NATIONAL TRANSPORTAT PILOT/OPERATOR AIRCRAFT AC This form to be used for reporting civil and pu	ION SAFETY BOARD CIDENT/INCIDENT REP blic use aircraft accide	PORT nts and incidents
BASIC INFORMATION		
Accident/Incident Location Nearest City/Place: Translow Rest State: SC ZIP: 29690 Country: 45 Latitude: 35°354 (dd:mm:ss N/#) Longitude: 82°255 (dd:mm:ss V/W)	Date/Time Date: <u>12/03/2013</u> La mm/dd/yyyy T	ocal Time: <u>17:50</u> ime Zone: <u>EST</u>
Phase of Operation Standing Takeoff (incl. initial climb) Cruise Hover Taxi Climb Maneuvering Other Ø Descent Landing Approach Unknown	Collision with Other Aircraft Midair On-ground None	Altitude of In-Flight Occurrence 2756 ft MSL

Standing	g Takeoff (Climb	incl. initial climb) Cruis	e euvering	Hover Other		Midair Occurrence On-ground 2756			56	0 MSI
AIRCR		MATION		oach	C Onknown	14	INONE		~/	~ ~	IT MOL
Manufacturer: <u>Anderson - Rans</u> Model: <u>S-65 Covote</u> Serial Number: <u>03071827</u> Registration Number: <u>N5817C</u> Aman				15 Amateur-I	Max Gross Weight: 1320 lbs Weight at Time of Accident/Incident: 106 Location of Center of Gravity at Time of Accident anateur-built: Yes □ No -or- Percent Mean Aerodynamic Comparison					1065 Accident/I or X datu ynamic Cord	lbs ncident: m (% MAC)
Category of Aircraft Type of Airworthiness Mairplane (Check all that apply) Balloon Standard Spectrame Blimp/Dirigible Normal R Glider Utility L Gyrocraft Acrobatic PP Powered lift Transport Signed Ultralight Normal R			Certificate Number of Seats: 2 cial If Large Aircraft, how many seats for: estricted Flight Crew:			Land c for: Chec c for: Confi Chec confi T Chec confi T Chec confi T Chec confi T C Chec confi T C C C C C C C C C C C C C	Landing Gear Retractable Check any additional landing gear configuration that applies: Tricycle Tricycle Tailwheel Amphibian High Skid Emergency Float Skid Float Ski Hull Ski/Wheel Unknown Ski/Wheel				
Type of Maintenance Program Annual Conditional (Amateur-built only) Manufacturer's Inspection Program Other Approved Inspection Program (AAIP) Continuous Airworthiness Other, specify: IFR Equipped Yes No Unknown			Last Inspection Type Date Last Inspection: 10/21/2013 100 Hour Continuous Airworthiness AAIP Conditional Inspection Annual Unknown Annual Unknown Stall Warning System Installed Type of Fire Extinguishing System Yes No Unknown None Specify H3nd - held extinguishing					<u>01</u> 3 7_hrs lent/Incident			
ELT Installed ELT Activated Image: Stress of the			ELT Ma Model/So Serial No Battery T g Fuel	nufacturer: eries: imber: Fype: Propeller Fixed Pite Gontrolla	Ar ME 203 203	$\frac{1}{2} \frac{1}{2} \frac{1}$	Batt turer: <u>Warp</u> 68", 3 blad	Prive	ate: 03	<u>12015</u> stable	
Engine Engine Manufacturer Engine Model/Series Manufa Serial N Eng. 1 Rotax 912 ULS 56 Eng. 2 1000000000000000000000000000000000000		Manufacturer's Serial Number 56452	s 54	Date of Mfg. mm/dd/yyyy	Engine Rated Power Measured as (check one) Horsepower Ibs of Thrust	Total Time (hours) 644.3	Time Since Inspection (hours)	Time Since Overhaul (hours) NA			

OWNER/OPERATOR INFO	RMATION	4				
Registered Aircraft Owner	,		Owner Address			
Name: Andress And	lerson		City: Merce	d		
Fractional Ownership Aircraft: 🛛 Y	es 🔀 No		State: <u>CA</u> Country: <u>US</u>	ZIP: <u>35348</u>		
Operator of Aircraft Same	As Registered	Owner	Operator Address	Same As Registered Owner		
Name: William Grift	fin H	nderson	City: Waed	enswill		
Doing Business As:		State:	ZIP: 8840			
Air Carrier/Operator Designator (4 Ch	naracter Code	·):	Country: Swit	zeriand		
Regulation Flight Conducted Under	P 01 Special I	Flight Dublic Use (select type)	Revenue Sightseein	g Flight /es 🛛 No		
□ FAR 103 □ FAR 133 □ No □ FAR 121 □ FAR 135 □ No □ FAR 121 □ FAR 137 □ Ar	on-US, Comme on-US, Non-co med Forces	rcial <i>Federal State Loc</i> mmercial Unknown	al Air Medical Flight	/es 🖸 No		
Purpose of Flight for FAR 91, 103, 133, 137 (Select one)	40.000	Revenue Operation for FAR 121, 125, 129, 135 (Select one)	Type of Commercia (Check all that apply)	l Operating Certificate Held		
Personal	Scheduled or Commuter	None None				
Business		Non-Scheduled or Air Taxi	Flag Carrier Operati	ing Certificate (121)		
Other Work Use		Densities - Later attend	Air Cargo	(190)		
Instructional Ferry		Domestic or International	Commuter Air Carriers	s (129) ier (135)		
Positioning			On-Demand Air Tay	xi (135)		
Aerial Application Aerial Observation		Cargo Operation	D Potorgraft External	Large Hencopter (127)		
Air Drop		Passenger/Cargo	- or -			
☐ Flight Test		Cargo Ibs	aft (137)			
Public Use Unknown		Mail	Other Operator of L	arge Aircraft		
OTHER AIRCRAFT - COLL	ISION IIF	air or around collision occurred, comp	ete this section for other a	aircraft)		
Aircraft Registration Number Ma	nufacturer:			Damage to Other Aircraft		
Mo	del:			Destroyed Minor		
				Cubatantial Nama		
Registered Owner of Other Aircraft	t			Substantial None		
Registered Owner of Other Aircraft	t	City:		Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial:	t	City: State:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name:	t	City:State:Country:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft	t	City:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial:	t 	City:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Last Name: Last Name: Middle Initial: Last Name: Middle Initial: Last Name:	t	City:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name:	ion/fail	City:	ZIP: ZIP: ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: MECHANICAL MALFUNCT Was there Mechanical Malfunction/ (If yes, list the name of the part, manufacture)	t ION/FAIL Failure? [rer, part no., s	City:	ZIP: ZIP: zue on separate sheet)	Substantial None Image: Substantial None Image: Substantial None Image: Substantial None Image: Substantial Image: Substantial Image: Substantial Image:		
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Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: MECHANICAL MALFUNCT Was there Mechanical Malfunction/ (If yes, list the name of the part, manufacture)	t ION/FAIL Failure? [rer, part no., si	City:	ZIP:	Substantial None Image: Substantial None		
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Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: MECHANICAL MALFUNCT Was there Mechanical Malfunction/ (If yes, list the name of the part, manufactur) DAMAGE TO AIRCRAFT A	t ION/FAIL Failure? [rer, part no., so	City:	ZIP:	Substantial None		
Registered Owner of Other Aircraft First Name: Middle Initial: Last Name: Pilot of Other Aircraft First Name: Middle Initial: Last Name: Middle Initial: Last Name: Middle Initial: Last Name: MECHANICAL MALFUNCT Was there Mechanical Malfunction/ (If yes, list the name of the part, manufactur) OBAMAGE TO AIRCRAFT A Aircraft Damage	t ION/FAIL Failure? [rer. part no., so ND OTHE Aircraft Fi	City:	ZIP:	Substantial None Image: Substantial Hours		

Description of Damage to Aircraft and River a ft : destvo	Other Property (use additi	ional sheet if i	necessary)				
Forest: 3-4 trees	8-10 in di	amet	er, brok	en at 1	0-12	ft above cround	
						7	
AIRPORT INFORMATION (If th	e accident/incident occur	red on app	roach, takeoff or	within 3 miles	of an airpor	t, complete this section)	
Airport Identifier:		_	Distance Fron	n Airport Cen	ter:	SM	
Airport Name:			Direction From	n Airport:		degrees MAG	
Proximity to Airport Off Airport/Airs	trip 🗌 On Airport 🔲 O	n Airstrip	Airport Eleva	tion:		ft. MSL	
Approach Segment (Select one)	_						
On Instrument Approach Landi Crosswind Dowr	ng 🔄 Base wind 🗌 Low A	leg Approach		nal borted Landing (after touchdov	☐ Go Around vn)	
IFR Approach (Check all that apply)	_		VFR Approach	n (Check all the	at apply)		
None PAR		Practice GPS	None			top and Go ouch and Go	
SDF ILS		Loran	Straight-In			imulated Forced Landing	
VOR/TVOR Localizer Only	Contact	Unknown	☐ Valley/Terrain	n Following		orced Landing recautionary Landing	
	Circling		Full Stop			nknown	
Runway Information			Condition of R	unway/Landi	ng Surface	(Check all that apply)	
Runway ID:(L/R/C) Length:	ft Width:	ft	Holes	Snow	-Compacted -Crusted	Water-Calm	
Runway/Landing Surface (Check all that	apply)		Ice Covered	Snow	-Dry -Wet	Water-Glassy	
☐ Asphalt ☐ Grass/Turf ☐ Ma ☐ Concrete ☐ Gravel ☐ Me	tal/Wood Unknown		Rubber Deposits Soft Unknown				
			Slush Covered	I Veget	tation		
Last Departure Point	Time of Departure	Destination	1		Type Fligh	t Plan Filed	
Airport ID: KSRB	- 16.16 (at)	Airport ID: _	KGMU		X None	VFR/IFR	
City: Sparta	Time: 13.13 (646.)	City: GI	reenville		Company	VFR IIFR VFR Unknown	
State: TN	Time Zone: <u>FS</u>	State: 50					
Country: <u>U.S</u>		Country:	15		Activated?	Yes No	
Type of ATC Clearance/Service (Check	all that apply)	TED		D Flight Falles		Contine .	
VFR IFR	VFR O	n Top		affic Advisory	ing	Unknown / NA	
Airspace where the accident/incident oc	curred (Check all that appl	(v)					
Class A Class E	Prohi Restri	bited Area		Jet Training	Area	Special	
Class C Demo Area		ry Operation	s Area (MOA)	FAR 93		Unknown	
Class D Warning Are	a 🗌 Airpo	rt Advisory A	Area				
Aircraft Load Description (Check all that	er Parac	hutists		Livestock			
Passengers Towing Ban	ner 🗌 Water	r 	10 I	Unknown		1. State 1.	
		ical/Fertilizer	/Seeds				
Fuel on Board at Last Takeoff	Fuel Type						
(convert from pounds, as necessary)	80/87	115/145	□ JP3	Oth	er, specify		
19.75 Gallons	100 Low Lead	Jet A Automotiv	e JP4 JP5				
Other Services, if Any, Prior to Departu	ire						

EVACUATION OF A	RCRAFT								-
Was an emergency evacuat	ion of the aircraft	performed	1? 🗆 Yes	X No					
Method of Exit – Describe h	low the occupants	exited and h	now many occupants	s evacuated each	h locat	tion			
The ziver at	t was by	ing o	on its lef	t side,	re	nderi	hg	the d	eroc
unusable. 7	he single	pilo	t exited	throug	hi	the sl	kylig	ht.	whose
Lexan glazi	ng had	becon	ne detai	ched in	n ti	he cr	d d	,	
WEATHER INFORM	TION AT TH	E ACCID	DENT/INCIDEN	IT SITE	501	e sep	arat	B sh	eet(6a)
Weather Observation Facil Facility ID: KAV/L Observation Time: 17:57 Time Zone: EST Distance from Accident Site: Direction from Accident Site:	ity <u>16.75</u> 1 <u>162</u> degr		Source of Weathe (Check all that apply) National Weather Flight Service Sta TV/Radio Automated Repor	r Information ⁹ Service ation rt ther Service (DUA	ATS)	Compan Military Internet	y n	Method (Check all In Pers Telety Teleph Aircra TV/Ra Unkno	of Briefing <i>that apply</i>) son pe ione/Computer ft Radio adio own
Briefing Type/Completenes	s		Light Condition					Visibility	y
Full Partial / Limited By Pilot Partial / Limited By Briefer	Abbreviate	ed ent	Dawn Day	Dusk Night		Dark Night Bright Night Not Reported		O_miles	
Sky/Lowest Cloud Condition Ceiling Clear Thin Broken None (Few Thin Overcast Broker Partial Obscuration Unknown Overce			(clear) 🖾 Obscured En 🗌 Indefinite En State En			Restriction to Visibilit None Blowing Dust Blowing Sand Blowing Snow Blowing Spray		ty (Check all that apply) Ground Fog Haze Ice Fog Smoke	
	ft AGL		leight	0 ft AGL		Dust		Unknown	
Wind Direction	Wind Speed		Wind Gusts		Ty	ype of Turbulence (Check all that apply)			apply)
Indicated: degrees MAG	Velocity:	KTS	Velocity:	KTS	X	None In Clouds Clear Air Vicinity of Thunde			derstorm
□ Variable			Gusting Not Gusting			Severity of Turbulence Extreme Moderate Ligh Severe Moderate Chop			
NOTAMs (D, L and FDC), AIRMETs, S	IGMETs,	PIREPs in effect	at the time of	f the	accident/ii	ncident		
Temperature:(C) or(F) Altimeter Setting: or Density Altitude:	in. HG MB ft Ic	ing Foreca Amount None Trace Light	Ist Moderate	Type Rime Clear Mixed		Type of Pro	ecipitatio	on (Check a Drizzle Ice Pellet Snow Pe Snow Gr Ice Cryst Ice Pellet	<i>ll that apply)</i> ts llets ains als ts Shower
Dew Point:(C) or(F)		Amount None Trace Light	Moderate Severe	Type Rime Clear Mixed		Intensity of	ower f Precipi	Freezing	Drizzle

PILOT "A" INFORMA	TION							
Pilot "A" Responsibilities at	t the Time of Accident/Incide	nt structor Check	Pilot 🗖 Fligh	nt Engineer 🔲 Oth	er Flight Crew			
Bilet #A? Identification					of I figure crew			
riot A identification			10	1	1			
First Name: W1/110/17			City: VV	Jeo ensw	2810			
Last Name: Hnderr	ch .		Country:	Switzerle	hd			
Age at time of Accident/Incid	lent: <u>66</u> Date of Birt	h: <u>0</u> /19	47 Certificate N	Number:			_	
Degree of Injury	Seat Occupied	min de yyyy	Seat Belt		Shoulder H	larness		
None Fatal Minor Unknown Serious	Left Front Right Rear Center Single	Unknown	Used Available	Yes No Yes No	Used Available	🔀 Yes 🗌 Yes	□ No □ No	
Pilot Certificate(s) (Check al	l that apply)							
□ None □ Stud ☑ Private □ Fligh	ent Recreat ht Instructor Sport	ional Cor	nmercial line Transport	☐ Flight En ☐ U.S. Mili	gineer tary	Foreign		
Principal Occupation N	Medical Certificate		Medical Cer	tificate Validity	Date of L	ast Medica	al	
Pilot Other Unknown	None Class 3 Class 1 Driver's Licens Class 2 Unknown	se (Sport Pilot only)	Without lin With limita	nitations/waivers tions/waivers	06/1 mm/da	<u>11/</u> 20	12	
Medical Certificate Limitati	ions							
MUST WEAR	CORRECTIVE	LENSES	FOR NL	EAR AND	DISTAI	VT VI	SION	
Medical Certificate Waivers								
and the second								
Date of Last Flight Review	Flight I	Review Aircraft						
or Equivalent, Including	06 12 7/2011 Make:	Anderson	1 - Ran	13				
FAR 121/155 Checks.	mm/dd/yyyy Model:	5-65						
Airplane Rating(s)	Other Aircraft Rating(s)	Instrument Rat	ing(s)	Instructor Rating	s)			
(Check all that apply)	(Check all that apply)	(Check all that app	oly)	(Check all that apply)	.,			
None None	X None	None ·		None None		Instrument	Airplane	
Single-Engine Land	Airship	Airplane		Airplane Single-Engine Instrument Helicopter				
Multiengine Land	Glider	Powered Lift		Gyroplane Glider				
Multiengine Sea	Gyroplane	-	Powered Lift Sport					
	Helicopter Powered Lift							
Type Ratings		1		Student Endorsem	ents (Include a	lates)		
			- 1					
	, , , , , , , , , , , , , , , , , , ,	Alexandrena		Т				
Flight Time (enter appropriate	All This Make	Single Airpla	ane	Instrument	-		Lighter	
number of hours in each box)	Aircraft & Model	Engine Multier	ngine Night	Actual Simulate	i Rotorcraft	Glider	Than Air	
Total Time	mont here h	1200-	13 (50 3		-		
Pilot in Command (PIC)	100 4050 685 (00)	FUU lest) -			-	-	-	
Time as Instructor			10,		-	-	-	
This Make/Model	dil n Chin	ona	15 (e)	0 3				
Last 90 Days	84.7 84.1	84.1 -	14.8					
	PA 19 PAL							
Last 30 Days	51.3 51.3	51.3 -	1.1		-		-	

see note, p. 11

Weather information on p. 6 reflects observations made by me at the accident site. KAVL, the nearest airport, reported weather as follows:

KAVL Dec 3, 17:54 EST (almost the precise instant of the crash): wind SSE at 6 kn; visibility 10 SM; ceiling overcast, 1900 ft; temp. 52°, dew point 47°; altimeter 29.90

I was unable to discover a source for the retrieval of historical AIRMETS, SIGMETS, etc.

As this accident occurred due to weather and to the decisions made in response to it, I would thus like to enlarge upon this topic.

The goal of the trip was to reach KGMU (Greenville, SC) on or before December 5 in order to hangar N581TC in time for me to return to my home on an evening commercial flight. At the time of the accident, I still had 1½ flying days to reach KGMU. The weather was not good, and was not expected to improve notably. On the evening of December 2, I telephoned a cousin, a pilot residing in Greenville, and discussed the weather and alternative strategies in the event I could not make KGMU on time for my commercial flight. We arranged that I could leave the plane anywhere between Nashville and Greenville -- the closer, the better, of course -- and continue in a rental car, and that my cousin would retrieve the plane later. We thought I might get as far as KAVL (Asheville, NC); we both considered it unlikely that I would get into KGMU. This plan, which relieved me of any necessity of completing the trip by a given deadline, was consciously made to combat "get-there-itis".

On the morning of December 3, the ceiling at KJWN was below minimums, and I spent my time impatiently checking the weather on the airport computer. An AIRMET was in effect as far as the Appalachians, but most stations were reporting MVFR, and a deviation to the NE -- hopefully not as far as VA -- would put me into VFR conditions. As I did not expect to get into Greenville, I gave only cursory consideration to that area.

A flight that day may not have been advisable for most VFR aircraft, which typically fly at altitudes measured in thousands of feet, at speeds of 130 kt or more. In N581TC, however, at 65-70 kn (3.5 GPH), and with a turn radius of only 200-300 ft, I felt secure under ceilings of 1800-2000 ft despite hazy conditions. Aided by a Bendix-King AV80R with terrain-relevant display, I kept a sharp lookout for obstructions as I flew around Nashville to the north. Further on, the terrain became hilly, and I made the rule for myself that I would only proceed if I could clearly see the ridgeline of the hill I was approaching and the one beyond it.

Continuing toward Crossville, TN, this condition no longer obtained, and I returned to KSRB (Sparta, TN), which I had overflown shortly before, to check weather. I decided to deviate NE: there was some terrain in that direction, but the weather looked better.

A remarkably sharp-eyed person at the airport saw my watch and remarked that "We are on Central Time." I replied that I knew that, but that I had already set my watch to EST so as not to be surprised by nightfall. (The reader may judge the effectiveness of that measure on the basis of later events.)

Continuing under generally improving visibility, I nonetheless encountered a ridge whose top was embedded in thick, well-defined cloud. I could not cross this ridge, and thought for a moment I would have to go back. However, the end of the ridge was near, as shown on the terrain-relative GPS, and I flew

through a gap, a few miles to the north of KJAU (Jacksboro, TN). If the weather was going to be nearly as bad farther E, I needed another weather check. I tuned the KJAU ASOS and was looking for the airport in preparation to landing when I noticed that the weather over the Tennessee Valley was, in fact, much better than I had passed through farther W. I tuned the CTAF at KMOR (Morristown, TN), on the eastern side of the valley, and heard a lot of pattern chatter as students flew their approaches; and the ASOS there reported a ceiling of 7000 ft, far above the terrain between me and KAVL, the most optimistic destination I had discussed with my cousin the evening before!

Cruise-climbing across the valley, I found myself at a VFR altitude of 9500 ft, above a broken layer ataround 8000 ft. There was no lack of ground references. Particularly the Interstate with its surprisingly heavy truck traffic was a fascinating feature: whenever I looked down, there was the Interstate! The GPS display was black: terrain no factor. The sun was getting low, but the clouds at that altitude were brilliantly lit, the sky was clear, the air smooth and serene. After he haze and cloud, I was elated. I thought at the time -- this is not a sentiment tacked on in retrospect -that these were some of the most glorious moments I had ever experienced in aviation. I tuned the KAVL ATIS, but had not yet started receiving it when an idea struck me. I entered KGMU into the GPS: it showed that I was less than 40 minutes away. I retuned to the KGMU ASOS and Spartanburg Approach; I couldn't receive them, either, but they would come up as soon as they were within range, and doing it now would save a lot of frequency-fumbling later on. I didn't need the KAVL weather: I was there and I could see what was going on.

SSE of KAVL, I picked a random hole in the broken layer and descended. I was so close to KGMU that the terrain must have flattened out, I thought. (The terrain-relative display was still black, remember. Remember, too, that though it is easy to see what is under a hole when you are atop it looking straight down, for a hole still off the nose -- one you are planning to descend into -- the view is limited.)

The terrain was still mountainous -- fairly high ones -- and the Interstate, of course. The terrain was clearly visible; no problem with insufficient ceiling, no obscuration, and it was still light. However, I elected to climb back on top because I thought it would be safer to descend over the flatlands. I assumed -- incorrectly, as it turns out -- that the broken layer with a generous ceiling would continue to the vicinity of KGMU.

And I repeated this procedure a second time. Still mountains. I was somewhat exasperated: I was less than 30 minutes from KGMU, and still over terrain! Again, I climbed back on top.

(An examination of a radar plot of the flight should clearly show these two controlled descents of 1500-2000 ft, followed by the much more random flight path of what was to come.)

Now, even at altitude, most of the clouds were turning gray. It was clear that I should not delay my descent much longer. Again, I chose a hole and descended. Below this hole, however, I encountered further clouds. I maneuvered around them, expecting to break out at any instant, but clear air got scarcer and I was soon in IMC. Visibility remained zero until the accident. The cloud was quite thick and -- once on the ground -- the fog was quite heavy; I did not know that I was going to crash until I had. At the crash site, the weather was calm, with comfortable temperatures and no precipitation though an intermittent light drizzle began later. Though it was dusky, it was not yet dark despite the fog. I would guess that I had perhaps twenty minutes to a half-hour before black night set in.

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 time and point of departure, intended destination, and services obtained.

My flight originated at John Tune Airport (KJWN, near Nashville, TN): the destination was Greenville Downtown Airport (KGMU, in Greenville, SC). I, the pilot, flew alone. The accident occurred during the descent phase, less than 30 minutes from KGMU. The initial phases of the flight were under marginal VFR conditions, but entering the Tennessee Valley, I found conditions markedly improved: the Morristown, TN (KMOR) ASOS reported a 7000 ft ceiling. Climbing to clear the anticipated terrain, I flew SE to overhead 140, then turned SSE on course for KGMU, keeping the airspace of Asheville, NC (KAVL) to my left. Flying at a VFR altitude of 9500 MSL, in still air above a thin, broken layer at approx. 8000 MSL, I had frequent sight of the ground. Continuing on course, I twice descended below the broken layer but, looking at the terrain from lower down, twice chose to go back on top: though visibility and ceiling were acceptable, I considered it safer to descend over the lowlands near Greenville. Letting down through a third break in the cloud layer, I encountered further clouds. I maneuvered around these, expecting to break out at any instant, but clear air got scarcer and I was soon in IMC. Visibility remained zero until the accident. With no ground reference, I found it difficult to control the aircraft, though training and experience suggest that I should have been able to do so. I did maintain a degree of control, but this task demanded my full attention to the detriment of navigation. I ultimately crashed into a wooded slope, evidently at a shallow angle and low speed. The aircraft encountered the trees, diameter 8-10 in, at a height of 10-12 ft: these caused great destruction to the wings and firewall-forward areas of the aircraft while leaving the welded-tube crew compartment largely undeformed, allowing me to escape with minor injuries.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

With onboard WX, I would not have been tempted to fly to KGMU if I knew that it would be difficult to get in there. Or I might have chosen an alternate with acceptable weather further east and remained on top longer.

More / recurrent training in IMC may have helped avoid the accident. My current assumption is that maneuvering while trying to avoid entering IMC set me up for the vertigo experienced when this indeed happened. Training -conceivably as part of a BFR -- might include maneuvering and recovery from unusual attitudes. Encouraging pilots to maintain these skills through regular training under the hood might help. If I had been able to maintain coordinated flight without difficulty, I could have devoted more attention to the GPS / moving map (navigation); arguably I could have reached flatter terrain near KGMU, where there was a 1600-ft ceiling at the time, or, if the GPS terrain display lit up in the fog, clawed my way back on top and gone in to KAVL.

Pilots could be furnished with more specific examples of all the things it takes to be "ahead of the aircraft". In my case, it means not only knowing the time of sunset and twilight as a figure, but also looking at brilliant sunlight at altitude and factoring in not only time, but cloud cover lower down, plus a margin for unexpected weather. I might normally continue a flight that had to be completed after dark; but I need to be aware that combinations of night and weather, for example, though manageable individually, can pose problems when combined. **ADDITIONAL INFORMATION** (Please type or print in ink) Use this space if additional space is needed for any answers.

Note to p. 7 Flight Times; I have since the accident been unable to locate my Logbook. The recent times, taken from my rough log are completely accurate. Older data for some categories (night, PIC) could only be estimated as they were only recorded in the missing fair-copy Log. Note to pp. 8-3: Not included, as not applicable. I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Date of this Report Signature and Name of 01/03/2014 Signature: Griffin Huderson mm/dd/yyyy William Type or Print Name: Signature and Name of Person Filing Report if Other than Pilot/Operator Signature: Type or Print Name: Title: FOR NTSB USE ONLY NTSB Accident/Incident No. **Reviewed by NTSB Regional Office** Name of Investigator **Date Report Received** ERA14CA062 Murray 1/3/14ERA