	10				-finited off: 1/24/2013 7.40.19 Fivi			
National Transportation Safety Board	NTSB	ID: CHI01LA1	81	Aircraft Registra	tion Number: N24898			
FACTUAL REPORT	Occur	rence Date: <b>06</b> /	21/2001	Most Critical Inju	ury: Fatal			
AVIATION	Occur	rence Type: Acc	ident	Investigated By:	NTSB			
Location/Time	I			•				
Nearest City/Place	State	Zip Code	Local Time	Time Zone				
Ann Arbor	МІ	48103	1405	EDT				
Airport Proximity: On Airport/Airstrip	Distance Fro	m Landing Facilit	y:					
Aircraft Information Summary								
Aircraft Manufacturer		Model/Ser	es		Type of Aircraft			
Masko		Mustang	MII		Airplane			
Revenue Sightseeing Flight: No		Air	Medical Transp	ort Flight: No				
Narrative								
crosswind leg of the traffic flight was being operated un Visual meteorological condition rated passenger received fatal is Witnesses to the accident saw the A postaccident examination of pre-impact condition. The pilot held commercial and land and instrument airplane advanced and instrument ration reported having 398 hours of recovered. The pilot rated passenger held instrument airplane ratings. single engine land rating. with an advanced rating. If passenger reported having 307 house logbook was not recovered.	prepare the eastern t, was des affic pat just comp c pattern nder the ons preva- injuries. he airplar f the ain certified ratings. According hours of f n the pic rformed or irplane v	is aircraft daylight t stroyed when tern at t pleted a tou for runway provisions ailed at th The flight ne make a st cplane revea d flight ins the pilot time as crial pilot d a certifie of rated pas to Federal flight time a the pilot was purchas	accident rep ime, an amate it impacted the Ann Arbor of 14 CFR Pa of 14 CFR Pa coniginated f ceep right tun aled no anomal otructor certi- ot also held a of March 15, certificate w ed flight inst as of May 10, pilot rated pa and pilot rate	port. *** sur-built Masko terrain follow Municipal Airp d was turning f et by 75 feet, art 91 and was e accident. Th from ARE at 135 cm prior to spi lies that could ificates with a a ground instru on Administrati 2001. The pi with airplane s cructor certifi held a ground i inistration rec 2001. The pi assenger were n ted passenger b	Mustang MII, N24898, ring a loss of control ort (ARB), Ann Arbor, rom the upwind to the concrete). The local not on a flight plan. e pilot and the pilot 3. raling to the ground. I be associated with a dirplane single engine ctor certificate with on records, the pilot lot's logbook was not single engine land and cate with an airplane nstructor certificate ords, the pilot rated lot rated passenger's egative for all tests by Washtenaw County on			
	FACTU	JAL REPORT -	AVIATION		Page 1			

National Transportation Safety Board	NTSB ID:	CHI01	LA181		~				
FACTUAL REPORT	Occurren	ce Date:	06/21/2001						
AVIATION			Accident						
Landing Facility/Approach Information		Contraction of the second							
Airport Name	Airp	ort ID:	Airport Elevation	Run	way Used	Runwa	ay Length	ı Rur	iway Width
ANN ARBOR MUNI	AR	585	839 Ft. MSL		NG MG La Carlos (Marine In Anno 1997)	3500		75	-
Runway Surface Type: Concrete									
Runway Surface Condition: Dry									
Approach/Arrival Flown: NONE									
VFR Approach/Landing: Touch and Go									
Aircraft Information									
Aircraft Manufacturer Masko		Annel M.V.	/Series ang MII				Serial N 8	lumber	
Airworthiness Certificate(s): Experimental (Special)									
Landing Gear Type: Tailwheel									
Amateur Built Acft? Yes Number of Seats	2	Certifie	d Max Gross Wt.		1500	LBS	Number	ofEngine	s: <b>1</b>
Engine Type: Reciprocating		igine Ma <b>ycominę</b>	nufacturer: g		Model/Se O-320	ries:			ted Power: <b>i0 HP</b>
- Aircraft Inspection Information			,	r					
Type of Last Inspection	Date	Date of Last Inspection Time Sinc			nce Last Insp		ours	Airframe T	otal Time Hours
- Emergency Locator Transmitter (ELT) Information									
ELT Installed?/Type Yes /	ELT	Г Operai	ted? No	ELT Aid	ded in Locatin	g Accid	ent Site?	No	
Owner/Operator Information									
Registered Aircraft Owner	1	Street A	Address 1841 Hiller Re	ч					
Craig W. Peterson	F	City		<u>u.</u>				State	Zip Code
	$\longrightarrow$		West Bloomfi	ield				MI	48324
Operator of Aircraft		Street A	ddress 1841 Hiller Re	d.					
Craig W. Peterson	s.C	City	West Bloomfi	ield				State MI	Zip Code 48324
Operator Does Business As:				01	perator Desig	nator Co	ode:	,	
- Type of U.S. Certificate(s) Held: None									
Air Carrier Operating Certificate(s):									
Operating Certificate:			Operator Certifi	icate:					
Regulation Flight Conducted Under: Part 91: Genera	al Aviation								
Type of Flight Operation Conducted: Personal									
	FACTUAL	REPO	RT - AVIATION	1					Page 2

Natior	TRANS nal Transportation	Safety Board	1	NTSB ID	CHI01LA	181								
	TACTUAL RI	7		Occurrer	nce Date: <b>0</b>	6/21/2001	1							
	7. 1. 1. 1. 1.	~ ~			10.00 La 11.00 La 10.00 La 10.		â		_					
	AVIATI ETY BO	No.		Occurrer	nce Type: A	ccident								
First Pilo	ot Information					-								
Name						City				Ĩ	State	Da	ate of Birth	Age
On File						On File	5				On File	9.		25
Sex: M	Seat Occupied	Left	T	Occupational F	Pilot? Civilia	an Pilot				Ce	tificate Nu	umber	ź	
Certificate	(s): Fligh	nt Instructor	; Comme	ercial										
Airplane R	Rating(s): Sing	le-engine L	and											
Rotorcraft	/Glider/LTA: Non	N 197												
parts of the second second	t Rating(s): Airpl	9838-4	8		22									
Instructor			engine;	Instrument Air	plane									
Current Bi	ennial Flight Revie	ew?												
Medical C	ert.: Class 2	Medica	al Cert. Si	tatus: Valid Me	edicalno w	vaivers/lin	n.		Da	te of La	ast Medica	al Exa	m: 10/2000	t
- Flight Tir	me Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	į	Actu	Instrument	Simulated	Rotoro	raft	Glider	Lighter Than Air
Total Time	е	398			I									
Pilot In Co	ommand(PIC)													
Instructor	12													
Instruction	n Received													
Last 90 Da	ays													
Last 30 Da	ays												ī.	
Last 24 H	ours							1						
Seatbelt U	Ised? Yes	Shou	lder Harr	ness Used? Ye	S	Т	oxico	ology F	erformec?	? Yes		Seco	ond Pilot? Ye	s
Flight Pla	an/Itinerary													
Type of Fli	ight Plan Filed: <b>N</b>	one												
Departure	Point						State		Airport	dentifie	er De	partur	re Time	Time Zone
Same as	Accident/Incide	ent Location							ARB		13	53		EDT
Destinatio	n					Ś	State		Airport	dentifie	er			
Local Fli	ght						AL.		ARB					
Type of Cl	learance: VFR													
Type of Ai	irspace: Class	D												
Weather	r Information													
Source of	f Wx Information:													
	Norec	ord of briefi	ng											
				FACTUA	L REPORT	- AVIA		T						Page 3

Nation	al Transportation Safety	Board		NTSB ID: 0	CHI01	LA181			T				
	ACTUAL REPOR		ļ	Occurrence	e Date:	06/21/2	2001		1				
1 2 Mars Anna	AVIATION		ţ	Occurrence					1				
Weather	Information			5		1 10 01							
WOF ID	Observation Time	Time Zone		WOF Elevatio	on		istance From	Acci	ident Site		Direction '	From Accident S	Site
, or the	Observator rand	TITIO Zone.		101° Elorges	21	1101 L.	laturio en	.7.1000.	dom one		Dirotion		Sho
ARB	1353	EDT		839 Ft.	MSL				<b>0</b> NM			<b>0</b> De	eg. Mag.
Sky/Lowes	st Cloud Condition: Clea	ar					Ft. AGL	E	Condition of	of Ligh	nt: Day		
Lowest Ce	illing: Broken			<b>8500</b> Ft. /	AGL	Visib	ility:	10	SM	Alti	meter:	30.03	"Hg
Temperatu	ure: <b>19</b> °C	Dew Point:		<b>15</b> °⊂	Weat	her Cond	itions at Accic	dent (	Site: <b>Visual</b>	Conc	litions		
Wind Direc		Wind Spe	)eed: <i>5</i>	5		Win	d Gusts:						
Visibility (R	RVR): Ft.	t. Visibility	/(RVV	0	SM	ſ <b>-</b>							
1.000	d/or Obscuration:	2 0006	<u></u>	<u>.</u>		<u> </u>							
Accident	Information												
Aircraft Dar	mage: <b>Destroyed</b>			Aircraft Fire	e: None	3			Aircraft Exp	plosio	n None		
- Injury Sur	mmary Matrix	Fatal	Seriou	us Minor	r	None	TOTAL						
First Pil	lot	1			$\Box$		1						
Second	d Pilot												
Studen	ıt Pilot												
Flight Ir	nstructor							ı					
Check	Pilot							I.					
Flight E	Engineer							I.					
1 conversal and	Attendants	++			+								
Other C		+ +			+		<u>                                     </u>						
Passen				<u> </u>	+		<u> </u>	1					
	ABOARD -	++			+		<u> </u>	ı					
10000000000000000000000000000000000000	and the state of t	2		_ <del></del>	-+		2						
Other G		+		<u> </u>				l					
- GRANL	D TOTAL -	2					2						
1			F	FACTUAL	REPO'	RT - AV	IATION						Page 4

V-	<i>3</i>	2 <u>.</u>
National Transportation Safety Board	NTSB ID: CHI01LA181	
FACTUAL REPORT	Occurrence Date: 06/21/2001	
AVIATION	Occurrence Type: Accident	
Administrative Information		
Investigator-In-Charge (IIC)		
John M. Brannen		
Additional Persons Participating in This Accident/Inci	dent Investigation:	
Lorenzo Rodney FAA-Detroit, Michigan - FSDO Belleville, MI		

National Transportation Safety Board	NT	SBID: CHI95FA	050	Aircraft Registrati	on Number: N1QF			
FACTUAL REPORT	Oc	currence Date: 12	/01/1994	Most Critical Injur	Most Critical Injury: Fatal			
ÁVIATION ETYBON	Oc	currence Type: Ac	cident	Investigated By:	NTSB			
Location/Time								
Nearest City/Place ANN ARBOR	State MI	Zip Code <b>48105</b>	Local Time 1007	Time Zone CST				
Airport Proximity: Off Airport/Airstrip	Distance I	From Landing Facil	ity:					
Aircraft Information Summary								
Aircraft Manufacturer		Model/Se	ries		Type of Aircraft			
Agusta		A109A I	I /A109A II		Helicopter			
Revenue Sightseeing Flight: No		A	ir Medical Transp	ort Flight:				
Narrative								
reactive the title of the test to the test	15 15.00 MM							

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

On December 1, 1994, about 1007 central standard time, an Agusta SPA A109A II, N1QF, operated by Metro Aviation, Inc., was destroyed when it collided with the terrain near Ann Arbor, Michigan. The commercial pilot and two passengers (medical evacuation crew members) were fatally injured. The 14 CFR Part 91 positioning flight departed the St. Joseph Hospital in visual meteorological conditions about 1003, en route to Howell, Michigan. The purpose of the flight was to pick up a patient at Howell, and return to St. Joseph's Hospital.

Prior to the morning of the accident N1QF was designated as the standby helicopter; however, the primary helicopter was scheduled for maintenance on the day of the accident, therefore essential equipment had to be moved from the primary craft to N1QF. Before the transfer could be accomplished, N1QF was required to prepare for dispatch on the accident flight. What was later described by a witness as a "hasty dispatch," necessitated a hurried departure to accomplish the transfer of equipment, complete a preflight, and other items necessary for a medical evacuation flight. The witness to the departure stated that a complete preflight was accomplished by the crew; although this witness did not actually have an opportunity to watch the entire preparation. The witness indicated that the start of the engines was "normal," with no delay in the engine start up. The flight departed at 1003.

At 1005 N1QF contacted the Ann Arbor, Federal Aviation Administration (FAA) Control Tower (ATCT), giving its position as one and one half miles east of St. Joseph's Hospital and requesting landing permission stating, in part, "I'd like to proceed inbound.. single engine landing, please." Six seconds later the flight was cleared into the class D surface area. Seven seconds later, N1QF responded stating, "Ah, disregard, I'm going down at this time." No additional information was transmitted, nor was the reason for the single engine landing stated. The pilot did not declare an emergency nor did he request assistance.

The pilot then contacted the dispatcher, at St. Joseph's Hospital and stated that he was going to land, "north of the university." The dispatcher requested the information be repeated and the pilot did so. There was no indication of any need for assistance, the nature of any emergency situation, nor was there any discussion of difficulties being experienced by the flight. Twenty-six seconds after the pilot's repeating the location to the dispatcher, he made a final transmission, indicating a crash was imminent.

Eyewitnesses observed the accident helicopter during the final few seconds of the flight. Two

FACTUAL REPORT - AVIATION

Page 1

National Transportation Safety Board	NTSB ID: CHI95FA050	
FACEUAL REPORT	Occurrence Date: 12/01/1994	
AVIATION ETYBON	Occurrence Type: Accident	
1999		

# Narrative (Continued)

witnesses stated that the helicopter was trailing smoke from the area of the engines. One witness indicted that the helicopter was maneuvering just prior to the impact and that during the final descent which he described as "dropped like a stone," it appeared the rotor blades were "not turning hardly at all." Witnesses reported that the helicopter was nearly silent just prior to ground impact and that there was no engine noise at all after impact.

## OTHER DAMAGE

One small tree was damaged during the impact with the terrain.

### PERSONAL INFORMATION

The pilot was born May 27, 1952, and was the holder of a commercial helicopter certificate number 2157108, with instrument helicopter privileges. At the time of the accident he had 5,000 hours flight time, with 3,500 hours of pilot in command time and 300 hours in the make and model of helicopter involved in the accident. He held a second class medical certificate issued June 9, 1994. His most recent biennial flight review was accomplished in an Agusta A109 on October 23, 1994.

## AIRCRAFT INFORMATION

The helicopter was an Agusta SPA A109A II, serial number 7311, N1QF. The helicopter was maintained on an Approved Inspection Program. The most recent inspection occurred on June 13, 1994, with a total time in service of 1,870 hours. The helicopter had accumulated 57 hours since the inspection, at the time of the accident. The helicopter was last fueled on November 22, 1994.

### WRECKAGE AND IMPACT INFORMATION

The helicopter impacted flat terrain in a commercial area, on a northeast heading. Ground scars and eyewitness reports indicated that the helicopter impacted in a near vertical direction with little forward motion. The landing gear was found in the extended (gear down) position. The helicopter was lying on its left side. The fuselage was crushed to about one-half the original height. The tail boom was partially separated from the fuselage from ground impact and impact with a small tree. Three of the main rotor blades were intact with little bending. The tail rotor assembly had impact damage only with no rotational damage evident. The main rotor head exhibited marks and damage consistent with blade coning impact.

The rotor system was inspected during the on scene phase of the investigation including the main and tail rotors, transmission and gearbox. No discrepancies were noted.

Both engines and the transmission exhibited little impact damage and were removed for further study. During the on-scene investigation both engines rotated and there was continuity throughout the gear train. No damage was visible in the output drive shafts on either engine. The fuel control pointer on the number 1 engine was at 30 degrees with the throttle handle at idle. The fuel control pointer on the number 2 engine was at 85 degrees with the throttle handle about mid-range. Fuel vacuum checks were done with engine number 1 having no leaks and engine number 2 having a leak traced to the fuel pump assembly.

# MEDICAL AND PATHOLOGICAL INFORMATION

A post mortem examination of the pilot was conducted by the Washtenaw County (Michigan) Medical Examiner, on December 2, 1994. No contributing pre-existing pathology was found.

A toxicological examination of specimens from the pilot proved negative for those drugs screen.

National Transportation Safety Board NTSB ID: CHI95FA050 FACTUAL REPORT Occurrence Date: 12/01/1994 AVIATION Occurrence Type: Accident Narrative (Continued) TESTS AND RESEARCH Fuel samples from the fueling source were found to be free of water and within limits for Jet-A1. Fuel and oil samples from the helicopter were tested at the Allison lab and were found to be within limits for Jet-A1 fuel and MIL-L-23699E oil. An examination of light bulb filaments revealed stretched filaments in the "Master Warning," "Master Caution," "Engine #1 Low RPM," "Engine #2 Low RPM." and "Low Rotor RPM" panels. Both engines were test run at Allison on a production test stand on January 11, 1995. Number 1 engine was found to be within limits. Number 2 engine experienced excessive compressor vibration, therefore, the control components from that engine were tested on the number 1 engine which had been successfully run. The engine operation did not reach the limits falling about 2% below top limits. The compressor for engine number 2 was disassembled and inspected. A visual inspection revealed unusual balance marks. The rotor was check balanced and it measured at 0.006 oz-in of unbalance. The limit should have been 0.001 oz-in. Although the exact mode of unbalance was not determined, experienced sources indicated that the unusual marks could not be associated with normal operation of the engine; however could be associated with impact artifact. The individual components (originally) from engine number 2 were tested on October 11, 1995, and the fuel control was found to fall about 2% below the top limit. There was nothing found that would have prevented the engine from operating normally at the cruise setting. Throughout the on-scene investigation and during the testing of components, nothing was found to indicate any reason that an engine should stop running inflight. Nothing was found in either engine to indicate an indication necessitating a need to manually shut down an engine inflight. ADDITIONAL DATA/INFORMATION Parties to the investigation were the FAA Flight Standards District Office, Belleville, Michigan; Agusta Aerospace Corporation, Philadelphia, Pennsylvania; Allison, Indianapolis, Indiana; Allied Signal Aerospace, South Bend, Indiana; and Metro Aviation Inc., Shreveport, Louisiana. The helicopter wreckage was released to representatives of the owner on December 16, and December 22, 1994 and January 9, 1996. Updated on Feb 2 2009 2:42PM

FACTUAL REPORT - AVIATION

ANA No	T			-	ľ				
National Transportation Safety Board	NTSB ID:	CHI95	FA050						
FACTUAL REPORT	Occurren	ce Date:	12/01/1994						
AVIATION	Occurren	се Туре	Accident						
Landing Facility/Approach Information						ь.			
Airport Name	Airp	ort ID:	Airport Elevation	Run	iway Used	Runwa	y Length	Run	way Width
			Ft. MSL	0					
Runway Surface Type:									
Runway Surface Condition:									
Approach/Arrival Flown:									
VFR Approach/Landing: Forced Landing									
Aircraft Information							14		
Aircraft Manufacturer		Model/		. 11			Serial Num	ber	
Agusta	Š	A109	A II /A109A	A II			7311		
Airworthiness Certificate(s): Normal									
Landing Gear Type: Retractable - Tricycle									
Amateur Built Acft? No Number of Seats:			d Max Gross Wt.		5730	LBS	Number of E	2,82	
Engine Type: Turbo Shaft		igine Ma LLISON	nufacturer: I		Model/Se 250-C20				ed Power: 0 HP
- Aircraft Inspection Information				n					
Type of Last Inspection			t Inspection	Time Si	nce Last Insp				otal Time
AAIP	-06	6/1994				57 Ho	urs	10	1890 Hours
- Emergency Locator Transmitter (ELT) Information									
ELT Installed?/Type <b>No</b>	EL	T Operat	ed?	ELT Aid	ded in Locatin	g Accide	ent Site?		
Owner/Operator Information									
Registered Aircraft Owner		Street A	Address 3050 RED LI	ON BD.					
AGUSTA AEROSPACE CORP.	F	City					200308	ate	Zip Code
		Ohrand A	PHILADELPH	HIA			PA		19114
Operator of Aircraft		Street A	P. O. BOX 70	008					
METRO AVIATION, INC.	1 Iv	City	SHREVEPOR	RT			ା ଅ	ate	Zip Code <b>71137</b>
Operator Does Business As: MIDWEST MED FLIG	нт			0	perator Desigi	nator Co	de: HDNA		
- Type of U.S. Certificate(s) Held:									
Air Carrier Operating Certificate(s): <b>On-demand Air</b>	Taxi								
Operating Certificate:			Operator Certifi	icate:					
Regulation Flight Conducted Under: Part 91: Genera	al Aviation								
Type of Flight Operation Conducted: Positioning									
8	FACTUAI	REPO	RT - AVIATION	2					Page 2

Nation	TRANS nal Transportation	Safety Board	1	NTSB ID	CHI95FA	.050							
	ACTUAL RE	7		Occurrer	nce Date: <b>1</b> :	2/01/1994							
-	1、「読い湯」」広	2 2			1000 A			_					
	AVIATI	APT		Occurren	nce Type: A	ccident							
First Pilo	ot Information												_
Name						City				State	Date	e of Birth	Age
On File						On File				On File	On	File	42
Sex: M	Seat Occupied:	Right	0	ccupational F	Pilot? Yes	Pc			Cert	ificate Nurr	ber: (	On File	<b>.</b>
Certificate	(s): Com	imercial											
Airplane R	Rating(s): None	•											
	/Glider/LTA: Helic												
-		copter			<u>29</u>		_						
Instructor	2703/2 ••••••••												
Current Bie	ennial Flight Revie	ew?											
Medical Co	ert.: Class 2	Medica	al Cert. Stati	us: Valid Me	edicalno v	vaivers/lim.		Dat	e of La	st Medical	Exam	06/1994	ž
-													
- Flight Tir	me Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Y DO	Instrument Actual S	imulated	Rotorcraft		Glider	Lighter Than Air
Total Time	e	5000	300			50	0	150	160	) 50	000		
Pilot In Co	ommand(PIC)	3500	300							35	500		
Instructor	15				ļ								
Instruction	n Received					_							
Last 90 Da	ays	32	32			1	1		3	3	32		
Last 30 Da	ays	10	10				4		10	ř.	10		
Last 24 H	ours	1	1						5		1		
Seatbelt U	Ised? Yes	Shou	Ilder Hames	s Used? Ye	3	Тох	icolog	y Performed'	? Yes	S	Secon	d Pilot? <b>N</b> a	)
Flight Pla	an/Itinerary	19 <b>8</b> 0						÷.					
Type of Fli	ight Plan Filed: $\mathbf{C}$	ompany VFI	R										
Departure	Point					Sta	ate	Airport Io	dentifier	Depa	arture	Time	Time Zone
Same as	Accident/Incide	ent Location						NONE		1003	3		EST
Destinatio	n.					Sta	ate	Airport I	dentifier	R.			
HOWELI	L					МІ		NONE					
Type of Cl	learance: None												
Type of Ai	irspace: Class	D											
Weather	r Information												
Source of	f Wx Information:												
	Norec	ord of briefi	ng										
				T 4 CONT.	I DEPART								<b>B</b> -2220
				FACTUA	l report	- AVIATIO	UN						Page 3

0000     0 Ft. MSL       Sky/Lowest Cloud Condition: Unknown     12000 Ft. AGL       Lowest Ceiling: Broken     12000 Ft. AGL       Temperature:     -1 °C       Dew Point:     °C	tance From Accident Site 0 NM 0 Deg. Mag. 0 Ft. AGL Condition of Light: Day ty: 10 SM Altimeter: "Hg
Occurrence Date: 12/01/19         Occurrence Type: Accident         Weather Information         WOF ID       Observation Time       Time Zone       WOF Elevation       WOF Dis         0000       0       0       Ft. MSL       Visibilit         Sky/Lowest Cloud Condition: Unknewn       12000 Ft. AGL       Visibilit         Lowest Ceiling: Broken       12000 Ft. AGL       Visibilit         Temperature:       -1 °C       Dew Point:       °C       Weather Condition	tance From Accident Site 0 NM 0 Deg. Mag. 0 Ft. AGL Condition of Light: Day ty: 10 SM Altimeter: "Hg
AVIATION       Occurrence Type: Accident         Weather Information       VOF Diservation Time       Time Zone       WOF Elevation       WOF Diservation         WOF ID       Observation Time       Time Zone       WOF Elevation       WOF Diservation         Sky/Lowest Cloud Condition: Unknown       12000 Ft. AGL       Visibility         Lowest Ceiling: Broken       12000 Ft. AGL       Visibility         Temperature:       -1 °C       Dew Point:       °C       Weather Condition	tance From Accident Site 0 NM 0 Deg. Mag. 0 Ft. AGL Condition of Light: Day ty: 10 SM Altimeter: "Hg
Weather Information         WOF ID       Observation Time       Time Zone       WOF Elevation       WOF Distribution         0000       0 Ft. MSL       0 Ft. MSL       Vor Distribution         Sky/Lowest Cloud Condition: Unknown       12000 Ft. AGL       Visibilition         Lowest Ceiling: Broken       12 000 Ft. AGL       Visibilition         Temperature:       -1 °C       Dew Point:       °C       Weather Condition	tance From Accident Site       0 NM     0 Deg. Mag.       0 Ft. AGL     Condition of Light: Day       ity:     10     SM     Altimeter:     "Hg
WOF ID         Observation Time         Time Zone         WOF Elevation         WOF Discrete           0000         0 Ft. MSL         0 Ft. MSL         Vor Discrete           Sky/Lowest Cloud Condition: Unknown         12000 Ft. AGL         Visibilit           Lowest Ceiling: Broken         12000 Ft. AGL         Visibilit           Temperature:         -1 °C         Dew Point:         °C         Weather Condition	0 NM     0 Deg. Mag.       0 Ft. AGL     Condition of Light: Day       ity:     10     SM     Altimeter:     "Hg
0000         0 Ft. MSL           Sky/Lowest Cloud Condition: Unknown         12000 Ft. AGL         Visibilit           Lowest Ceiling: Broken         12000 Ft. AGL         Visibilit           Temperature:         -1 °C         Dew Point:         °C         Weather Condition	0 NM     0 Deg. Mag.       0 Ft. AGL     Condition of Light: Day       ity:     10     SM     Altimeter:     "Hg
Sky/Lowest Cloud Condition: Unknown         Lowest Ceiling: Broken       12000 Ft. AGL       Visibilit         Temperature:       -1 °C       Dew Point:       °C       Weather Condition	0 Ft. AGL     Condition of Light: Day       ity:     10     SM     Altimeter:     "Hg
Sky/Lowest Cloud Condition: Unknown         Lowest Ceiling: Broken       12000 Ft. AGL       Visibilit         Temperature:       -1 °C       Dew Point:       °C       Weather Condition	0 Ft. AGL     Condition of Light: Day       ity:     10     SM     Altimeter:     "Hg
Lowest Ceiling: Broken         12000 Ft. AGL         Visibilit           Temperature:         -1 °C         Dew Point:         °C         Weather Condition	ity: <b>10</b> SM Altimeter: "Hg
Temperature: -1 °C Dew Point: °C Weather Condition	
	Viewel Conditions
Wind Direction: 180 Wind Speed: 12 Wind	ons at Accident Site: Visual Conditions
	Gusts: 16
Visibility (RVR): 0 Ft. Visibility (RVV) 0 SM	
Precip and/or Obscuration:	
No Obscuration; No Precipitation	
Accident Information	
Aircraft Damage: Destroyed Aircraft Fire: None	Aircraft Explosion None
Iniuru Curameru Matrixi Estal Pariaus Minar Nanai	TOTAL
- Injury Summary Matrix Fatal Serious Minor None	TOTAL
First Pilot 1	1
Second Pilot Student Pilot	
Flight Instructor	
Check Pilot	
Flight Engineer	
Cabin Attendants	
Other Crew	
Passengers 2	2
- TOTAL ABOARD - 3	3
	3
	0
Other Ground         O         O           - GRAND TOTAL -         3         0         0	0

National Transportation Safety Board	NTSB ID: CHI95FA050	
FACTUAL REPORT	Occurrence Date: 12/01/1994	
AVIATION	Occurrence Type: Accident	
Administrative Information		
Investigator-In-Charge (IIC) STEPHEN A. WILSON		
Additional Persons Participating in This Acciden	t/Incident Investigation:	
RICHARD G GASTRICH BELLEVILLE, MI		
PAOLO FERRERI PHILADELPHIA, PA		
SCOTT S SCHEURICH INDIANAPOLIS, IN		
MILTON K GELTZ SHREVEPORT, LA		

National Transportation Safety Board		NTSB ID	: CHI90FA003	3	Aircraft Registr	ation Nu	mber: N9704J		
FACTUAL REPORT		Occurrer	nce Date: <b>10/07</b>	/1989	Most Critical In	ijury: Fa	tal		
AVIATION ETYBON		Occurrer	nce Type: Accid	lent	Investigated By	y: NTSI	В		
Location/Time									
Nearest City/Place	State	Z	Zip Code	Local Time	Time Zone				
ANN ARBOR	МІ	4	48108	1201	EDT				
Airport Proximity: On Airport/Airstrip	Distar	nce From I	Landing Facility:	0					
Aircraft Information Summary									
Aircraft Manufacturer			Model/Series	3			Type of Aircraft		
PIPER			PA-28-180	/PA-28-180			Airplane		
Revenue Sightseeing Flight: No			Air M	Medical Transport I	Flight: No				
Narrative									
*** Note: NTSB investigators significant amount of invest: sources to prepare this aircraft	igati	ive wor	rk without	any travel, and					

National Transportation Safety Board	NTSB ID: CHI90FA003								
FACTUAL REPORT	Occurren	currence Date: 10/07/1989							
AVIATION ETYBON	Occurren	urrence Type: Accident							
Landing Facility/Approach Information									
Airport Name	Airp	ort ID:	Airport Elevation	Run	way Used	Runwa	iy Length	Rur	way Width
ANN ARBOR	AR	В	839 Ft. MSL	. 24		3500		75	4 Control 10 Control 1
Runway Surface Type: Asphalt	•	1		•				an be	
Runway Surface Condition: <b>Dry</b>									
Approach/Arrival Flown: NONE									
VFR Approach/Landing: Full Stop; Traffic Pattern									
Aircraft Information							r		
Aircraft Manufacturer PIPER		Model/ PA-2		8-180			Serial Ni 28-389		
Airworthiness Certificate(s):	0								
Landing Gear Type: <b>Tricycle</b>									
Amateur Built Actt? No Number of Seats: 4	1	Certified	d Max Gross Wt.		2400	LBS	Number	ofEngine	s: <b>1</b>
Engine Type: <b>Reciprocating</b>		ngine Manufacturer: Model/Series: _YCOMING O-360-A4A							ed Power: <b>0 HP</b>
- Aircraft Inspection Information				r					
			t Inspection	Time Si	nce Last Insp	ection	A	virframe T	otal Time
Unknown						<b>0</b> Ho	ours		Hours
- Emergency Locator Transmitter (ELT) Information			5						
			ed? Yes	ELT Aid	ded in Locatin	ig Accide	ent Site?		
Owner/Operator Information									
Registered Aircraft Owner	Street A	Address 952 E. 163RI	) PLAC	E					
DAVID B. ESTEP		City	Marcolai II - KAAMbara				8	State	Zip Code
		Street A	SOUTH HOL	LAND				L	60473
Operator of Aircraft		952 E. 163R	) PLAC	E.					
DAVID B. ESTEP			City     State     Zip Cod       SOUTH HOLLAND     IL     60473						
Operator Does Business As:				0	perator Desig	nator Co	ode:		
- Type of U.S. Certificate(s) Held: <b>None</b>									
Air Carrier Operating Certificate(s):									
Operating Certificate:	Operator Certifi	cate:							
Regulation Flight Conducted Under: Part 91: Genera	l Aviation								
Type of Flight Operation Conducted: Personal									
]	FACTUAL	REPO	RT - AVIATION						Page 2

ARANSA National Transportation Safety Board	NTSB ID	NTSB ID: CHI90FA003								
FACTUAL REPORT	)/07/1989									
Z	Occurrence Type: Accident									
AVIATION ETY BON	Occurren	ice Type. A	cident		-					
First Pilot Information										
Name			City				State	Date o	f Birth	Age
On File	On File				On File			34		
Sex: M Seat Occupied: Unknown O	ccupational P	ilot? Unkn	own			Cer	tificate Nun	nber: Or	n File	
Certificate(s): Private										
Airplane Rating(s): Single-engine Land										
Rotorcraft/Glider/LTA: None										
Instrument Rating(s): None										
Instructor Rating(s):										
Current Biennial Flight Review?										
Medical Cert.: Class 3 Medical Cert. State	us: Valid Me	edicalno w	/aivers/lim.		Dat	e of La	ist Medical	Exam: <b>(</b>	5/1989	
- Flight Time Matrix All AVC This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Actu	Instrument Actual Simulated		Rotorcraf		Glider	Lighter Than Air
Total Time 72 7										
Pilot In Command(PIC)										
Instructor							_			
Instruction Received										
Last 90 Days										
Last 30 Days										
Last 24 Hours										
Seatbelt Used? Yes Shoulder Hames	Τοχία	cology F	erformed'	? Yes	Ś	Second F	Pilot? No	)		
Flight Plan/Itinerary					1					
Type of Flight Plan Filed: None										
Departure Point	Stat	e	Airport Io	dentifie	r Dep	arture Tii	me	Time Zone		
CHICAGO	IL		зна		090	0		CDT		
Destination	Stat	e	Airport lo	dentifie	r					
Same as Accident/Incident Location			ARB							
Type of Clearance: None										
Type of Airspace:										
Weather Information										
Source of Wx Information:										
Flight Service Station										
			- AVIATIO	<b>N</b> T						Page 3

Secure Type: Acident         Occurre Type: Acident Ster       Dreation From Accident Ster         OFF.ACI       Oregan Acident Ster         Oregan Acident Ster       Oregan Acident Ster <th co<="" th=""><th colspan="3">National Transportation Safety Board</th><th>NT</th><th colspan="5">NTSB ID: CHI90FA003</th><th></th><th></th><th></th><th></th></th>	<th colspan="3">National Transportation Safety Board</th> <th>NT</th> <th colspan="5">NTSB ID: CHI90FA003</th> <th></th> <th></th> <th></th> <th></th>	National Transportation Safety Board			NT	NTSB ID: CHI90FA003								
Occurremee Type: Aecident           Occurremee Type: Aecident           WOF Diamee Type: Aecident Site         Direction From Accident Site           OF Laboration Tyme:         OF Laboration From Accident Site         Direction From Accident Site           OF Laboration Tyme:         OF Laboration From Accident Site         Direction From Accident Site           OF Laboration: University         OF Laboration: Site Condition: University         OF Laboration: Site Condition: University           OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University         OF Laboration: University	0			00	ccurrence D	ate: <b>10</b> /	07/1989							
Wather isonation Time       Time Zone       WOF Elevator       WOF Distance From Acuident Steve       Direction From Acuident Steve         ARB       1204       EDT       939 FLM2 <ul> <li>Tection From Acuident Steve</li> <li>Submit Stev</li></ul>	1211202								-					
WOF ID         Observation Time         Time Zone         WOF Elevation         WOF Distance From Accident Site         Direction From Accident Site         Direction From Accident Site         O Deg Mag           SkyLlowest Cloud Condition: Unkowst         EDT         839 FLMSL         Visibility:         20         SM         Atimeter:         30.00         "Hg           Lowest Ceiling: Overoast         -18 °C         Visibility:         20         SM         Atimeter:         30.00         "Hg           Temperature:         -18 °C         Veroast         Visibility:         20         SM         Atimeter:         30.00         "Hg           Wind Directorn:         300         Wind Speed: 8         Wind Gusts:         Visibility: (RVR): 0         FL         Visibility: (RVR): 0         SM         Atimeter:         30.00         "Hg           Precip and/or Obscuration:         Visibility: (RVR): 0         FL         Aircraft Fire: None         Aircraft Explosion None         Aircraft Explosion None           Chiqure Plot         1         Serieux         Minor         None         TotAL         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	Mosther					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							-	
ARB 1204 EDT 839 Ft ML 0 M0 Gut 0 Deg, Mag.   SkyLoweit Clud Condition: Unit with the second of		r	Time Zone	WOF	Elevation	W	)E Distance E	rom Ac	rcident Site	Tr	Direction Fi	rom Accident S	ito	
OFE.AGL       Condition: Unk         Lowest Ceiling: Overcast       3000 FL AGL       Visibility 20 SM       Altimater: 30.00 "Hg         Temperature:       18 °C       Werture: Conditions at Accident Site: Visual Conditions         Wind Direction:       3000       FL       9 °C       Wind Speed:       8       Wind Gusts:       Visibility       Visual Condition:         Wind Direction:       3000       FL       Visibility (RVV)       0       SM       Attmater:       30.00       "Hg         Visibility (RVR):       0       FL       Visibility (RVV)       0       SM       Attmater:       30.00       "Hg         Aircraft Damage: Destroyed       Visibility (RVV):       0       SM       Aircraft Fire: None       Aircraft Explosion None         Aircraft Damage: Destroyed       Fatal       Serous       Minor       TOTAL       1		Observation nine	Time Zone	VVOF	Elevation	VVC	F DISLANCE F	IUIITAC	Cident Site	Ient Site Direction From Accident S				
Lowest Ceiling: Overcast       3000 Ft. 41       Visibility: 20       SM       Attimeter: 30.00       "Hg         Temperature:       -18 °C       Vertic:       -18 °C       Weat+Conditions at Accident Site: Visual Conditions         Wind Direction: 300       Visibility (RVR):       0       Ft       Visibility (RVR):       0       Ft       Visibility (RVR):       0       Ft       Visibility (RVR):       0       Ft       Visibility (RVR):       0       SM       Visibility (RVR):       0       Ft       Visibility (RVR):       0       Ft       Visibility (RVR):       0       SM       Visibility (RVR):       0       Ft       Visibility (RVR):       0       SM       Visibility (RVR):       0       Ft       Visibility (RVR):       0       Ft       Visibility (RVR):       0       SM       Visibility (RVR):       0       Ft       Visibility (RVR):       0       SM       Visibility (RVR):       0       Ft       Visibility (RVR):       None       <	ARB	1204	EDT		839 Ft. MS	iL			<b>0</b> NM			<b>0</b> De	g. Mag.	
Temperature:       -18 °C       Weather Conditions at Accident Site; Visual Conditions         Wind Direction: 300       Wind Speed: 8       Wind Gusts:         Visibility (RVR):       0       Ft       Visibility (RVV)       0       SM         Precip and/or Obscuration:       Precip and/or Obscuration:       None       Image: Sectore       Image: Sectore         Accident Information       Aircraft Fire: None       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       None       TOTAL         First Plot       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore         - Injury Summary Matrix       Fatal       Serious       Minor       TOTAL       Image: Sectore         First Plot       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore         - Student Plot       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore         - Student Plot       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore         - Student Plot       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore       Image: Sectore<	Sky/Lowes	st Cloud Condition: <b>Unk</b>	nown				<b>0</b> Ft.	AGL	Condition	of Light:	Day			
Wind Direction: 300       Wind Speed: 8       Wind Gusts:         Visibility (RVR):       0       Ft       Visibility (RVV):       0       SM         Precip and/or Obscuration:       Precip and/or Obscuration:       0       SM       Image: Comparison of the second of	Lowest Ce	iling: Overcast		3	<b>000</b> Ft. AGI	La la	Visibility:	20	SM	SM Altimeter: 30.00				
Visibility (RVR):       0       Ft.       Visibility (RVV):       0       SM         Precip and/or Obscuration:       Precip and/or Obscuration:       Second Priority Second Priorit	Temperatu	ıre: <b>-18</b> °C	Dew Point:	( <u>1</u>	18 °C V	veather C	onditions at A	ccident	t Site: <b>Visual</b>	Condit	ions			
Precip and/or Obscuration:         Aircraft Damage: Destroyed       Aircraft Fire: None       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       TOTAL         - Injury Summary Matrix       Fatal       Serious       Minor       TOTAL         First Pilot       1        Image: Destroyed       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       TOTAL         First Pilot       1       Image: Destroyed       Image: Destroyed       Image: Destroyed         Student Pilot       1       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Generation       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         - Injury Summary Matrix       Fatal       Serious       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Student Pilot       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Generation       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Check Pilot       Image: De	Wind Direc	tion: <b>300</b>	Wind Sp	eed: <b>8</b>	•		Wind Gusts:							
Aircraft Information         Aircraft Damage: Destroyed       Aircraft Fire: Nore       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serius       Minor       None       TOTAL         - Injury Summary Matrix       Fatal       Serius       Minor       None       TOTAL         - First Pilot       Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4"Colspan="4">Colspan="4"Colsp	Visibility (R	VR): 0 Ft.	Visibility	(RVV)	<b>0</b> S	м.								
Aircraft Information         Aircraft Damage: Destroyed       Aircraft Fire: Nore       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serius       Minor       None       TOTAL         - Injury Summary Matrix       Fatal       Serius       Minor       None       TOTAL         - First Pilot       Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4"Colspan="4">Colspan="4"Colsp	Precip and	l/or Obscuration:	-	arronti (fati										
Aircraft Damage: Destroyed       Aircraft Fire: Nove       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         First Pliot       11       -       Image: Destroyed       TOTAL       Image: Destroyed         Second Pliot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Studert Pliot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Flight Instructor       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Cabin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Passengers       2       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Other Ground       0       0       0       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed I	8													
Aircraft Damage: Destroyed       Aircraft Fire: Nove       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         - First Pilot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Second Pilot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Studert Pilot       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Flight Instructor       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gatin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gotter Ground       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gotter Ground       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gatin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed <th></th>														
Aircraft Damage: Destroyed       Aircraft Fire: Nove       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         First Pliot       11       -       Image: Destroyed       TOTAL       Image: Destroyed         Second Pliot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Studert Pliot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Flight Instructor       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Cabin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Passengers       2       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Other Ground       0       0       0       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed Image: Destroyed I														
Aircraft Damage: Destroyed       Aircraft Fire: Nove       Aircraft Explosion None         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         - Injury Summary Matrix       Fatal       Serious       Minor       None       TOTAL         - First Pilot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Second Pilot       11       -       Image: Destroyed       Image: Destroyed       Image: Destroyed         Studert Pilot       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Flight Instructor       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gatin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gotter Ground       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gotter Ground       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed       Image: Destroyed         Gatin Attendants       Image: Destroyed       Image: Destroyed       Image: Destroyed <td>10 1306 C</td> <td></td>	10 1306 C													
- Injury Summary MatrixFatalSeriousMinorNoneTOTALFirst Pilot11111Second Pilot11111Second Pilot11111Studert Pilot11111Filght Instructor11111Check Pilot11111Filght Engineer11111Other Crew11111Passengers21121Other Ground00000		of the first statistic from the statistic of the							1					
First Pilot1111Second PilotIIIIStudent PilotIIIIFilight InstructorIIIICheck PilotIIIIFilight EngineerIIIICabin AttendantsIIIIOther CrewIIIIPassengers2II3Other Ground00I0Other Ground0000	Aircraft Dar	mage: D <b>estroyed</b>		Ain	craft Fire: <b>N</b>	one			Aircraft Exp	plosion	None			
First Pilot1111Second PilotIIIIStudent PilotIIIIFilight InstructorIIIICheck PilotIIIIFilight EngineerIIIICabin AttendantsIIIIOther CrewIIIIPassengers2II3Other Ground00I0Other Ground0000														
Second PilotImage: Second PilotImage: Second PilotImage: Second PilotStudent PilotImage: Second PilotImage: Second PilotImage: Second PilotFlight InstructorImage: Second PilotImage: Second PilotImage: Second PilotCheck PilotImage: Second PilotImage: Second PilotImage: Second PilotCheck PilotImage: Second PilotImage: Second PilotImage: Second PilotFlight EngineerImage: Second PilotImage: Second PilotImage: Second PilotOther CrewImage: Second PilotImage: Second PilotImage: Second PilotPassengers2Image: Second PilotImage: Second PilotOther Ground00Image: Second PilotImage: Second PilotOther Ground0Image: Second PilotImage: Second PilotImage: Second Pilot	- Injury Sur	mmary Matrix	Fatal	Serious	Minor	None	TOTAL							
Student PilotImage: Student PilotImage: Student PilotImage: Student PilotFlight InstructorImage: Student PilotImage: Student PilotImage: Student PilotCheck PilotImage: Student PilotImage: Student PilotImage: Student PilotFlight EngineerImage: Student PilotImage: Student PilotImage: Student PilotCabin AttendantsImage: Student PilotImage: Student PilotImage: Student PilotOther CrewImage: Student PilotImage: Student PilotImage: Student PilotPassengersImage: Student PilotImage: Student PilotImage: Student PilotOther GroundImage: Student PilotImage: Student PilotImage: Student PilotOther GroundImage: Student PilotImage:	First Pi	lot	1					1						
Flight InstructorImage: Sector Se	Second	d Pilot						_						
Check PilotImage: Sector S	Studen	t Pilot			<u> </u>		_							
Flight EngineerImage: Second Seco	Flight I	nstructor												
Cabin AttendantsImage: Cabin AttendantsImage: Cabin AttendantsOther CrewImage: Cabin AttendantsImage: Cabin AttendantsPassengersImage: Cabin AttendantsImage: Cabin Attendants- TOTAL ABOARD-Image: Cabin AttendantsImage: Cabin AttendantsOther GroundImage: Cabin AttendantsImage: Cabin Attendants	Checki	Pilot												
Other CrewImage: CrewImage: CrewImage: CrewImage: CrewPassengers22Image: Crew22- TOTAL ABOARD -33Image: Crew33Other Ground00Image: Crew	Flight E	ingineer												
Passengers2Image: Comparison of the system2- TOTALABOARD-3Image: Comparison of the system3Other Ground0000	Cabin A	Attendants												
- TOTAL ABOARD -OOOOOther GroundOOOO	Other C	Crew												
Other Ground 000000000000000000000000000000000000	Passen	ngers	2					2						
	- TOTAL A	ABOARD -	3					3						
- GRAND TOTAL - 3 0 0 3	Other C	Ground	0	C		0		0						
	- GRANE	D TOTAL -	3	C		0		3						
				FAC	TUAL RE	PORT -	AVIATION	62					Page 4	

	This space for binding	
TRANSP National Transportation Sufety Board	NTSB ID: CHI90FA003	
FACTUAL REPORT	Occurrence Date: 10/07/1989	
AVIATION	Occurrence Type: Accident	
Administrative Information		1
Investigator-In-Charge (IIC) WILLIAM C. BRUCE		
Additional Persons Participating in This Accident G. ERIKSON WILLIAMSPORT, PA	/Incident Investigation:	
J. CHADWELL VERO BEACH, FL		
R. JOHNSON		