



# Aviation Investigation Final Report

<b>Location:</b>	HUSLIA, Alaska	<b>Accident Number:</b>	ANC93LA017
<b>Date &amp; Time:</b>	November 28, 1992, 15:30 Local	<b>Registration:</b>	N69MA
<b>Aircraft:</b>	TAYLORCRAFT BC-12D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT EXECUTED A NORMAL TOUCH AND GO IN BRIGHT DAYLIGHT AT A SNOW COVERED AIRPORT, FOLLOWED BY THE DOWNWIND LEG DIRECTLY INTO THE BRIGHT SETTING ARTIC SUN. AT THE TIME THE AIRPLANE TURNED TO FINAL APPROACH, THE PILOT TURNED AWAY FROM THE SUN, SUNSET OCCURRED AND THE SHADOW OF CIVIL TWILIGHT PASSED ACROSS THE THRESHOLD OF THE LANDING RUNWAY. THE AIRCRAFT DESCENDED INTO THE SHADOW, REDUCING THE VISUAL CUES SUFFICEINT FOR DEPTH PERCEPTION. THE PILOT COULD NOT ACCOUNT FOR THE UNDERSHOOT BUT BELIEVED 'IT MUST HAVE BEEN A WINDSHEAR.' THE WEATHER WAS CLEAR, VISIBILITY UNLIMITED, A STEADY HEADWIND OF 8 TO 10 KNOTS, AND TEMPERATURE AT MINUS 11 DEGREES (F).

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE PILOT TO MAINTAIN PROPER GLIDEPATH DUE TO LOSS OF VISUAL CUES OVER SNOW COVERED TERRAIN IN SHADOW OF SETTING SUN. FACTORS RELATING TO THE ACCIDENT WERE THE REDUCED LIGHT OF DUSK AND THE REDUCTION OF VISUAL PERCEPTION OF THE PILOT IN CIVIL TWILIGHT.

## Findings

Occurrence #1: UNDERSHOOT  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) LIGHT CONDITION - DUSK
2. (C) PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
3. (F) VISUAL/AURAL PERCEPTION - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	June 9, 1992
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	204 hours (Total, all aircraft), 113 hours (Total, this make and model), 170 hours (Pilot In Command, all aircraft), 77 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	TAYLORCRAFT	<b>Registration:</b>	N69MA
<b>Model/Series:</b>	BC-12D BC-12D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	6902
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 22, 1992 Annual	<b>Certified Max Gross Wt.:</b>	1280 lbs
<b>Time Since Last Inspection:</b>	198 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3210 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	C85-12F
<b>Registered Owner:</b>	ERNST, DONALD E.	<b>Rated Power:</b>	85 Horsepower
<b>Operator:</b>	ERNST, DONALD E.	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dusk
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(HSL)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:50 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	HUSLIA HSL	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	180 ft msl	<b>Runway Surface Condition:</b>	Snow
<b>Runway Used:</b>	3	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3000 ft / 60 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 1 None	<b>Latitude, Longitude:</b>	65.690299,-156.350921(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Herlihy, Douglas
<b>Additional Participating Persons:</b>	DAVID SMITH; FAIRBANKS , AK
<b>Original Publish Date:</b>	September 28, 1993
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=5853">https://data.nts.gov/Docket?ProjectID=5853</a>

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