



National Transportation Safety Board Aviation Accident Final Report

Location:	SAINT PAUL, MN	Accident Number:	MKC90LA021
Date & Time:	11/02/1989, 0436 CST	Registration:	N3174S
Aircraft:	BELL 206L-3	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Positioning - Air Medical (Unspecified)		

Analysis

DRG AN EMERGENCY MEDICAL SVC (EMS/MEDEVAC) FLT, THE PLT ENCTR D STRONGER HEADWINDS THAN EXPECTED. AFTER DELIVERING A PATIENT, HE ESTIMATED 12 MIN OF FUEL WAS REMAINING. SINCE THE FLT TO HIS HOME BASE WOULD TAKE ABOUT 6 MIN, HE ELECTED TO RETURN WITHOUT REFUELING. WHILE ARRIVING ABEAM OF HIS DESTN, A FUEL BOOST PUMP LIGHT ILLUMINATED. THE PLT SAID HE EXPEDITED HIS APCH, BUT AT ABOUT 50' AGL, A 2ND BOOST PUMP LIGHT ILLUMINATED. THE ENG THEN LOST POWER FROM FUEL EXHAUSTION. SUBSEQUENTLY, THE HELICOPTER WAS DAMAGED DRG AN EMERGENCY AUTOROTATION (AT NIGHT).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION DUE TO AN INADEQUATE SUPPLY OF FUEL. DARKNESS WAS A RELATED FACTOR.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (C) FLUID,FUEL - EXHAUSTION
3. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

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

Findings

4. AUTOROTATION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) LIGHT CONDITION - DARK NIGHT

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	40, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	None Valid Medical--no waivers/lim.	Last FAA Medical Exam:	05/09/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4436 hours (Total, all aircraft), 1435 hours (Total, this make and model), 4063 hours (Pilot In Command, all aircraft), 74 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N3174S
Model/Series:	206L-3 206L-3	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	51036
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	10/21/1989, 100 Hour	Certified Max Gross Wt.:	4150 lbs
Time Since Last Inspection:	13 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	3207 Hours	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250-C30B
Registered Owner:	AIR METHODS CORP INTERNATIONAL	Rated Power:	650 hp
Operator:	AIR METHODS, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	LIFE LINK 3	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	MSP, 841 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	0452 CST	Direction from Accident Site:	240°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	4 Miles
Lowest Ceiling:	Overcast / 1100 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-2° C / -3° C
Precipitation and Obscuration:			
Departure Point:	MINNEAPOLIS, MN (MY65)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	0429 CST	Type of Airspace:	

Airport Information

Airport:	HOLMAN FLD (STP)	Runway Surface Type:	Asphalt
Airport Elevation:	704 ft	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	200 ft / 300 ft	VFR Approach/Landing:	Forced Landing; Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JOHN R HRUBAN	Report Date:	04/13/1992
Additional Participating Persons:	BILL JOHNSON		
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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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](#).