## NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASI	C INFORMA	NOITA		N. NY						H. B.				
	nt/Incident Loc						Accident/Incident Date/Time			ime				
	City/Place: Skag			State: AK			Date	05/0	06/2016	Loc	cal Time: _	19:00		
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Registr	ation Number:	N94TH							ped and Ce					
Manufacturer: Airbus				Unmanned						d Space Flight Aircraft				
Model: AS 350 B2				Maximum Gro										
	iumber: <u>2548</u>	ELM SETTIME TO SETTIME		Weight at Time					ne of Accid	ent/Incid	dent: <u>36</u>	41	_lbs	
Year of	Manufacture:										w Seats:			
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O Rock O Ultra		☐ Utility		al Light-Sport		□Hull	□Ski/Wheel		Fuel System Type (Reciprocating)					
OUnkn			Charles of Street	Other La		Other Lau	inch/R	ecovery Sys	stem	<b>O</b> Carbi	uretor	O Fuel-	Injected	
	3523000	None	of Authorization	Unknown None			Unknown							
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Eng. 2				3332			3,333		04(000)					
Eng. 3														
Eng. 4														
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0100-Н	our OCont	inuous Airwo	rthiness	OGroun							_	Ground Adjus		
OAAIP		ditional Inspec	ction	Manufacturer:			Manufacturer							
<b>⊙</b> Annu				Model:				Model:						
Date La	ast Inspection:	12/17/2 mm/dd/yy		ELT Installed: •Yes ONo			No Additional Equipment (Check all that apply)					apply)		
Airfran	ne Total Time:		hrs	If Yes:			☑ ADS-B							
	s measured at (S	13/5				er: Artex	The state of the s		- TOTAL STREET	rame Para	chute ck Indicato	r		
<b>⊙</b> L	ast Inspection	O Time of A	ccident/Incident			.: ME 406	n			pilot	on marcaro			
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Annual							[7] Elec		ght Bag or Itifunction	Handheld De	vice			
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	facturer's Inspect Approved Inspec		(AAID)			? OYes Of		J103 (J10	☐Han	dheld GPS		- GR - CTR		
	nuous Airworthin		(AAIF)	If activa	ited:			☐ Heads Up Display ☐ Onboard Weather						
	, specify:	Court Ch. /		Did ELT	Aid in L	ocating Aircra	ft: O	Yes <b>⊙</b> No	- 1 <del></del>		cing Device	e		
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O None		Medical participation		Indicate	Reason:	Impact Dar				eo Record er, Specify	ing Device			
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OWNER/OPERATOR INFORMA	OWNER/OPERATOR INFORMATION								
Registered Aircraft Owner		City: Ketchikan	.,.						
Name: TEMSCO Helicopters Inc.		State: AK ZIP: 99901							
Fractional Ownership Aircraft: O Yes •	No	Country: USA							
Operator of Aircraft	gistered Owner	☑ Same Address as Registered Owner							
Name:		City:	36						
Doing Business As:		State: ZIP:							
Air Carrier/Operator Designator (4 Characte	er Code):	Country:							
Operating Certificates Held (Check all that apply)	Regulation Flight Conducted Un	Inder Revenue Operation for FAR 121, 125, 129, 135 (Select one for each group)							
□ None □ Flag Carrier Operating Certificate (FAR 121) □ Supplemental □ Air Cargo □ Foreign Air Carriers (FAR 129) □ Rotorcraft External Load (FAR 133) □ Commuter Air Carrier (FAR 135) □ On-Demand Air Taxi (FAR 135) □ Commercial Air Tour (FAR 136) □ Agricultural Aircraft (FAR 137) □ Pilot School (FAR 141) □ Certificate of Authorization or Waiver (COA) □ Commercial Space Transportation Experimental Permit □ Commercial Space Transportation License □ Other Operator of Large Aircraft	OFAR 91 OFAR 129 OFAR 133 OFAR 103 OFAR 133 OFAR 135 OFAR 121 OFAR 135 OFAR 137 OFAR 125 OFAR 137 OFAR	R 431 R 435 R 437  O Non-Scheduled or Air Taxi O International O Passenger O Cargo O Mail Contract Only  Purpose of Flight for FAR 91, 103, 133, 137 (Select one)	ational						
D. C. L	A CONTRACTOR OF THE CONTRACTOR	O External Load O Skydiving							
Revenue Sightseeing Flight  O Yes   O No	Air Medical Flight  ○ Yes	O Ferry							
Section 1		pproach, landing, takeoff, departure, or within 3 miles of an ai	rport)						
Airport Name:		sm							
Airport Identifier:		_ Direction From Airport: degrees	true						
Proximity to Airport: O Off Airport/Airstri	o OOn Airport/Airstrip ON/A	Airport Elevation:ft. msl							
Runway Information		Condition of Runway/Landing Surface (Check all that appl							
Runway ID:(L/R/C) Length:	dam Water	□ Dry       □ Snow-Compacted       □ Water-Calm         □ Holes       □ Snow-Crusted       □ Water-Chop         □ Ice Covered       □ Snow-Dry       □ Water-Glass         □ Rough       □ Snow-Wet       □ Wet         □ Rubber Deposits       □ Soft         □ Slush-Covered       □ Vegetation       □ Unknown	ру						
Approach/Departure Segment (Select one)									
OTaxi OVFR Departure OTakeoff OIFR Departure Proc OInitial Climb	OOn Instrument Appledure/Clearance OLanding	Approach OBase OFinal OCrosswind OCrosswind OLow Approach OGo Around OAborted Landing (after touchdo	wn)						
IFR Approach (Check all that apply)		VFR Approach (Check all that apply)							
□None		□None							
□ ADF/NDB □ PAR □ SDF □ Sidestep □ VOR/TVOR □ ILS □ VOR/DME □ Localizer Only □ TACAN □ LOC-back course □ RNAV	□MLS □Practice □LDA □GPS □ASR □Visual □Contact □Circling □Unknown	□ Traffic Pattern       □ Stop and Go         □ Straight-In       □ Touch and Go         □ Valley/Terrain Following       □ Simulated Forced Landing         □ Go Around       □ Forced Landing         □ Full Stop       □ Precautionary Landing         □ Unknown	0.5						

"FLIGHT CREWMEM					la garren					IN THE
"Flight Crewmember 1" Res	sponsibilities at 1									
Control of the second s		□Yes □ N	0							
"Flight Crewmember 1" Ide	ntification				20 22	80 8				
First Name: Christopher					City of Re	sidence: S	skagway			
Middle Initial: D					State: AK	9.		ZIP: 99840	0	
Last Name: Maggio										-3
Age at time of	Accident/Inciden	it: <u>66</u>	Date of E	Birth:			m/dd/yyyy			
			ertificate Nun	nber:						
Degree of Injury	Seat Occupie			- 1	straint Ty	pe			Inflatable l	Restraints
O None     ● Fatal       O Minor     O Unknown       ● Right     O Rear				wn	Available Used					
O Serious		O None O None ☑ Not Insta O Lap only O Lap only ☐ Installed								
Pilot Certificate(s) (Check all	that apply)				O 3-poin	it	O <sub>3</sub> -point		Not De	ployed
☐ None ☐ Flight In		ommercial	☐ US M		⊙ 4-poin		• 4-point • 5-point	1	☐ Deploy ☐ Unknow	
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Must wear corrective lenses										
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			u							
Medical Certificate Special I	ssuance									
N/A										
Date of Last Flight Review		Flight	Review Airc	raft						
or Equivalent, Including FAR 121/135 Checks:	03/19/2016	Make:	AS350							
	mm/dd/yyyy	Model:	BA							
Airplane Rating(s)	Other Aircraft		Instrum	ent Rating(s						
(Check all that apply)	(Check all that app	ply)		l that apply)						Dat 10
<ul> <li>□ None</li> <li>□ Single-Engine Land</li> </ul>	☐ None ☐ Airship		☐ None ☐ Airpla	ne		☐ None	e Single-Eng		Instrument Instrument	
☐ Single-Engine Sea	☐ Balloon		☐ Helico	pter		☐ Airplane Multi-Engine ☐ Helicopter				
☐ Multiengine Land ☐ Multiengine Sea	☐ Glider ☐ Gyroplane		☐ Power	ed Lift	t ☐ Gyroplane ☐ Glider ☐ Powered Lift ☐ Sport					
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Type Ratings						Student E	ndorsemer	its (Include	dates)	
Flight Time (Enter appropriate	All	This Make	Airplane Single	Airplane		Inst	rument			Lighter
number of hours in each box)	Aircraft	& Model	Engine	Multiengine	Night	Actual	Simulated	Rotorcraft	Glider	Than Air
Total Time	7,190	5,200			76	40	7,190			
Pilot in Command (PIC)	6,690	5,700								
Time as Instructor										
This Make/Model						-			7	
Last 90 Days	5	4								
Last 30 Days	3	3			1	1				

FLIGHT ITINERARY	INFORMATIO	N			S S I S S S S S S S S S S S S S S S S S	TO THIS	16.11	
Last Departure Point Airport ID: Denver Glacier City: Skagway State: AK Country: USA  Type of ATC Clearance/Ser None VFR  Airspace where the acciden Class A Class B Class C Class D Class E	Time Time Time Time Time Time Time Time	e of Departure : 18:40  Zone: AKDT  apply)  Spe VF  (Check all that Air Jet TR:	Airport ID: City: Ska State: AK Country: L  cital IFR R On Top  apply) itary Operations port Advisory A Training Area SA R 93	TEMSCO He gway  JSA  Area (MOA) rea	☐ VFR Flight Folk ☐ Traffic Advisory ☐ Special ☐ Air Traffic Conti ☐ Unknown	y rol Area	y VFR VFR   OYes  Cruise Unkn	O VFR/IFR O IFR O Unknown O No OUnknown e own / NA de of In-Flight
Source of Pilot Weather Inf (Check all that apply)  National Weather Service Flight Service Station TV/Radio Automated Report Commercial Weather Service On-Board Weather	☑ Com ☐ Milit ☑ Inter ☐ None	ary net e nown		Facility ID: P Observation Ti Time Zone: A Distance from	me: 18:53		nm	true
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Icing Forecast Amount O None O Light O Moderate O Severe O Unknown  Type O N/A O Rime O Clear O Moderate O Mixed O Severe O Unknown	vn	Icing Actual Amount O None Trace C Light O Moderate O Severe O Unknown	Type O N/A O Rime O Clea O Mixe O Unki	ed	Turbulence Type (Check a  □ None □ Clear Air □ Terrain-Indu □ Convective	uced		v <b>erity</b> Light Moderate Severe Extreme
NOTAMs (D and FDC),	AIRMETs, SIGN	METS, PIREPS	s in effect at	the time of t	he accident/inci	dent:		

Aircraft Da	mage	Aircraft Fire		Aircraft Explosi	on
O None O Minor	O Substantial O Destroyed O Unknown	<ul><li>None</li><li>In-Flight</li><li>On-Ground</li></ul>	O Both Ground and In-Flight O Fire at Unknown Time O Unknown	<ul><li>None</li><li>In-Flight</li><li>On-Ground</li></ul>	O Both Ground and In-Flight O Explosion at Unknown Time O Unknown

No Damage to Other Property, Aircraft totally destroyed.

## NARRATIVE HISTORY OF FLIGHT (Please type or print in ink)

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and location, services obtained, and intended destination. Provide as much detail as possible.

N94TH AS-350B2 SKAGWAY, AK 05-06-2016

The aircraft was flying supplies between the TEMSCO Waterfront Heliport in Skagway, AK and the Alaska Icefield Expeditions' dog sled camp on the Denver Glacier.

There were seven trips scheduled for 5/6. The aircraft had successfully completed twelve trips the day before.

The pilot was ready to fly at 08:00 on May 6, but the low ceilings prohibited operations. The pilot attended company orientation at 09:00, and at 13:00 he performed helicopter loading training for new TEMSCO employees.

At about 15:30, he was done with training and was evaluating the afternoon weather. The weather was to windy at that time, but was fore casted to subside later in the afternoon. At approximately 16:00 there were more discussions about the weather, and even though the ceiling was improving, the pilot and base manager both agreed the wind was too strong. Personnel were put on standby for another hour.

By approximately 16:45, the wind had subsided significantly. The pilot decided it was safe to launch.

Time-line of events:

- 17:10: N94th launches from TEMSCO for the first of seven trips.
- 17:28: One round trip completed, N94th departs for another.
- 17:38: N94TH calls inbound from Denver Glacier. The pilot is asked by the base manager about the conditions. The pilot states that it turbulent around the toe of the glacier and that he is keeping his airspeed down for a smoother ride. The base manager decides, based on the report, to fore go a scheduled sling load for him and load cargo internally in another helicopter.
- 17:47: N94TH departs for the third trip. On his way to the glacier the pilot reports to base he experienced a little bit of in flight icing at 3000' msl. The base manager discusses the conditions with the pilot and the pilot agrees to monitor the conditions closely on his future flights.
- 17:56: N94TH calls inbound from the Denver Glacier.
- 18:03: N94TH departs for the fourth trip.
- 18:13: N94TH calls inbound for the Denver Glacier and reports the weather had improved.
- 18:22: N94TH departs for the fifth trip.
- 18:32: N94TH calls inbound from the Denver Glacier.
- 18:40: N94TH departs for the sixth trip. On the way to the glacier, the pilot says to the crew at dog camp: "I'm going to have to so to this one guys." After some unknown chatter on the radio with dog camp personnel, he is heard saying he would try to make it there and "don't count me out just yet." He is hears shortly after saying he was inbound to dog camp. No further transmissions were received. At approximately 19:00, the base manager walked into dispatch for assisting with loading cargo on a parked helicopter. +

RECOMMENDATION (How	v could this	accident/incident ha	ve been pre	vented?)		REPORT OF THE PERSON NAMED IN		
Operator/Owner Safety Recomm	endation							
Due to the uncertain nature of the accident, we can not yet make any recommendations until the NTSB can pull all the data together and provide some clarity on what might have caused this accident.								
MECHANICAL MALFUN	NCTION/F	AILURE (If mor	e space is n	eeded, co	ntinue on sepa	rate sheet)		
Was there Mechanical Malfund (If yes. list the name of the part, man	ction/Failur	e?    Yes    No	•		•		Total Time/Cycles On Part	
							Hours	
							Cycles	
							Time Since This Part	
							Inspected/Overhauled	
							Hours	
<b>FUEL &amp; SERVICES INF</b>	ORMATI	ON	121-40		a same		The section of the section of	
Fuel on Board at Last Takeoff		Fuel Type	_		<b>2</b> 0 3			
(Convert from pounds, as necessary)	50000000	O 80/87 O 100 Low Lead	<ul><li>O 115/145</li><li>O Jet A</li></ul>		O Jet B O JP8	O Other, specify		
71 gal	Gallons	O 100/130	O Jet A-1		O Automotive			
Other Services, if Any, Prior to	Departure							
EVACUATION OF AIRC	DAFT			7				
EVACUATION OF AIRC								
Was an emergency evacuation		259	☐ Yes	☑ No	1 (1			
Method of Exit - Describe how	the occupant	is exited and how ma	ny occupant	s evacuate	ed each location			
OTHER AIRCRAFT - C	OLLISIOI	V (If air or ground	collision occ	urrod co	mulate this sec	tion for other aircraft		
Aircraft Registration Number		irer:					age to Other Aircraft	
Anti-ant Registration (Valide)							estroyed  Minor	
Registered Owner of Other Air				Pilot of	Other Aircraft		- Notic	
Name:				Name: _				
City:				City:				
State:ZIP: _				State:		ZIP:		

## ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

After not hearing any further chatter for a few minutes he wondered where the aircraft was. After looking at the flight tracking computer, he determined that even though it looked on the screen as if the helicopter was idling at dog camp, it was in fact reporting at a location just northwest of dog camp at an elevation of roughly 6200'. Dog camp is roughly 4200' msl.

~19:00: Radio calls were made to the pilot in an attempt to reach him.

19:05: The base manager decides to have ground crew personnel unload the cargo from the helicopter on the ramp to be used as a potential search aircraft.

19:10: After repeated radio calls, the base manager decides to launch a search aircraft. The lead pilot hears all the transmissions on the radio and returns to base. TEMSCO's Emergency Response Plan is activated.

19:14: Th base manager launches from Skagway in N970TH with an observer on-board to search for the missing aircraft. They program the aircraft GPS with the last known coordinates of N94TH.

19:24: N970TH reports they are unable to pass overhead dog camp via Paradise Valley due to ceilings, blowing snow and turbulence. They would try the Reid Valley.

19:42: N970TH reports they are maneuvering in the vicinity of the North Denver Icefall and are unable to climb higher that 4000' MSL due to ceilings, blowing snow and mechanical turbulence.

19:43: N970TH reports moving from the North Denver Icefall back to Reid Valley.

19:48: N970TH reports improving ceilings and maneuvering around 5000' MSL.

20:00: TEMSCO notifies FAA of overdue aircraft.

20:09: N970TH reports aircraft wreckage found at an approximate altitude of 4000' MSL. Aircraft was reported as destroyed with no occupants visible.

20:12: 911 is called by TEMSCO personnel.

Unknown time; U.S. Coast Guard is called.

20:14: N970TH reports being unable to land at the crash site due to high winds and flat light.

20:20: N970TH gives a weather report of five miles visibility and the ceiling above the highest terrain.

20:23: TEMSCO requests Search and Rescue assistance for the police dispatcher.

20:31: TEMSCO notifies the NTSB.

20:32: N970TH returns for fuel.

20:38: N970TH departs for crash site with same crew on board.

20:41: N970TH reports they are back on scene, maneuvering ans still unable to land due to wind.

20:55: N970TH reports inbound to Skagway to pick up search and rescue.

21:20: N970TH departs for the Denver Glacier dog camp with Search and Rescue personnel who would then try and reach the accident via ground transport.

21:33: N970TH lands back at TEMSCO having dropped off SAR at dog camp.

22:32: SAR personnel report they are unable to reach the site and have turned back to dog camp for the night.

22:33: U.S. Coast Guard helicopter is heard over Skagway.

22:35: US Coast Guard Helicopter speaks with TEMSCO dispatch about the location of the crash via radio, the coast Guard helicopter could not land or maintain hover possition over the crash sit due to wind conditions and had to dump fuel and then made another attempt.

22:43: US Coast Guard tells TEMSCO dispatch to expect an update via landline.

22:52: AK State Troopers pass on update from US Coast Guard that there were no survivors.

The operation was ceased for the night at that point and recovery operations began the following day.

I HEREBY CERTIF	THAT TH	HE ABOVE INFORMATION IS COMPL	ETE AND ACCURATE TO THE BEST	OF MY KNOWLEDGE				
Date of this Report  05/17/2016  mm/dd/yyyy	016 Signature:							
Name: Joseph Signature:	R. Hicks	erator is Filing Report  o electronically sign this document	Title: Director of	Operations				
		FOR NTSB	USE ONLY					
a contract of the contract of		Reviewed by NTSB Regional Office ANC	Name of Investigator Michael J. Hodges	Date Report Received 05/18/2016				