



National Transportation Safety Board Aviation Accident Final Report

Location:	Homer, AK	Accident Number:	DCA14FA002
Date & Time:	10/23/2013, 1530 AKD	Registration:	N575U
Aircraft:	BEECH 1900C	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	15 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

The captain was the pilot flying and conducted a visual approach to runway 22. The aircraft was configured on final approach with the landing gear down and the flaps selected to landing. The first officer indicated that, after touchdown on the runway, while intending to retract the flaps, he inadvertently selected the landing gear handle up. The nose landing gear and both main landing gear retracted and the airplane slid to a stop on the runway resting on the lower fuselage, wings, and engine nacelles.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The first officer inadvertently selecting the landing gear handle up after touchdown during the landing rollout. Contributing to the accident was the first officer's decision to reconfigure the airplane while still on the active runway.

Findings

Personnel issues	Incorrect action performance - Flight crew (Cause)
	Use of equip/system - Flight crew (Factor)
	Incorrect action selection - Flight crew (Factor)
	Identification/recognition - Flight crew (Factor)

Factual Information

HISTORY OF FLIGHT

On October 23, 2013, at about 1530 Alaska daylight time (AKDT), ERA Alaska flight 878, a Beechcraft 1900C, N575U, experienced a nose and main landing gear collapse during landing on runway 22 at Homer Airport (HOM), Homer, Alaska. The 2 flight crew members and 13 passengers were not injured and the airplane sustained substantial damage. The scheduled domestic passenger flight was operating under the provisions of 14 Code of Federal Regulations Part 121 from Ted Stevens Anchorage International Airport (ANC), Anchorage, Alaska.

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INJURIES TO PERSONS

There were no injuries to the 13 passengers or 2 crewmembers on board.

DAMAGE TO AIRCRAFT

The airplane was substantially damaged sustaining deformation and wear due to runway contact. The lower fuselage dragged along the runway resulting in structural damage to the fuselage skin, stringers, and frames. Both propellers sustained damage due to contact with the runway surface

PERSONNEL INFORMATION

The flight crew consisted of two pilots and the accident occurred on their first flight of the day.

The captain, age 34, reported 7,609 hours total flight time, including 6,639 hours as pilot in command and 739 hours in the BE-1900. The captain held a valid Federal Aviation Administration (FAA) Airline Transport Pilot (ATP) certificate with type ratings for BE-1900, and DHC-8 (second in command privileges only) and a current FAA first-class medical certificate.

The first officer, age 58, reported 2,337 hours total flight time, including 383 hours in the BE-1900. He held a valid FAA ATP certificate and a current FAA first-class medical certificate with a limitation that he must wear corrective lenses.

AIRCRAFT INFORMATION

N575U, manufacturer serial number UC-93, was a Beech 1900C equipped with two Pratt and Whitney PT6A-65B turbo-prop engines. The company reported that the airplane had approximately 29,841 hours total time on the airframe. Recorded data and airline records indicated no open maintenance items with the airplane. At the time of the accident the estimated landing weight was 14,991 pounds.

Cockpit controls

The flap position lever is located on the lower right hand side of the center pedestal and included four detent positions: UP, TAKEOFF, APPROACH, and LANDING. Post-accident

inspection indicated the flap position lever was in the LANDING position.

The landing gear control selector handle is located on the captain's side of the cockpit on the lower right subpanel included two positions: UP and DOWN. The control handle must be pulled out of a detent before it can be selected either UP or DOWN. A post-accident inspection indicated the landing gear selector lever was in the UP position.

Landing Gear Safety Switch

A safety switch on the right main landing gear opens the control circuit when the landing gear strut is compressed to prevent the landing gear handle from being raised when the airplane is on the ground. The safety switch automatically disengages when the airplane is not on the ground, and can be manually overridden by pressing a release button adjacent to the landing gear control handle.

METEOROLOGICAL INFORMATION

Day visual meteorological conditions prevailed at the time of the accident. The Homer Airport surface observation at 1453 AKDT, the most recent observation at the time of landing, reported wind from 070 degrees at 5 knots, visibility 10 statute miles, clear skies, temperature 6 degrees Celsius, dew point temperature minus 3 degrees Celsius, and altimeter 29.79 inches mercury.

AERODROME INFORMATION

The Homer Airport (HOM) is located about 2 miles east of the city of Homer, AK. The airport has 2 runways for commercial and general aviation. Runway 22 is asphalt, 6,701 feet long, 150 feet wide with a touchdown zone elevation of 74 feet. The runway is served by a visual approach slope indicator system (VASI) with a 3 degree glide path on the left side of the runway, and a medium intensity approach light system with runway alignment indicator lights (MALSR).

FLIGHT RECORDERS

The cockpit voice recorder (CVR), an L-3/Fairchild model FA2100-1020, serial number 356941, was removed from the airplane and downloaded at the NTSB Vehicle Recorder Laboratory. The CVR contained 2 hours, 4 minutes of recording on 4 audio channels. The audio quality of each channel was characterized excellent, and the recording included events from the entire flight beginning with ground operations prior to departure from ANC. Timing on the transcript was established by adjusting CVR elapsed time to align with crew reported off time in ANC.

The FDR, a Loral/Fairchild F1000, S703-1000-00 64 wps, serial number 000386321, was removed from the airplane and downloaded at the NTSB Vehicle Recorder Laboratory. During removal from the aircraft, the FDR was found with the total pressure line disconnected. The FDR arrived in good condition and contained approximately 90 hours of data which was extracted normally. The Pneumatic Indicated Airspeed parameter exhibited characteristics similar to static pressure. A test by the manufacturer indicated the recorder was fully functional. Correlation of the FDR data to event local time, Alaska daylight time, was established by aligning the FDR microphone clicks with the radio transmissions observed on the CVR.

TESTS AND RESEARCH

Post-accident tests included placing the aircraft on jacks, performing a normal operation of the

landing gear, and an operational check of the safety switch on the right main landing gear and the ground mode override function of the safety switch. All tests indicated normal operation and no anomalies were noted.

History of Flight

Landing-landing roll	Landing gear not configured Landing gear collapse (Defining event)
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Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	34
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	03/21/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/05/2013
Flight Time:	7609 hours (Total, all aircraft), 6639 hours (Pilot In Command, all aircraft), 134 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport	Age:	58
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	04/01/2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	02/09/2013
Flight Time:	2337 hours (Total, all aircraft), 383 hours (Total, this make and model), 1581 hours (Pilot In Command, all aircraft), 204 hours (Last 90 days, all aircraft), 83 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BEECH	Registration:	N575U
Model/Series:	1900C C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	UC-93
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	10/04/2013, Continuous Airworthiness	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:	29841 Hours	Engine Manufacturer:	P&W CANADA
ELT:	Installed, not activated	Engine Model/Series:	PT6A-65B
Registered Owner:	ICECAP LLC TRUSTEE	Rated Power:	1173 hp
Operator:	ERA AVIATION INC	Air Carrier Operating Certificate:	Flag carrier (121)
Operator Does Business As:	ERA Alaska	Operator Designator Code:	ERAA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAHO, 84 ft msl	Observation Time:	1453 ADT
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	6°C / -3°C
Lowest Ceiling:		Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 70°	Visibility (RVR):	
Altimeter Setting:	29.79 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Anchorage, AK (KANC)	Type of Flight Plan Filed:	IFR
Destination:	Homer, AK (KHOM)	Type of Clearance:	IFR
Departure Time:	1300 ADT	Type of Airspace:	

Airport Information

Airport:	Homer Airport (HOM)	Runway Surface Type:	Asphalt
Airport Elevation:	84 ft	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	6701 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	13 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	15 None	Latitude, Longitude:	59.645556, -151.476667 (est)

Administrative Information

Investigator In Charge (IIC):	David Helson	Adopted Date:	09/02/2015
Additional Participating Persons:			
Publish Date:	09/02/2015		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=88290		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.