



# **Aviation Investigation Final Report**

Location: Karluk, Alaska Accident Number: ANC02LA073

Date & Time: July 7, 2002, 15:00 Local Registration: N35606

Aircraft: Cessna 206 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Positioning

### **Analysis**

The certificated commercial pilot was landing an amphibious float-equipped airplane on a saltwater lagoon. The pilot reported that after departing from a gravel-covered airstrip, en route to the salt-water lagoon, his attention was temporarily distracted while correcting a minor flap retraction problem. The pilot thought he had placed the landing gear retraction handle in the "up" position, in preparation for a water landing at his destination, but failed to observe 4 blue lights, indicating that wheels were up for a water landing. During touchdown in the lagoon, as the keels of the floats made contact with the water, the airplane suddenly pitched forward, and nosed over. The pilot said that as he exited the sinking airplane, he noticed that the wheels were in the "down" position. Due to the saltwater emersion damage, the landing gear retract/extension system could not be tested. The director of operations for the operator reported that when he interviewed the pilot shortly after the accident, the pilot reported that after departing from the airstrip, his attention was distracted during the wing flap anomaly, and that he just forgot to retract the wheels.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent water landing on amphibious floats with the wheels extended, which resulted in the airplane nosing over. A factor associated with the accident was the pilot's diverted attention during departure.

#### **Findings**

Occurrence #1: WHEELS DOWN LANDING IN WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

1. TERRAIN CONDITION - WATER

2. (C) WHEELS DOWN LANDING IN WATER - INADVERTENT - PILOT IN COMMAND

3. (F) DIVERTED ATTENTION - PILOT IN COMMAND

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Occurrence #2: NOSE OVER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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#### **Factual Information**

On July 7, 2002, about 1500 Alaska daylight time, an amphibious float-equipped Cessna 206 airplane, N35606, sustained substantial damage when it nosed over during touchdown while landing in a saltwater lagoon, located about 1 mile west of Karluk, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country positioning flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by Alaska West Air, Inc., Kenai, Alaska. The commercial certificated pilot, the sole occupant, sustained minor injuries. Visual meteorological conditions prevailed, and VFR company flight following procedures were in effect. The flight originated at the Larson Bay Airstrip, Larson Bay, Alaska, about 1445.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on July 16, the pilot reported that after departing from the gravel-covered airstrip at Larson Bay, his attention was temporarily distracted while correcting a flap retraction problem. He said that after correcting the minor flap problem, he thought he had placed the landing gear retraction handle in the "up" position, in preparation for a water landing at his destination. The pilot said that during touchdown in the lagoon at Karluk, as the keels of the floats made contact with the water, the airplane suddenly pitched forward and nosed over in about 18-inches of water. The pilot said that as he exited the airplane, he noticed that the wheels were in the "down" position. The pilot added that after the airplane was recovered from the lagoon, the landing gear extension handle was found in the "up" position. The airplane sustained substantial damage to the left wing, fuselage, and empennage.

During a follow-up telephone conversation with the NTSB IIC on July 18, the director of operations for the operator reported that when he interviewed the pilot shortly after the accident, the pilot reported that after departing from the Larson Bay Airstrip, his attention was distracted during the wing flap anomaly, and that he just forgot to retract the wheels. The director of operations added that the landing gear retract/extension handle is located on the instrument panel, and that the pilot could have inadvertently bumped the handle to the "up" position as the airplane pitched forward, and nosed over. The director of operations added that the airplane was not outfitted with any device that would warn the pilot that the landing gear was in the down position while performing a water landing. Due to the saltwater emersion damage, the landing gear retract/extension system could not be tested.

The pilot submitted an NTSB Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) dated August 29, 2002. In the pilot's written report, he wrote, in part: "...was distracted by multiple attempts to get the flaps to work properly, when finally in landing configuration, failed to observe lack of 4 blue lights, gear up for water landing." In the section: "Mechanical Malfunction / Failure" the pilot checked the "Yes" box, and wrote: "Flaps, landing gear failed to retract."

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## **Pilot Information**

Commercial	Age:	62,Male
Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Helicopter	Restraint Used:	
Airplane	Second Pilot Present:	No
	Toxicology Performed:	No
Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 4, 2002
Yes	Last Flight Review or Equivalent:	June 12, 2002
13502 hours (Total, all aircraft), 900 hours (Total, this make and model), 12000 hours (Pilot In Command, all aircraft), 91 hours (Last 90 days, all aircraft), 91 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		
	Single-engine land; Single-engine sea; Multi-engine land Helicopter Airplane Class 2 Valid Medical-w/ waivers/lim Yes 13502 hours (Total, all aircraft), 900 Command, all aircraft), 91 hours (Las	Single-engine land; Single-engine sea; Multi-engine land  Helicopter Restraint Used:  Airplane Second Pilot Present:  Toxicology Performed:  Class 2 Valid Medicalw/ waivers/lim  Yes Last Flight Review or Equivalent:  13502 hours (Total, all aircraft), 900 hours (Total, this make and model), 1: Command, all aircraft), 91 hours (Last 90 days, all aircraft), 91 hours (Last

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N35606
Model/Series:	206	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	420602733
Landing Gear Type:	Retractable - ; Amphibian; Float	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520F
Registered Owner:	CAG Aero Ventures LLC	Rated Power:	300 Horsepower
Operator:	ALASKA WEST AIR, INC.	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	LCWC

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Few / 2500 ft AGL	Visibility	20 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Larson Bay, AK (2A3)	Type of Flight Plan Filed:	Company VFR
Destination:	Karluk, AK (KYK )	Type of Clearance:	None
Departure Time:	14:45 Local	Type of Airspace:	Class E

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	57.567222,-154.400558

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#### **Administrative Information**

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Spencer K Hill; Federal Aviation Administration; Anchorage, AK
Original Publish Date:	May 30, 2003
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=55229

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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.

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