National Transportation Safety Board		NTSB ID: ERA14FA162 Aircraft Registration Number: N8309L								
FACTUAL REPORT		Occurrence Date: 03/22/2014			Most Critical I	Most Critical Injury: Fatal				
AVIATION		Occurrence Type: Accident			Investigated B	Investigated By: NTSB				
Location/Time					I					
Nearest City/Place	State	z Z	Zip Code	Local Time	Time Zone					
Safety Harbor	FL	;	34695	0400	EDT					
Airport Proximity: Off Airport/Airstrip	Dista	ance From Landing Facility:								
Aircraft Information Summary										
Aircraft Manufacturer			Model/Series	S			Type of Aircraft			
PIPER			PA-28-181				Airplane			
Revenue Sightseeing Flight: No			Air N	Medical Transpo	ort Flight: No					
Narrative										
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident: *** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***										
HISTORY OF FLIGHT	HISTORY OF FLIGHT									
On March 22, 2014, at 0400 eastern daylight time, a Piper PA-28-181, N8309L, operated by a private individual, was substantially damaged when it collided with powerlines, during a forced landing to a highway in Safety Harbor, Florida, near Saint Petersburg-Clearwater International Airport (PIE), Clearwater, Florida. The private pilot and one passenger were fatally injured, while a second passenger was seriously injured. Night visual meteorological conditions prevailed and no flight plar was filed for the planned flight to PIE. The flight departed John C Tune Airport (JWN), Nashville, Tennessee at 2338 eastern daylight time on March 21, 2014. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. According to information from the Federal Aviation Administration (FAA), the pilot completed an earlier leg of the long cross-country flight uneventfully, from Campbell Airport (C81), Grayslake,							rced landing to a irport (PIE), e a second nd no flight plan WN), Nashville, conducted under the completed an 81), Grayslake,			
Illinois to JWN. During the second leg, the pilot radioed a "fuel emergency" to air traffic control at 0359:36. The controller queried the pilot twice as to his request and at 0400:03, the pilot replied "landing on the highway sir, fuel emergency." No further transmissions were received from the accident airplane. The airplane subsequently impacted powerlines about 6 miles north of PIE.										
PILOT INFORMATION										
The pilot held a private pilot certificate with a rating for airplane single-engine land. His most recent FAA second-class medical certificate was issued on October 31, 2013. At that time, he reported a total flight experience of 1,549 hours; of which, 64 hours were flown during the previous 6 months. The pilot's logbook was not recovered. He had owned the accident airplane since 2007.							time, he reported previous 6 months.			
AIRCRAFT INFORMATION										
The four-seat, low-wing, fixed tricycle-gear airplane, serial number 28-8190112, was manufactured in 1980. It was powered by a Lycoming 0-360, 180-horsepower engine, equipped with a Sensenich fixed-pite propeller. Review of the airplane's logbooks revealed that its most recent annual inspection was completed on November 1, 2013. At that time, the airplane had accumulated 9,221 total hours of operation. The engine had accumulated 5,672 total hours; of which, 1,420 hours were since the most recent major overhaul that was completed in 2007. According to the tachometer, the airplane had flow about 21.6 hours since the most recent annual inspection.							nsenich fixed-pitch nspection was al hours of since the most			

TRANSP	
National Transportation Safety Board	
FACTUAL REPORT	
AVIATION	

NTSB ID: ERA14FA162

Occurrence Date: 03/22/2014

Occurrence Type: Accident

Narrative (Continued)

Review of a pilot operating handbook for the make and model airplane revealed that the airplane was equipped with two 25-gallon fuel tanks, one in each wing, for a total fuel capacity of 50 gallons (48 useable). The airplane was completely fueled with 44 gallons of 100 low-lead aviation gasoline prior to departing JWN.

METEOROLOGICAL INFORMATION

The recorded weather at PIE, at 0353, was: wind 030 degrees at 5 knots; visibility 10 miles; sky clear; temperature 19 degrees C; dew point 16 degrees C; altimeter 30.01 inches Hg.

There was no record of the pilot receiving a weather briefing for the accident flight, or previous leg, from flight service or the direct user access terminal system.

WRECKAGE INFORMATION

The wreckage came to rest upright, nose-down, oriented on a southeasterly heading, on a highway beneath the powerlines. All major components of the airplane were accounted for at the scene. The engine and cockpit area were crushed inward and the cabin roof had separated. The cabin roof, where the top of the cockpit door met the cabin, exhibited an impact mark consistent with a wire strike. The impact mark was a similar size to an approximate 1.25-inch-thick aluminum powerline that had separated during the impact, causing a power outage in the area. The aluminum power line had been located about 160 feet above the highway and oriented perpendicular to it.

The leading edge of the left wing exhibited impact damage. The left main fuel tank remained intact and approximately 4 ounces of fuel were recovered from it by an FAA inspector. The left aileron and flap remained attached. The right wing was undamaged with the exception of a partial separation of the right flap and the right fuel tank was compromised at its fuel drain. During recovery, the FAA inspector observed some drops of fuel dripping from the right tank, but the tank otherwise did not contain an appreciable quantity of fuel. The fuel selector was found positioned to the left main fuel tank.

The four seats and their respective seatbelts remained intact, including the pilot's shoulder harness. The seatbelts had been unlatched by rescue personnel and the pilot's shoulder harness had separated with the cabin roof; however, when tested both front seat and rear seat seatbelts latched and unlatched without difficulty. Flight control continuity was confirmed from all control surfaces to the mid-cabin area.

The propeller was removed from the engine to facilitate crankshaft rotation. The top spark plugs were also removed. Their electrodes were intact and light gray in color. The crankshaft was then rotated by hand. Camshaft, crankshaft, and valve train continuity were confirmed to the rear accessory section. Thumb compression was attained on all cylinders. The carburetor bowl drain plug was removed from the carburetor and approximately 1 ounce of fuel was drained. The fuel was light blue, clear, and consistent with 100 low-lead aviation gasoline.

A handheld Garmin 496 GPS was recovered from the cockpit and forwarded to the NTSB Vehicle Recorders Laboratory, Washington, D.C. Data were successfully downloaded from the unit and plotted. The plots revealed that at 1930, the airplane departed C81 and proceeded uneventfully to JWN at 2312. After fuel was purchased, the flight departed JWN at 2338.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the State of Florida, District Six Medical Examiner's Office, Largo, Florida, on March 22, 2014. The cause of death was noted as blunt trauma.

Toxicology testing was performed by the FAA's Civil Aerospace Medical Institute. No ethanol was detected in vitreous. Cocaine was detected in cavity blood (0.024 ug/ml), urine (7.301 ug/ml), and liver (0.078 ug/g). Benzoylecgonine, an inactive cocaine metabolite, was detected in cavity blood (0.638 ug/ml), urine (109.404 ug/ml), and liver (0.994 ug/g).

FACTUAL REPORT - AVIATION

National Transportation Safety Board	NTSB ID: ERA14FA162	
FACTUAL REPORT	Occurrence Date: 03/22/2014	
AVIATION ETYBON	Occurrence Type: Accident	

Narrative (Continued)

Ecgonine methyl ester, another inactive cocaine metabolite, was detected in cavity blood, urine, and liver. Cocaethylene, an active metabolite of cocaine only produced when ethanol is also ingested, was detected in cavity blood, urine (0.775 ug/ml), and liver. Anhydroecgonine methyl ester, a metabolite of smoked cocaine, was detected in liver and urine but not in the cavity blood. Levamisole was detected in the cavity blood and urine.

Cocaine is a strong central nervous system stimulant. Initial effects include: euphoria, excitation, general arousal, dizziness, increased focus and alertness. At higher doses, effects may include psychosis, confusion, delusions, hallucinations, fear, antisocial behavior, and aggressiveness. Late effects, beginning within 1 to 2 hours after use, include: dysphoria, depression, agitation, nervousness, drug craving, general central nervous system depression, fatigue, and insomnia. Additional performance effects are expected after higher doses, with chronic ingestion, and during drug withdrawal including agitation, anxiety, distress, inability to focus on divided attention tasks, inability to follow directions, confusion, hostility, time distortion, and poor balance and coordination.

Cocaine's therapeutic range in blood is from 0.12 to 0.27 ug/ml and its half-life is from 0.7 to 1.5 hours. Cocaine is rapidly metabolized by the body into inactive compounds including benzoylecgonine and ecgonine methyl ester.

Cocaethylene is produced in the body when cocaine and ethanol are ingested together. This biologically active molecule is nearly as psychoactive as cocaine.

Anhydroecgonine methyl ester is formed when cocaine is smoked. This unique product is not biologically active but can be used as an indicator of smoked cocaine, or "crack" use.

ADDITIONAL INFORMAITON

Further review of performance information revealed that at 75 percent power, the airplane's engine consumed about 10.5 gallons of gasoline per hour with the mixture leaned to best power. That consumption resulted in an endurance of approximately 4 hours, 35 minutes and did not account for fuel used during taxi, takeoff, and climb. Updated on Oct 21 2015 8:09AM

National Transportation Safety Board	NTS	B ID: ER	RA14FA	162							
FACTUAL REPORT	Осси	urrence Da)ate: 03/	/22/2014							
AVIATION	Occi	urrence Ty	vne Ac	cident							
Landing Facility/Approach Information											
Airport Name		Airport I	D: Air	rport Elevation	Run	way Used	Runwa	ay Length	Rur	way Width	
N/A				Ft. MSL	N/A	-			-)		
Runway Surface Type: Not Applicable											
Runway Surface Condition:											
Approach/Arrival Flown: NONE											
VFR Approach/Landing: Forced Landing											
Aircraft Information											
Aircraft Manufacturer PIPER	-	odel/Seri A-28-18						Number 190112			
Airworthiness Certificate(s): Normal; Utility											
Landing Gear Type: Tricycle											
Amateur Built Acft? No Number of Sea	Cer	Certified Max Gross Wt. 2550 LBS Numb						of Engine	s: 1		
Engine Type: Reciprocating		e Manufa DMING	ufacturer: Model/Series: IG O-360					Rated Power: 180 HP			
- Aircraft Inspection Information											
Type of Last Inspection		Last Ins	pection	nce Last Inspe			Airframe T				
Annual		11/201	11/2013 22 Hours					ours	urs 9221 Hours		
- Emergency Locator Transmitter (ELT) Information	n										
ELT Installed?/Type Yes / C91	ELT Op	ELT Operated? No ELT Aided in Locating Accident Site?									
Owner/Operator Information											
Registered Aircraft Owner	Street Address										
GLASS MAN INC DBA		City State Zip								Zip Code	
	HIGHLAND PARK IL 60035 Street Address										
Operator of Aircraft		Stree	et Addre	ess							
JEFFREY A BRONKEN								Zip Code 60035			
Operator Does Business As: Operator Designator Code:											
- Type of U.S. Certificate(s) Held: None											
Air Carrier Operating Certificate(s):											
Operating Certificate:				Operator Certific	ate:						
Regulation Flight Conducted Under: Part 91: Ger	neral Avia	tion									
Type of Flight Operation Conducted: Personal											
	FACT	UAL RE	EPORT	- AVIATION						Page 2	

Nation	TRANS	Post Dear	1	NTSB ID:	ERA14F	A162								
	ACTUAL RI	7	1	Occurren	ce Date: 0	2/22/20	14		-					
F	7. W. M. 14	1							_					
	AVIATI ETY BO	GIN		Occurren	Occurrence Type: Accident									
First Pilo	ot Information													
Name	City									State	e [Date of Birth	Age	
On File					On File							ile	On File	53
Carri	Cost Occurried			Decupational Pilot? No Certificate Number: On File										
Sex:	Seat Occupied			Occupational P	IIOT? NO					Cer	tificate	Numb	er: On File	
Certificate	e(s): Priva	ate												
Airplane F	Rating(s): Sing	le-engine L	and											
Rotorcraft	/Glider/LTA: None	e												
Instrumen	rument Rating(s): None													
Instructor	Rating(s). None	e												
Instructor	rtating(3).													
Current Bi	Current Biennial Flight Review?													
Medical C	ert.: Class 2	Medica	al Cert. Sta	Status: With Waivers/Limitations					Dat	e of La	ast Mee	dical Ex	xam: 10/2013	
		411.470	This Make	Airplane	Airplane				Instrument					Lighter
- Flight Tir	me Matrix	All A/C	and Model	Single Engine	Mult-Engine	N	ight	Actua		imulated	Rotorcraft		Glider	Than Air
Total Time		1549	99999	9									_	
	ommand(PIC)													
Instructor											_			
L	Received					_								
Last 90 Da											_			
Last 30 Da														
Last 24 H														
Seatbelt U	lsed?	Shou	ılder Harne	ess Used?			Toxic	ology P	erformed	? Yes		Se	cond Pilot? No	0
Flight Pla	an/Itinerary													
Type of Fl	ight Plan Filed: No	one												
Departure Point						State	,	Airport Io	lentifie	er	Depar	ture Time	Time Zone	
Nashville									JWN			2338		EDT
Destinatio	Destination State Airport Identifier													
Clearwater						FL								
	learance: VFR F	light Follow	ing											
Type of Ai	-													
	r Information													
Pilot's So	urce of Wx Informa	ation:												
	Unkno	wn												
				FACTUAI	L REPORT	- AVI	ATIO	N						Page 3

Nationa	al Transportation Safety	Board		NTSB ID:									
	ACTUAL REPOP		ſ	Occurrent	e Date:	03/22/2	014		1				
	AVIATION		F	Occurrence Type: Accident									
Weather	Information				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
WOF ID	Observation Time	Time Zone		WOF Elevation WOF Distance From Accident					dent Site	dent Site Direction From Accident Site			
-													
PIE	0353	EDT		11 Ft.	MSL				6 NM	eg. Mag.			
Sky/Lowes	t Cloud Condition: Clea	ar					Ft. AC	<u>SL</u>	Condition of	of Ligi	nt: Night		
Lowest Ce	iling: None			Ft.	AGL	Visib	ility:	10	SM	Alti	meter:	30.01	"Hg
Temperatu	ire: 19 °C	Dew Point:		16 °C	Weat	her Condi	tions at Acc	ident S	Site: Visual	Conc	litions		
Wind Direc	tion: 130	Wind Sp	beed: 5	i		Win	d Gusts:						
Visibility (F	RVR): Ft	. Visibility	y (RVV))	SM								
	l/or Obscuration: oscuration; No Precip	itation											
Accident	Information												
Aircraft Dar	mage: Substantial			Aircraft Fire	e: None	;			Aircraft Exp	olosio	n None		
									-				
- Injury Su	mmary Matrix	Fatal	Serious	s Mino	r	None	TOTAL						
First Pi		1					1	1					
Second	d Pilot												
Studen	t Pilot												
Flight li	nstructor												
Check													
Flight E	ngineer												
Cabin A	Attendants												
Other C	Crew												
Passen	igers	1		1			2						
- TOTAL A	ABOARD -	2		1			3						
Other G					_			4					
- GRANE) TOTAL -	2		1 3									
			F	FACTUAL	REPO	RT - AV	IATION						Page 4

National Transportation Safety Board	NTSB ID: ERA14FA162	
National Transportation Safety Board FACTUAL REPORT	Occurrence Date: 03/22/2014	
AVIATION ETYBON	Occurrence Type: Accident	
dministrative Information		
nvestigator-In-Charge (IIC)		
Robert J. Gretz		
dditional Persons Participating in This Accident William J Stokes FAA/FSDO Fampa, FL Robert Martellotti Piper Aircraft	/Incident Investigation:	
Vero Beach, FL		