAN; SCOTTSDALE , AZ
Original Publish Date:	November 28, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49176

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).