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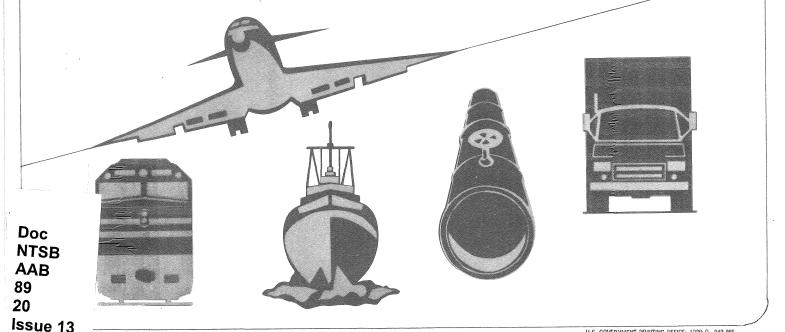
# Issue 13 IATIONAL **TRANSPORTATION SAFETY BOARD**

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PB89-916920 **NTSB/AAB-89/20** 

## **AIRCRAFT ACCIDENT REPORTS**

**BRIEF FORMAT U.S. CIVIL AND FOREIGN AVIATION ISSUE NUMBER 13 OF 1988 ACCIDENTS** 





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TECHNICAL REPORT DOCUMENTATION PAGE

4       Aircitate and Subtitue Friefs - Brief Format U.S. Civil and Foreign Aviation Calendar Year 1988 - Issue Number 13       5       5       5       6       Performing Organization Code         7. Author(s)       6       Performing Organization Report No.       6       9       Performing Organization Report No.         9       Orffice Or No. Organization Safety Board Washington, D.C. 20594       10. Work Unit No.       11. Contract or Grant No.         12. Sponsoring Agency Name and Address Washington, D. C. 20594       10. Work Unit No.       13. Type of Report and Approximately 113 General Aviation and Air Carrier Accidents Occurring in 1988 in Brief Format         16. Abstract       This publication contains selected aircraft accident reports in Brief Format occurring in U.S. civil and foreign aviation operations during Calendar Year 1988. Approximately 113 General Aviation and Air Carrier accidents Occurring in this publication represent a random selection. This publication is issued irregularly, normally eighteen times each year. The Brief Format represents the facts, conditions, circumstances and probable cause(s) for each accident. File Numbers: 2401 through 2466 2468 through 2456 2498 through 2514         17. Key Words       18. Distribution Statement Aviation accident, probable cause, findings, certificate/rating, injuries, type of accident, type operating certificate, flight conducted under, accident occurred during, aircraft damage, basic weather       10. Nocri Fages 22. Price 241	1. Report No. NTSB/AAB-89/20	2.Government Accession No. PB89-916920	3.Recipient's Catalog No.
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NTSB Form 1765.2 (Rev. 9/74)

#### FOREWORD

The National Transportation Safety Board, in accordance with the provisions of Title VII of the Federal Aviation Act of 1958 (as amended) and Section 304(a) of the Independent Safety Board Act of 1974, has determined the probable cause(s) of the accidents reported herein.

This publication is issued sixteen (16) times per year and contains approximately 200 U.S. and foreign aircraft accident/incident reports arranged in state and date order.

The enclosed computer briefs are the reports of the National Transportation Safety Board and thereby subject to the limitations of 49 USC 1441(e) which states:

"No part of any report or reports of the Board, relating to any accident or the investigation thereof, shall be admitted as evidence or used in any suit or action for damage growing out of any matter mentioned in such report or reports."

In reading these reports, it should be borne in mind that they are produced directly from records on magnetic disk by electronic data processing equipment. Due to spacing limitations a number of abbreviations are utilized in the narrative section. Therefore, caution should be exercised in reading this section on the Briefs of Accidents.

Collisions between aircraft are treated as one accident. An analysis is done on each aircraft involved in a collision. This produces two aircraft accident records per accident. Consequently, when compiling information on accidents involving collisions between aircraft, the number of accident records will exceed the number of accidents.

The Briefs of Accidents contain the essential information which fulfill most requirements of persons using these reports. However, for those having a need for more detailed information, the original factual reports are on file in the Washington Office of the National Transportation Safety Board. Upon request, these reports will be produced commercially for a fee to cover reproduction and postage. The cost will be assessed per printed page and photograph(s) reproduced.

Copies of material ordered will be mailed from the Washington business firm that holds the current contract for commercial reproduction of the Board's public files. Billing is also direct to you by the same company. Orders for this material will also involve a user service charge by the Board for special services. This charge is in addition to the cost of commercial reproduction of material and will be included in the bill from the commercial reproduction firm.

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#### DEFINITIONS

The following definitions contained in CFR 49, Part 830, Paragraph 830.2 apply when used in this publication.

#### <u>Aircraft</u> <u>Accidents</u>

An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, and in which any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached thereto, or in which the aircraft receives substantial damage.

#### Fatal Injury

Any injury which results in death within 30 days of the accident.

#### Serious Injury

Any injury which 1) requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; 2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); involves lacerations which cause severe hemorrhages, nerve, muscle, or tendon damage; 4) involves injury to any internal organ; or 5) involves second or third degree burns affecting more than 5 percent of the body surface.

#### <u>Substantial</u> Damage

1) Except as provided in subparagraph (2) of this paragraph, substantial damage means damage or structural failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. 2) Engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "Substantial Damage" for the purpose of this part.

#### OCCURRENCE

Occurrence relates to the immediate circumstance of the event. Occurrences are numbered in descending order and directly relate to the phase of operation. Some examples of occurrences are as follows:

#### <u>Gear</u> <u>Collapsed</u>

Collapse of the landing gear due to mechanical failure other than malfunction of the retracting mechanism.

#### TYPE OF OPERATING CERTIFICATE/TYPE OF OPERATION

The type of operating certificate/type of operation refers to the purpose for which the aircraft is being operated at the time of the accident. This type of operating certificate is broken into two categories. These categories are:

#### 1. GENERAL AVIATION

This operating certificate refers to operations involving U.S. and foreign aircraft owned and operated by persons, businesses, corporations, et cetera. This category also includes public use aircraft.

To further define General Aviation operations we have classified the following:

#### Personal

Flying by individuals in there own or rented aircraft for pleasure, or personal transportation not in furtherance of their occupation or company business.

#### <u>Business</u>

The use of aircraft by pilots (not receiving direct salary or compensation for piloting) in connection with their occupation or in the furtherance of a private business.

#### <u>Corporate/Executive Operations</u>

The use of aircraft owned or leased, and operated by a corporation or business firm for the transportation of personnel or cargo in furtherance of the corporation's or firm's business, and which are flown by professional pilots receiving a direct salary or compensation for piloting.

#### Instructional Flying

Refers to flying accomplished in supervised training under the direction of an accredited instructor.

#### Other Flying

Includes other kinds of flying not covered under the other broad categories. In some instances the criterion of direct financial return may or may not be present.

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#### 2. <u>AIR CARRIER</u>

This operating certificate refers to all operations conducted for direct financial return except instructional flying. It includes Domestic/Flag Air Carriers, Supplemental Air Carriers, All Cargo Air Service Air Carriers, Commercial Operators, Air Travel Club, and Corporate (14 CFR 125) operations. Also included in this category are Commuter Air Carrier and On-Demand Air Taxi operations.

#### Airframe/Component/System Failure/Malfunction

Occurrences resulting from failure of any part of the airframe/component/system while in flight or in motion on the ground. Excludes failure resulting from contact with another airplane or object, or impact with the ground, or damage from landing gear collapse or retraction.

<u>Powerplant</u> - <u>Loss</u> of <u>Power</u>

Occurrences of engine failure or malfunction for any reason. Includes engine stoppage, power interruption, or power loss, actual or simulated.

#### PHASE OF OPERATION

The phase of operation relates to the particular segment of the flight or occurrences during which the circumstances of the accident occur.

#### CAUSES AND RELATED FACTORS

In determining probable cause(s) of an accident, all facts, conditions and circumstances are considered. The object is to ascertain these cause-effect relationships in the accident sequence about which something can be done to prevent recurrence of the type of accident under consideration. Accordingly, for statistical purposes where two or more causes exist in an accident, each is recorded and no attempt is made to establish a primary cause. The term factor is used to denote those elements of an accident which further explain supplement the probable cause(s). Additional or items that are not categorized as cause or factors are indicated as findings. These items are of interest in the investigation, however, they do not relate directly to the cause of the accident.

#### BASIC WEATHER CONDITIONS

The types of weather conditions (VMC/IMC) are determined in accordance with the prescribed minima in Part 91 of the Federal Aviation Regulations. These minima pertain to the ceiling and visibility, in conjunction with the type of airspace at the accident site. Type of weather conditions are based on surface weather as determined from officially recognized sources. Weather conditions encountered in flight are not necessarily representative of the classifications VMC/IMC as carried under Weather Data.

## FILE ORDER LISTING

### ISSUE NUMBER 13

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2450	13261	042988	FAYETTEVILLE, WV	CESSNA	172M	NONE	226

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File Number	Aircraft Regist.	Date	Location	Aircr Make 	aft Model	Injury Index	Page
2451	5462B	110688	SMITHFIELD, RI	CESSNA	152	FATAL	200
2452	1189Z	091688	HAYS, KS	AERO COMMAND	500B	MINOR	70
2453	52601	090488	BOYNE CITY, MI	CESSNA	172P	FATAL	104
2454	53784	072388	PENDLETON, NY	BELLANCA	7GCAA	SERIOUS	158
2455	9981L	053088	DOVER, PA	GRUMMAN	AA-1B	NONE	186
2456	192AP	070288	FOWLERVILLE, MI	PERKINS	DRAGONFLY	NONE	90
2457	8980H	080388	CHENDA, IL	GRUMMAN	G164A	NONE	52
2458	58155	101688	LUDINGTON, MI	MOONEY	M20J	FATAL	108
2459	30	082888	YORK, NE	PIPER	J3	SERIOUS	132
2460	3533N	091288	GOODMAN, MO	PIPER	J3C-65	SERIOUS	128
2461	4490T	062188	ELDON, MO	PIPER	PA-28R-200	SERIOUS	124
2462	56352	080188	RACINE, WI	MOONEY	M20K	SERIOUS	218
2463	48417	081788	SCHOOLCRAFT, MI	GRUMMAN	G-164B	NONE	98
2464	939H	081588	WHITE CLOUD, MI	HULLIBERGER	STARDUSTER	NONE	96
2465	5124T	081388	GRAND HAVEN, MI	CHAMPION	7KCAB	NONE	94
2466	5166G	082888	GREGORY, MI	CESSNA	305A	NONE	102
2468	33131	081988	DECKERVILLE, MI	SACKETT	J2	MINOR	100
2469	4113R	101688	SEDONA, AŻ	PIPER	PA-32-300	FATAL	10
2470	732QZ	071488	CARSON, CA	CESSNA	T210M	SERIOUS	16
2471	322BA	081688	CLEVELAND, OH	FAIRCHILD	SA-226-TC	MINOR	170
2472	50331	122288	BENTON HARBOR, MI	CESSNA	150H	NONE	112
2473	25561	081088	REDKEY, IN	TOMCAT	MK-5	FATAL	62
2474	NONE	092188	ELKHART, IN	JONES	NONE	FATAL	64
2475	745F	073088	PERRIS, CA	LEAR	23	FATAL	18
2476	54814	090388	GRAND CANYON, AZ	CESSNA	172	FATAL	8

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File Number	Aircraft Regist.	Date	Location	Aircr Make 	aft Model	Injury Index	Page
2477	53EP	060488	LIHUE, HI	FAIRCHILD-HI	FH-1100	NONE	48
2478	1830R	082188	PARADISE, CA	BEECH	A36TC	SERIOUS	22
2479	2326L	041888	BRIGHTON, MI	BEECH	23	MINOR	86
2480	7797Q	032488	SERVIA, IN	CESSNA	310Q	FATAL	60
2481	181LL	040588	ST. PAUL, MN	BEECH	В90	NONE	116
2482	5728A	120388	GREENCASTLE, IN	CESSNA	172	NONE	68
2483	3RJ	111788	DELPHI, IN	PITTS	S-15	FATAL	66
2484	NONE	111388	SULLIVAN, IL	AIR COMMAND	503	FATAL	54
2485	131JT	100888	COLDWATER, MI	VOLKSPLANE	VP-1	FATAL	106
2486	9877C	091888	ZANESVILLE, OH	CESSNA	182RG	FATAL	174
2487	8743W	090788	CAMARILLO, CA	PIPER	PA-28-235	FATAL	24
2488	55478	091888	BIG BEAR, CA	PIPER	PA-28-140	FATAL	26
2489	4049P	083088	TOLEDO, OH	PIPER	PA-23-160	SERIOUS	172
2490	83255	081588	BARKER, NY	AERONCA	7CCM	FATAL	160
2491	1170Z	111688	HOLDEN, MA	MOONEY	M20K	FATAL	76
2492	2246Q	092988	SANTA BARBARA, CA	BELL	206L-1	NONE	28
2493	340FB	040788	PINEVILLE, WV	CESSNA	340	NONE	222
2494	739YS	101988	PASO ROBLES, CA	CESSNA	TR-182	FATAL	34
2495	47CL	042488	GAITHERSBURG, MD	LAMB	SHOESTRING	FATAL	82
2496	6655L	070488	LINDEN, NJ	LAKE	LA-4	NONE	142
2498	369DK	090588	MANKATO, MN	HOMEBUILT	WOODSTOCK	FATAL	122
2499	325X	092988	CLARKSVILLE, VA	MAULE	M-5-210C	FATAL	214
2500	663FL	012388	MENDON, MA	PIPER	PA-28	SERIOUS	74
2501	34JH	040988	FAIRFIELD, PA	SCHLEICHER	ASW-20	FATAL	180
2501	311DP	040988	FAIRFIELD, PA	SCHLEICHER	ASW-20	FATAL	182

File	Aircraft			Aircr		Injury	
Number	Regist.	Date	Location	Make	Model 	Index	Page
2502	19699	073088	NO. KINGSTOWN, RI	CESSNA	172L	MINOR	198
2503	979LA	081488	WELLSBORD, PA	PIPER	PA-32RT-30	FATAL	192
2504	5810E	06 1788	JACKSON, MI	CESSNA	150	MINOR	88
2505	7222D	090588	COHASSET, MN	PIPER	PA-22-150	NONE	120
2506	9469Y	112788	HANFORD, CA	BEECH	N35	FATAL	44
2507	53375	112488	WEATHERFORD, TX	CESSNA	337A	FATAL	210
2508	4006T	080288	CIMARRON, NM	BEECH	B23	FATAL	148
2509	5163B	110388	PHOENIX, AZ	BELL	47G2	FATAL	12
2510	48DS	101688	YPSILANTI, MI	EXPERIMENTAL	BARRACUDA	NONE	110
2511	666RW	102888	OCEAN CITY, MD	PIPER	PA-34-200	FATAL	84
2512	355EH	110488	W. CAMERON 617, GM	AEROSPATIALE	AS-355F-1	FATAL	46
2513	8697A	111888	SHIRLEY, NY	BEECH	A35	FATAL	164
2514	5202G	052988	COLTS NECK, NJ	CESSNA	305A	NONE	140

## AIRCRAFT ACCIDENT REPORTS BRIEF FORMAT U.S. CIVIL AND FOREIGN AVIATION ISSUE NUMBER 13 OF 1988 ACCIDENTS

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2445 5/27/88 BIG I	SLAND, AR A/C Reg	. No. N3618Q	Т	ime (Lcl) -	1730 CDT	
Basic Information Type Operating Certificate-NONE (GENERA Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	L AVIATION) Aircraft DESTROYE Fire NONE	D Crew	Fatal 1 0	Injur Serious O O		None 0 0
Aircraft Information Make/Model - BEECH A-23-1900 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2200 No. of Seats - 4	Eng Make/Model - LYCC Number Engines - 1 Engine Type - REC Rated Power -	PROCATING-CARBURE	Stal	Installed/A 1 Warning S		
Environment/Operations Information ;Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 110/011 KTS Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Itinerary Last Departure Point SAME AS ACC/INC Destination MCGHEE.AR ATC/Airspace Type of Flight Plan - Type of Clearance Type Apch/Lndg -	NONE NONE	OFF AI Airport D BIG IS Runway Runway Runway	LAND	N/A 1500 GRASS/TUR	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE SE LAND	Age - 54 M Biennial Flight Review Current - YES Months Since - 3 Aircraft Type - A-23-19	edical Certificato Fligh Total - Make/Model- Instrument- Multi-Eng - UNM	t Time (H 274 10 0	ours) Last 24 Last 30 Last 90	IVERS/LIMI Hrs - UNK Days- UNK Days- UNK aft - UNK	(/NR (/NR (/NR

----Narrative----

THE PILOT ENCOUNTERED AN INCAPACITATING MEDICAL EVENT WHICH RESULTED IN THE LOSS OF AIRCRAFT CONTROL DURING THE INITIAL SEGMENT OF TAKEOFF. AUTOPSY FINDINGS LISTED THE CAUSE OF DEATH AS "DROWNING IN ASSOCIATION WITH ARTERIOSCLEROTIC HEART DISEASE". THE AIRCRAFT IMPACTED THE WATERS OF THE MISSISSIPPI RIVER AND SUBMERGED IN APPROXIMATELY 12 FEET OF WATER. THE PRIVATE PILOT WAS FATALLY INJURED AND THE AIRCRAFT WAS DESTROYED. EXAMINATION OF THE WRECKAGE, TO INCLUDE THE ENGINE, FAILED TO REVEAL EVIDENCE OF ENGINE OR AIRFRAME MALFUNCTIONS.

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File No 24	45 5/27/88	BIG ISLAND,AR	A/C Reg. No. N3618Q	Time (Lcl) - 1730 CDT
Occurrence #1 Phase of Operation		_		
		- PILOT IN COMMAND DIOVASCULAR) - PILOT IN	COMMAND	
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATER ROLLED		
Finding(s) 3. TERRAIN CONDITI	DN - WATER			
Probable Cause			· · · · · · · · · · · · · · · · · · ·	
The National Transpo	rtation Safety Boa	nd determines that the	Probable Cause(s) of this accide	ent

is/are finding(s) 1,2

Brief of Accident

File No 2446 7/02/88 BEEDEV	ILLE, AR A	/C Reg. No. NS	5517W	T	ime (Lcl) -	1740 CDT	
-Basic Information Type Operating Certificate-NONE (GENERAL		craft Damage BSTANTIAL		Fatal	Injur Serjous		None
Type of Operation -PERSONAL	Fir		Crew	0	1	0	0
Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT		NE	Pass	1	0	õ	õ
Aircraft Information Make/Model - PIPER PA-28-160	Eng Make (Mode)			 г, т	Installed/A		
Landing Gear - TRICYCLE-FIXED	Eng Make/Model Number Engines		320-828		tall Warnin		
Max Gross Wt - 2200	Engine Type	•				y Jystem	115
No. of Seats - 4	5 11	- 160 HP	IG CARBORE				
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 060/010 KTS Visibility - 9.0 SM Lowest Sky/Clouds - 2000 FT THIN Lowest Sky/Clouds - 25000 FT BROKE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT		lan - NONE e - NONE		OFF AI Airport D Runway Runway Runway Runway	Ident - Lth/Wid - Surface -	N/A N/A	
	Age - 22 Biennial Flight Review Current - N/ Months Since - N/ Aircraft Type - N/	A Total A Make A Instr	Certificate Flight I - UNA /Model- UNA rument- UNA i-Eng - UNA	t Time (H K/NR K/NR K/NR	ours) Last 24 Last 30 Last 90	Hrs - UN Days- UN Days- UN aft - UN	IK/NR IK/NR
Instrument Rating(s) - NONE			-				

----Narrative----

WHILE INTENTIONALLY BUZZING AN ACQUAINTANCE'S RURAL RESIDENCE, THE AIRCRAFT COLLIDED WITH POWER LINES, SHEARING THE RIGHT WING, THEN DESCENDED UNCONTROLLED TO THE TERRAIN. NO ABNORMALITIES WERE DISCOVERED IN THE AIRFRAME OR POWERPLANT DURING THE POST ACCIDENT INVESTIGATION.

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File No 24	46 7/02/88	BEEDEVILLE, AR	A/C Reg. No. N5517W	Time (Lcl) - 1740 CDT
Occurrence #1 Phase of Operation		ION WITH OBJECT		
<ol> <li>VISUAL LOOKOUT</li> <li>4. OSTENTATIOU</li> </ol>	FORMED - PILOT IN - NOT MAINTAINED - S DISPLAY - PILOT	PILOT IN COMMAND	MAND	
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATE ROLLED	R	
Probable Cause				
The National Transpo	rtation Safety Boa	rd determines that the	e Probable Cause(s) of this accid	lent

is/are finding(s) 2,3

Factor(s) relating to this accident is/are finding(s) 1,4,5

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#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2405 5/30/88 ELOY,AZ	A/C Reg	. No. N27463		Time (Lc1) - 1445 MST				
Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft DESTROYE		Fatal	Injur Serious	ries Minor	None	
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT		Fire NONE	Cre Pas		0 0	0	0 0	
Aircraft Information Make/Model - TAYLORCRAFT BL65 Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1150 No. of Seats - 2	Number E	Ingines - 1 Type - RECI	INENTAL A-65 PROCATING-CARBU 55 HP	ç	Installed/A Stall Warnir			
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 290/013 KTS Visibility - 50.0 SM Lowest Sky/Clouds - 6000 FT SCATTE Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	ELOY,AZ Destinatio LOCAL ATC/Airspac RED Type of F Type of C	on Ce light Plan - I Clearance / - I		OFF Al Airport [ Runway Runway Runway	/ Ident - / Lth/Wid - / Surface -	- N/A - N/A		
Personnel Information Pilot-In-Command A Certificate(s)/Rating(s) B PRIVATE SE LAND	iennial Flight Current Months Sinc	: Review - YES ce - UNK/NR	Total -	ght Time (H 103 12	Hours) Last 24 Last 30	AIVERS/LI 4 Hrs - U ) Days- ) Days-	NK/NR 12	

Instrument Rating(s) - NONE

----Narrative----

SHORTLY AFTER TAKEOFF, DURING TAKEOFF CLIMB, AIRCRAFT WAS OBSERVED OUT OF CONTROL SPIRALLING TO GROUND. PILOT HAD RESTORED THE AIRCRAFT AND HAD ONLY 12 HOURS OF FLIGHT EXPERIENCE IN MAKE AND MODEL. PILOT HAD FAILED HIS FIRST FLIGHT TEST FOR PRIVATE PILOT RATING 17 MONTHS PRIOR TO ACCIDENT. IMPROPER USE OF FLIGHT CONTROLS DURING STALL RECOVERY WAS CITED IN NOTICE OF DISAPPROVAL. THERE WAS NO RECORD OF PILOT RECEIVING FORMAL TRAINING IN ACCIDENT AIRCRAFT MAKE AND MODEL.

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File No 240	05 5/30/88 ELOY,AZ	A/C Reg	. No. N27463	Time (Lcl) - 1445 MST
Occurrence #1 Phase of Operation	LOSS OF CONTROL - IN FLIG CLIMB	ЭНТ		
2. REMEDIAL ACTION	ENT - PILOT IN COMMAND - NOT PERFORMED - PILOT IN NL EXPERIENCE IN TYPE OF AI			
	IN FLIGHT COLLISION WITH DESCENT - UNCONTROLLED	TERRAIN/WATER		
Finding(s) 4. SPIRAL				
Probable Cause				
The National Transpor is/are finding(s) 1,		nines that the Probable Cause	e(s) of this accident	

Factor(s) relating to this accident is/are finding(s) 3

Brief of Accident

File No 2476 9/03/88 GRAN	CANYON, AZ A/	C Reg. No. N548	814	Τ	ime (Lc1) -	2120 MS	T 
Basic Information Type Operating Certificate-ON-DEMAND A		raft Damage		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF	Fire		Crew Pass	1 3	0	0 0	0
ircraft Information Make/Model - CESSNA 172 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2400 No. of Seats - 4	Eng Make/Model - Number Engines - Engine Type - Rated Power -	1 RECIPROCATING		S	Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - FSS Method - TELEPHONE Completeness - UNK/NR Basic Weather - VMC Wind Dir/Speed- 070/004 KTS Visibility - 7.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - NIGHT(DARK)	Itinerary Last Departure Po SAME AS ACC/INC Destination FARMINGTON,NM ATC/Airspace Type of Flight Pl Type of Clearance Type Apch/Lndg	an - NONE : - NONE		ON AIR Airport D GRAND Runway Runway Runway	ata CANYON Ident - Lth/Wid - Surface -	03 8900/ UNK/NR UNK/NR	150
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL SE LAND,ME LAND	Age - 23 Biennial Flight Review Current - YES Months Since - 1 Aircraft Type - PA-	Total Make/Ma 44 Instru	Fligh - odel-	nt Time (H 366 152 63	Last 24 Last 30	Hrs -	2 2

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PILOT HAD FLOWN THE ACFT ON TWO PREVIOUS FLIGHTS ON THE DAY OF THE ACCIDENT. THE FIRST FLT WAS WITHOUT INCIDENT. THE SECOND FLT WAS ABORTED DURING THE TAKEOFF CLIMB. THE PILOT CALCULATED HIS WEIGHT ONBOARD AND REALIZED HE EXCEEDED THE MAX GROSS. HE DEFUELED AN UNKNOWN QUANTITY OF FUEL AND PLANNED TO STAY THE NIGHT IN THE AREA BUT WAS UNABLE TO SECURE LODGING. HE THEN ELECTED TO CONTINUE THE FLT THAT NIGHT. WITNESSES STATED THE ACFT CLIMBED TO APRX 200 FT WITH THE WINGS FLUCTUATING IN BANK ANGLE AFTER WHICH THE ACFT ENTERED A SPIRAL AND DESCENDED TO THE GROUND. DENSITY ALT WAS CALCULATED TO HAVE BEEN 8,500 FT WHEN THE TAKEOFF OCCURRED. THE ARPT PROVIDES A "BLACK HOLE" ENVIROMENT AT NIGHT. REVIEW OF THE PLT LOGBOOKS REVEALED A LACK OF RECENT NIGHT EXPERIENCE IN ACCORDANCE WITH FAR PART 61.75(D).

File No 2476	9/03/88	GRAND CANYON, AZ	A/C Reg. No. N54814	Time (Lc1) - 2120 MST
	LOSS OF CONTROL TAKEOFF	- IN FLIGHT		
inding(s) 1. WEATHER CONDITION 2. LIGHT CONDITION - 3. STALL/SPIN - IN				
	IN FLIGHT COLLIS DESCENT - UNCONT	ION WITH TERRAIN/WATER		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 3

Factor(s) relating to this accident is/are finding(s) 2

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Brief of Accident

File No 2469 10/16/88 SE							
Basic Information Type Operating Certificate-ON-DEMAND		rcraft Damage			Injur	ies	
Name of Carrier -NORTHERN	ARIZONA AIRCRAFT	ESTROYED		Fatal	Serious		None
Type of Operation -NON SCHED	,DOMESTIC, PASSENGER F	re	Crew	1	0		0
Type of Operation -NON SCHED Flight Conducted Under -14 CFR 13	5 0	IN GROUND	Pass	4	0	0	0
Accident Occurred During -APPROACH							
Aircraft Information							
Make/Model - PIPER PA-32-300	Eng Make/Mode		D-540-K1A5				
Landing Gear - TRICYCLE-FIXED	Number Engines			S	tall Warnin	g System –	- YES
Max Gross Wt - 3400	Engine Type		INJECTED				
No. of Seats - 7	Rated Power	- 300 HP					
Environment/Operations Information							
Weather Data	Itinerary				Proximity		
Wx Briefing - UNK/NR Method - UNK/NR	Last Departure	Point		OFF AI	RPORT/STRIP		
	SEDONA, AZ						
Completeness - UNK/NR	Destination			Airport Da	ата		
Basic Weather - VMC Wind Dir/Speed- LIGHT AND VARIABLE	SEDONA, AZ			Bubyay	Ident -	N/A	
Visibility - 50.0 SM	ATC/Airspace				Lth/Wid -	•	
Lowest Sky/Clouds - CLEAR	Type of Flight	Plan - NONE			Surface -		
Lowest Ceiling - NONE	Type of Clearar				Status -		
Obstructions to Vision- NONE	Type Apch/Lndg			nannay	otatao	,	
Precipitation - NONE	· ) P · · · P · · · · · · · · · · · · ·						
Condition of Light - DAYLIGHT							
Personnel Information		· · · · · · · · · · · · · · · · · · ·					
Pilot-In-Command	Age - 58	Medical	Certificat	e - VALID	MEDICAL-WA	IVERS/LIM	ΙT
Certificate(s)/Rating(s)	Biennial Flight Revie Current - Y	ew .	Fligh	t Time (H	ours)		
COMMERCIAL, CFI	Current - Y	'ES Tota	al - 2	5800	Last 24	Hrs - UN	
SE LAND, ME LAND	Months Since -	4 Make	e/model-UN		Last 30	Days- UN	
	Aircraft Type - F					Days- UNH aft - UNH	
		Mult	ti-Eng - UN		KUTOPEP	art - UNP	V/NK
Instrument Rating(s) - AIRPLANE							

----Narrative----

THE PLT & 4 FARE-PAYING PAX WERE ENROUTE TO THE GRAND CANYON NATIONAL PARK FOR AERIAL SIGHTSEEING. AN INTERNAL FAILURE OF THE LEFT MAGNETO (MAG) RESULTED IN A TOTAL LOSS OF ENGINE PWR. THE ACFT COLLIDED WITH TERRAIN & WAS DESTROYED BY GROUND FIRE. THE MAG WAS SUBJECT TO AD 78-09-07 R3 WHICH ADDRESSED IMPULSE COUPLING FAILURE. UPON EXAM IT WAS NOT FOUND TO HAVE BEEN IN COMPLIANCE WITH THE AD. THE AIR TAXI COMPANY HAD TWO EMPLOYEES; AN OWNER/PRESIDENT/PILOT AND A DIRECTOR OF MAINTENANCE/MECHANIC. THE MECHANIC ACKNOWLEDGED HE FAILED TO FOLLOW THE CURRECT GUIDELINE IN THE CORRECT AD. AS A RESULT, THE IMPULSE COUPLING JAMMED WHEN THE FLYWEIGHT TO STOP PIN CLEARANCE BECAME ZERO. THIS ACTION SHEARED OFF TEETH ON THE ENGINE'S CRANKSHAFT GEAR & DOWEL PIN.

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		Brief of	f Accident (Continued)	
File No 24	69 10/16/88	SEDONA, AZ	A/C Reg. No. N4113R	Time (Lcl) - 1017 MST
Occurrence #1 Phase of Operation	LOSS OF ENGINE F CRUISE - NORMAL	POWER(TOTAL) - MECH I	AILURE/MALF	
		- NOT PERFORMED - CO	DMPANY MAINTENANCE PSNL	
Occurrence #2 Phase of Operation		ENC Y		
Finding(s) 3. TERRAIN CONDITI	ON - NONE SUITABLE			
Occurrence #3 Phase of Operation		SION WITH OBJECT		
Finding(s) 4. TERRAIN CONDITI	ON - TREE(S)			
Occurrence #4 Phase of Operation			FER	
Finding(s) 5. TERRAIN CONDITI	ON - HIDDEN OBSTRU	JCTION(S)		
Probable Cause				
The National Transpo is/are finding(s) 1		ard determines that <sup>.</sup>	the Probable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 3

Brief of Accident

Basic Information							
Type Operating Certificate-NONE (GENERA	L AVIATION) Aircraft	Damage		Injuries	•		
· · · · · ·	DESTROY		Fatal		inor	None	
Type of Operation -BUSINESS	Fire	Crew	1	0	0	0	
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0	
Accident Occurred During -DESCENT							
Aircraft Information							
Make/Model - BELL 47G2	Eng Make/Model - LYC	COMING VO-435-A1		Installed/Acti			
Landing Gear ~ SKID	Number Engines - 1			tall Warning S	ystem –	- NO	
Max Gross Wt - 2450	Engine Type - REC		FOR				
No. of Seats - 2	Rated Power -	285 HP					
Environment/Operations Information							
Weather Data	Itinerary		Airport	Proximity			
Wx Briefing - NO RECORD OF BRIEFING				RPORT/STRIP			
Method - N/A	SAME AS ACC/INC			···· · · · · · · · ·			
Completeness - N/A	Destination		Airport Data				
Basic Weather - VMC	SAME AS ACC/INC		•				
Wind Dir/Speed- 270/004 KTS			Runway	Ident - N/	A		
Visibility - 30.0 SM	ATC/Airspace		Runway	Lth/Wid - N/	Α		
Lowest Sky/Clouds - CLEAR	Type of Flight Plan -	NONE	Runway Surface - N/A Runway Status - N/A				
Lowest Ceiling - NONE	Type of Clearance -	NONE					
Obstructions to Vision- NONE	Type Apch/Lndg -	NONE					
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 37	Medical Certificate	e - EXPIR	ED			
Certificate(s)/Rating(s)	Biennial Flight Review	Fligh	t Time (H	ours)			
PRIVATE	Current - UNK/NR			Last 24 Hr	s -	0	
SE LAND, ME LAND	Months Since - UNK/NR	Make/Model- UN	<td>Last 30 Da</td> <td>ys-</td> <td>0</td>	Last 30 Da	ys-	0	
	Aircraft Type - UNK/NR	Instrument- UN	<td>Last 90 Da</td> <td>ys-</td> <td>0</td>	Last 90 Da	ys-	0	
		Multi-Eng - UNH	<td>Rotorcraft</td> <td></td> <td>0</td>	Rotorcraft		0	

----Narrative----

THE HELICOPTER HAD JUST HAD MAJOR MAINTENANCE AND THE MECHANIC WAS CONDUCTING ENGINE RUN-UPS. THE HELICOPTER INADVERTENTLY BECAME AIRBORNE AND ASCENDED TO 100 FT. THE HELICOPTER MADE TWO TURNS IN A SIDEWARD SKID AND DESCENDED TO TERRAIN IMPACT. THE HELICOPTER COLLIDED WITH ELECTRICAL CABLES DURING THE DESCENT. THERE WAS NO EVIDENCE OF A MECHANICAL FAILURE FOUND DURING THE INVESTIGATION.

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Brief	of	Accident	(Continued)
Driet	0T	Accident	(continueu)

11/03/88 PHOENIX,AZ	A/C Reg. No. N5163B	Time (Lcl) - 1600 MST
- NOT POSSIBLE - UNQUALIFIED PER	SON	
1C		
ESCENT - UNCONTROLLED		
	OSS OF CONTROL - IN FLIGHT TAKEOFF - INITIAL CLIMB - NOT POSSIBLE - UNQUALIFIED PER NN FLIGHT COLLISION WITH OBJECT DESCENT - UNCONTROLLED	OSS OF CONTROL - IN FLIGHT FAKEOFF - INITIAL CLIMB - NOT POSSIBLE - UNQUALIFIED PERSON IN FLIGHT COLLISION WITH OBJECT DESCENT - UNCONTROLLED FIC IN FLIGHT COLLISION WITH TERRAIN/WATER

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

-Basic Information Type Operating Certificate-NONE (GENERAL	AV(TATION) Airona	ft Damage			Tojun	inc	
Type operating centricate-none (General		ft Damage NYFD	Fa	tal	Injur Serious		n None
Type of Operation -PERSONAL	Fire	DYED (					
Flight Conducted Under -14 CFR 91	NONE	í	Dass	1 0	0	0	0
Accident Occurred During -DESCENT							
-Aircraft Information							
Make/Model - PIPER PA-28-180	Eng Make/Model - L'						
Landing Gear - TRICYCLE-FIXED				St	all Warnin	ng Syste	∋m - YES
Max Gross Wt - 2450	Engine Type - R		RBURETOR				
No. of Seats - 4	Rated Power -	180 HP					
-Environment/Operations Information							
Weather Data	Itinerary				roximity		
Wx Briefing - FSS Method - IN PERSON	Last Departure Poin	t	C	IFF AIR	PORT/STRIP	)	
	UKIAH,CA						
Completeness - UNK/NR Basic Weather - IMC	Destination	Airport Data					
Wind Dir/Speed- LIGHT AND VARIABLE	SANTA ROSA,CA				Ident -	N/A	
	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - N/A					Surface -		
Lowest Ceiling - 1000 FT BROKE					Status -		
Obstructions to Vision- NONE	Type Apch/Lndg			,		,	
Precipitation - DRIZZLE		~					
Condition of Light - DAYLIGHT							
-Personnel Information Pilot-In-Command	Age - 61	Medical Certi	ficato -			TVEDS /I	TMIT
Certificate(s)/Rating(s)	Biennial Flight Review		Flight Ti	me (Ho	MEDICAL WA	VIVER3/1	_ 1 14 1 1
PRIVATE	Giennial Flight Review Current - YES Months Since - 13 Aircraft Type - UNK/N	Total	- 915		last 24	Hrs -	UNK/NR
SELAND	Months Since - 13	Make/Mode	1- UNK/NR		Last 30	) Davs-	
	Aircraft Type - UNK/N	R Instrumen	t- 82		Last 90	) Davs-	UNK/NR
		Multi-Eng	- 7		Rotorcr	aft -	UNK/NR
		-					
Instrument Rating(s) - AIRPLANE							
-Narrative						_	
PLT ENCOUNTERED SPATIAL DISORIENTATION & L	ST CONTROL OF HIS ACET D	IRING CLIMB WHIL	Ε ΔΤΤΕΜΕ	TING	O REVERSE		
RSE IN COMPLIANCE WITH AN ATC CLEARANCE. IM							

MONTHS. THERAPEUTIC LEVELS OF DIAZEPAM WERE FOUND IN THE PLT'S LIVER.

#### Brief of Accident (Continued)

File No 24	08 4/03/88 UKIAH,CA	A/C Reg. No. N15847	Time (Lcl) - 1159 PDT
	LOSS OF CONTROL - IN FLIGH MANEUVERING - TURN TO REVE		
3. PHYSICAL IM	ON - CLOUDS ORIENTATION - PILOT IN COMMA PAIRMENT(DRUGS) - PILOT IN C ENT INSTRUMENT TIME - PILOT	OMMAND	· · · · · · · · · · · · · · · · · · ·
	AIRFRAME/COMPONENT/SYSTEM DESCENT - UNCONTROLLED	FAILURE/MALFUNCTION	
	SSIVE - PILOT IN COMMAND IMITS OF AIRCRAFT - EXCEEDED	) - PILOT IN COMMAND	
Probable Cause			
The National Transpo	rtation Safety Board determi	nes that the Probable Cause(s) of this ad	ccident

1

Factor(s) relating to this accident is/are finding(s) 4

is/are finding(s) 2,6

PAGE 15

Brief of Accident

Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION) Aircraft D DESTROYED	0	Fatal	Injur Serious	ies Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire NONE	Crew Pass	0 0	1 O	0 1	0 0
Aircraft Information Make/Model - CESSNA T210M Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 3800 No. of Seats - 6	Eng Make/Model - CONTI Number Engines - 1 Engine Type - RECIP Rated Power - 31	-FUEL INJECTED		nstalled/A all Warnin		
Environment/Operations Information Weather Data	Itinerary		Airport P			
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Point CATALINA,CA		OFF AIR	PORT/STRIP		
Completeness - N⁄A Basic Weather - VMC	Destination COMPTON,CA	Ļ	Airport Da	ta		
Wind Dir/Speed- CALM					N/A	
Visibility - 50.0 SM Lowest Sky/Clouds - CLEAR	ATC/Airspace Type of Flight Plan - N		,	Lth/Wid - Surface -	N/A	
Lowest Ceiling - NONE	Type of Clearance - N		,		N/A N/A	
Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Type Apch/Lndg - F		j		.,	
Personnel Information , Pilot-In-Command	Age - 45 Me	dical Certificate	e - VALID	MEDICAL-WA	TVERS/LIM	т 1
	Biennial Flight Review					
PRIVATE	-		802			1
SE LAND	Months Since - 4					20
	Aircraft Type - C-T210M	-		Last 90	Days-	24
SE LAND	Months Since - 4 Aircraft Type - C-T210M	Make/Model-	642 0	Last		30 Days- 90 Days-

Instrument Rating(s) - NONE

----Narrative----

A CESSNA T210M CRASHED INTO A RESIDENTIAL ROOF AFTER A LOSS OF ENG PWR, DURING CRUISE DESCENT TO ENTER ARPT TRAFFIC PATTERN. THE RIGHT WING FUEL TANK AND HEADER TANK WERE EMPTY. THE FUEL SELECTOR VALVE WAS FOUND WEDGED IN THE RIGHT TANK POSITION. FUEL STAINS WERE VISIBLE ON THE RIGHT WING EMANATING FROM SEVERAL FUEL TANK ACCESS PANELS. THE LEFT WING FUEL TANK HAD SUFFICIENT FUEL FOR THE PILOT TO REACH THE DESTINATION. THE EMERG PROCEDURE OUTLINED IN THE PILOT OPERATING HANDBOOK DIRECTS THE PILOT TO SWITCH TO THE FULLEST TANK. THE PILOT STATED WHEN HE REALIZED HE COULD NOT MAKE THE INTENDED FORCED LANDING AREA HE ATTEMPTED TO LAND IN A SCHOOL YARD. HE THEN OVERSHOT THE SCHOOL YARD. THE ACFT WAS CONFIGURED WITH THE LANDING GEAR DOWN AND THE FLAPS UP. EMERGENCY PROCEDURE RECOMMENDS 30 DEGS OF FLAPS FOR A FORCED LANDING.

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#### Brief of Accident (Continued)

File No 24	70 7/14/88 CARSON,CA	A/C Reg. No. N732QZ	Time (Lc1) - 1503 PDT
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER(TOTAL) - NON-MECH/ DESCENT	ANICAL	
Finding(s) 1. FUEL SYSTEM,TAN 2. EMERGENCY PRO 3. FLUID,FUEL - ST	CEDURE - NOT FOLLOWED - PILOT IN COMMAND ARVATION		
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGENCY		
Occurrence #3 Phaşe of Operation	IN FLIGHT COLLISION WITH OBJECT LANDING		
Finding(s) 4. TOUCHDOWN - MIS 5. OBJECT - RESIDE 6. OBJECT - WIRE,T			
Probable Cause			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3

Factor(s) relating to this accident is/are finding(s) 4

4

#### National Transportation Safety Board Washington, D.C. 20594

· · · ·	Brief	of Accident					
File No 2475 7/30/88 PERR	IS,CA	A/C Reg. No. N74	45F	T	ime (Lcl) -	1140 PDT	
Basic Information Type Operating Certificate-NONE (GENER, Type of Operation -POSITIONING Flight Conducted Under -14 CFR 91 Accident Occurred During -APPROACH	÷	Aircraft Damage DESTROYED Fire ON GROUND	Crew Pass	Fatal 2 0	Injur Serious O O		None 0 0
-Aircraft Information Make/Model - LEAR 23 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 12500 No. of Seats - 2	Number Eng	Model - GE CJ610-4 gines - 2 be - TURBOJET er - 2850 LBS TH	IRUST		[nstalled/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - FSS Method - TELEPHONE Completeness - FULL Basic Weather - VMC Wind Dir/Speed- 150/007 KTS Visibility - 10.0 SM Lowest Sky/Clouds - PART OBS Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Type of Cle	2		OFF AIF irport Da MARCH A Runway Runway Runway Runway	AFB Ident - Lth/Wid - Surface -	32 13300/ 3	300
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,ATP SE LAND,ME LAND	Age - 30 Biennial Flight F Current Months Since Aircraft Type	Review - UNK/NR Total - UNK/NR Make/M e - UNK/NR Instru		Time (Ho 300 /NR /NR	Last 24 Last 30 Last 90	WAIVERS/L Hrs - Days- UNP Days- UNP aft - UNP	1 K/NR K/NR
Instrument Rating(s) - AIRPLANE							

----Narrative----

AFTER LANDING AT THE AIRCRAFT'S MANUFACTURER FACILITY WITH AN ASYMMETRIC FUEL CONDITION AND AN INOPERATIVE YAW DAMPNER THE CREW ELECTED TO CONTINUE THE FLIGHT TO THEIR DESTINATION WITHOUT CORRECTING THE DEFICIENCIES. ENROUTE THE CAPTAIN INFORMED AIR TRAFFIC CONTROLLERS THAT HE HAD FUEL COMING FROM ONE TANK AND THAT HE DOUBTED THAT HAD FUEL AVAILABLE TO REACH HIS DESTINATION. THE CONTROLLER CLEARED THE AIRCRAFT TO LAND AT A NEARBY AIRPORT. AS THE AIRCRAFT TURNED ONTO THE FINAL APPROACH IT ROLLED INVERTED AND IMPACTED THE GROUND INVERTED.

#### Brief of Accident (Continued)

File No 24	75 7/30/88	PERRIS,CA	A/C Reg. No. N745F	Time (Lcl) - 1140 PDT
Occurrence #1 Phase of Operation			BASE TO FINAL	
Finding(s) 1. AUTOPILOT/FLIGH 2. OPERATION WIT 3. FUEL SYSTEM,TRA	H KNOWN DEFICIENCI	ES IN EQUIPMENT - A	ATTEMPTED - PILOT IN COMMAND	
Occurrence #2 Phase of Operation		•		
Probable Cause		· · · ·		
The National Transpo is/are finding(s) 2	rtation Safety Boa	rd determines that	the Probable Cause(s) of this acci	dent

Factor(s) relating to this accident is/are finding(s) 1,3

Brief of Accident

Type of Operation-PERSONALFlight Conducted Under-14 CFR 91Accident Dccurred During-MANEUVERINGAircraft InformationMake/ModelMake/Model- CESSNA 414ALanding Gear- TRICYCLE-RETRACTABLEMax Gross Wt- 6500Max Gross Wt- 6500No. of Seats- UNK/NREnvironment/Operations InformationWeather DataItineraryWx Briefing- NO RECORD OF BRIEFINGMethod- N/ACompleteness- N/ABasic Weather- VMCVisibility- 50.0SMATC/AirspaceLowest Sky/Clouds- 3000 FTUbstructions to Vision-NONEType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation- NONECondition of Light- DAYLIGHT	el - CON es - 2 - REC - - e Point A t Plan - ance -	ED ND TINENTAL IP-FUEL 340 HP	Crew Pass TSIO-520-N INJECTED	B ELT Airport OFF A irport ( Runwa Runwa	O O Installed/ Stall Warnin Proximity IRPORT/STRI	O O Activated ng System P - N/A - N/A	- YES/NO
Flight Conducted Under -14 CFR 91 Accident Occurred During -MANEUVERING Aircraft Information Make/Model - CESSNA 414A Eng Make/Mod Landing Gear - TRICYCLE-RETRACTABLE Number Engin Max Gross Wt - 6500 Engine Type No. of Seats - UNK/NR Rated Power Environment/Operations Information Weather Data Itinerary Wx Briefing - NO RECORD OF BRIEFING Last Departur Method - N/A Destination Basic Weather - VMC SAN DIEGO,C Wind Dir/Speed- 360/005 KTS Visibility - 50.0 SM ATC/Airspace Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - NONE Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT	ON GROUN el - CON es - 2 - REC  e Point A t Plan - ance -	TINENTAL IP-FUEL 340 HP	Pass TSIO-520-N INJECTED	O B ELT Airport OFF A irport ( Runwa Runwa	O Installed/ Stall Warnin Proximity IRPORT/STRI Data / Ident / Lth/Wid	O Activated ng System P - N/A - N/A	0  - YES/NO
Accident Occurred During -MANEUVERINGAircraft Information Make/Model - CESSNA 414A,Eng Make/Mod Landing Gear - TRICYCLE-RETRACTABLE Number Engin Max Gross Wt - 6500 Max Gross Wt - 6500 Max Gross Wt - 6500 No. of Seats - UNK/NR Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A BisHOP,CA Destination Basic Weather - VMC Wind Dir/Speed- 360/005 KTS Visibility - 50.0 SM Lowest Sky/Clouds - 3000 FT Destructions to Vision- NONE Condition of Light - DAYLIGHTItinerary Englishing Last Departur Basic Weather - VMC SAN DIEGO,C Type of Clear Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT	el - CON es - 2 - REC  e Point A t Plan - ance -	TINENTAL IP-FUEL 340 HP	. TSIO-52O-N INJECTED	B ELT Airport OFF A irport ( Runwa Runwa	Installed/ Stall Warnin Proximity (RPORT/STRI Data / Ident / Lth/Wid	Activated ng System  P - N/A - N/A	- YES/NO
Aircraft Information Make/Model - CESSNA 414A, Eng Make/Mod Landing Gear - TRICYCLE-RETRACTABLE Number Engin Max Gross Wt - 6500 Engine Type No. of Seats - UNK/NR Rated Power Environment/Operations Information Weather Data Itinerary Wx Briefing - NO RECORD OF BRIEFING Last Departur Method - N/A BISHOP,CA Completeness - N/A Destination Basic Weather - VMC SAN DIEGO,C Wind Dir/Speed- 360/005 KTS Visibility - 50.0 SM ATC/Airspace Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - 3000 FT BROKEN Type of Clear Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE	el - CON es - 2 - REC - - e Point A t Plan - ance -	TINENTAL IP-FUEL 340 HP	- TSIO-52O-N INJECTED	B ELT Airport OFF A irport ( Runwa Runwa	Installed/ Stall Warnin Proximity IRPORT/STRI Data / Ident / Lth/Wid	Activated ng System  P - N/A - N/A	- YES/NO
Make/Model- CESSNA 414A,Eng Make/ModLanding GearTRICYCLE-RETRACTABLENumber EnginMax Gross Wt- 6500Engine TypeNo. of Seats- UNK/NRRated PowerEnvironment/Operations InformationItineraryWeather DataItineraryWethod- N/ABISHOP,CACompleteness- N/ADestinationBasic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSType of FlighLowest Sky/Clouds- 3000 FTType of FlighLowest Ceiling- 3000 FT BROKENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation- NONEType Apch/Lnd	es - 2 - REC - - e Point A t Plan - ance -	IP-FUEL 340 HP	INJECTED	Airport OFF A irport ( Runway Runway	Stall Warnin Proximity (RPORT/STRI Data / Ident / Lth/Wid	ng System  P - N/A - N/A	
Landing GearTRICYCLE-RETRACTABLENumber EnginMax Gross Wt6500Engine TypeNo. of SeatsUNK/NRRated PowerEnvironment/Operations InformationItineraryWeather DataItineraryWx BriefingNO RECORD OF BRIEFINGLast DeparturMethodN/ABISHOP,CACompletenessN/ADestinationBasic WeatherVMCSAN DIEGO,CWind Dir/Speed-360/005 KTSType of FlighLowest Sky/Clouds3000 FTType of FlighLowest Ceiling-3000 FT BROKENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation-NONEType Apch/Lnd	es - 2 - REC - - e Point A t Plan - ance -	IP-FUEL 340 HP	INJECTED	Airport OFF A irport ( Runway Runway	Stall Warnin Proximity (RPORT/STRI Data / Ident / Lth/Wid	ng System  P - N/A - N/A	
Max Gross Wt-6500Engine Type Rated PowerNo. of Seats-UNK/NRRated PowerEnvironment/Operations Information Weather DataItinerary Last Departur BISHOP,CAWx Briefing-NO RECORD OF BRIEFING CompletenessLast Departur BISHOP,CABasic Weather-N/ADestinationBasic Weather-VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSType of Fligh Lowest Sky/Clouds-Aust Ceiling-3000 FTType of Fligh Type of ClearObstructions to Vision-NONEType Apch/Lnd Precipitation-NONE Condition of Light-DAYLIGHT	- REC - - e Point A t Plan - ance -	IP-FUEL 340 HP 	INJECTED	Airport OFF A irport ( Runway Runway	Proximity IRPORT/STRI Data / Ident / Lth/Wid	- N/A - N/A - N/A	- YES
No. of Seats - UNK/NRRated PowerEnvironment/Operations Information Weather DataItineraryWx Briefing - NO RECORD OF BRIEFING Method - N/ALast Departur BISHOP,CACompleteness - N/ADestinationBasic Weather - VMCSAN DIEGO,CWind Dir/Speed- 360/005 KTS Visibility - 50.0 SMATC/Airspace Type of Fligh Lowest Sky/Clouds - 3000 FTDestructions to Vision- NONEType of Clear Type Apch/Lnd Precipitation - NONE	- e Point A t Plan - ance -	340 HP 		OFF A irport ( Runway Runway	IRPORT/STŔI Data / Ident / Lth/Wid	- N/A - N/A	
Environment/Operations Information Weather Data Itinerary Wx Briefing - NO RECORD OF BRIEFING Last Departur Method - N/A Destination Basic Weather - VMC SAN DIEGO,C Wind Dir/Speed- 360/005 KTS Visibility - 50.0 SM ATC/Airspace Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - 3000 FT BROKEN Type of Clear Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE	e Point A t Plan - ance -			OFF A irport ( Runway Runway	IRPORT/STŔI Data / Ident / Lth/Wid	- N/A - N/A	
Weather DataItineraryWx Briefing- NO RECORD OF BRIEFINGLast Departur BISHOP,CAMethod- N/ADestinationCompleteness- N/ADestinationBasic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSVisibilityVisibility- 50.0SMATC/AirspaceLowest Sky/Clouds- 3000 FTType of FlighLowest Ceiling- 3000 FT BROKENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation- NONECondition of Light	A t Plan - ance -	NONE		OFF A irport ( Runway Runway	IRPORT/STŔI Data / Ident / Lth/Wid	- N/A - N/A	
Wx Briefing- NO RECORD OF BRIEFINGLast Departur BISHOP,CAMethod- N/ABISHOP,CACompleteness- N/ADestinationBasic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSSAN DIEGO,CVisibility- 50.0 SMATC/AirspaceLowest Sky/Clouds- 3000 FTType of FlighLowest Ceiling- 3000 FT BR0KENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation- NONECondition of Light	A t Plan - ance -	NONE		OFF A irport ( Runway Runway	IRPORT/STŔI Data / Ident / Lth/Wid	- N/A - N/A	
Method- N/ABISHOP,CACompleteness- N/ADestinationBasic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSSAN DIEGO,CWind Dir/Speed-360/005 KTSATC/AirspaceLowest Sky/Clouds-3000 FTType of FlighLowest Ceiling-3000 FT BR0KENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation-NONEType Apch/LndCondition of Light-DAYLIGHT	A t Plan - ance -	NONE	۵	irport ( Runway Runway	Data / Ident / Lth/Wid	- N/A - N/A	
CompletenessN/ADestinationBasic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSSAN DIEGO,CVisibility- 50.0 SMATC/AirspaceLowest Sky/Clouds- 3000 FTType of FlighLowest Ceiling- 3000 FT BROKENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation- NONEType Apch/LndCondition of Light- DAYLIGHT-	t Plan - ance -	NONE	Α	Runwa Runwa	/ Ident / Lth/Wid	- N/A	
Basic Weather- VMCSAN DIEGO,CWind Dir/Speed-360/005 KTSATC/AirspaceVisibility-50.0 SMATC/AirspaceLowest Sky/Clouds-3000 FTType of FlighLowest Ceiling-3000 FT BROKENType of ClearObstructions to Vision-NONEType Apch/LndPrecipitation-NONEType Apch/LndCondition of Light-DAYLIGHT	t Plan - ance -	NONE	A	Runwa Runwa	/ Ident / Lth/Wid	- N/A	
Wind Dir/Speed- 360/005 KTS Visibility - 50.0 SM ATC/Airspace Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - 3000 FT BROKEN Type of Clear Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT	t Plan - ance -	NONE		Runwa	/ Lth/Wid	- N/A	
Visibility - 50.0 SM ATC/Airspace Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - 3000 FT BROKEN Type of Clear Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT		NONE		Runwa	/ Lth/Wid	- N/A	
Lowest Sky/Clouds - 3000 FT Type of Fligh Lowest Ceiling - 3000 FT BROKEN Type of Clear Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT		NONE					
Obstructions to Vision- NONE Type Apch/Lnd Precipitation - NONE Condition of Light - DAYLIGHT							
Precipitation - NONE Condition of Light - DAYLIGHT	ig -	NONE		Runwa	/ Status	- N/A	
Condition of Light - DAYLIGHT		NONE					
Condition of Light - DAYLIGHT							
Personnel Information							
		Medical	Certificate			AIVERS/LI	TIN
Certificate(s)/Rating(s) Biennial Flight Rev	UNK/NR	Tata	Flight al - 3	Time (I		4 1100 - 11	
COMMERCIAL Current - SE LAND_ME_LAND Months Since -		Iota	e/Model-UNK				
		Inst	trumente UNK		Last 9	0 Days- U	
Aircraft Type -		Mult	ti-Ena - UNK	/NR	Rotorc	raft - U	
				.,			,
Instrument Rating(s) - AIRPLANE							
Narrative PILOT-OWNER DECIDED TO OVERFLY A GLACIER WHICH WAS LOCATED IN							

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ROCKY 40 DEGREE UPSLOPING TERRAIN WHEREUPON IT BURNED.

File No 2447 7/31/88 BIG PINE,CA	A/C Reg. No. N414YV	Time (Lcl) - 1217 PDT
Occurrence #1 LOSS OF CONTROL - IN FLIGHT Phase of Operation MANEUVERING - TURN TO REVERSE DIRECTION		
Finding(s) 1. TERRAIN CONDITION - BOX CANYON 2. TERRAIN CONDITION - HIGH TERRAIN 3. REMEDIAL ACTION - DELAYED - PILOT IN COMMAND 4. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND		
Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation DESCENT - UNCONTROLLED		
Finding(s) 5. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND 6. STALL - INADVERTENT - PILOT IN COMMAND		
Probable Cause		
The National Transportation Safety Board determines that the Pr	obable Cause(s) of this accide	ent

is/are finding(s) 3,5,6

Factor(s) relating to this accident is/are finding(s) 4

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asic Information~ Type Operating Certificate-NONE (GENE	RAL AVIATION) A	rcraft Damage			Inju	ries	
	,	ESTROYED		Fatal	Serious	Minor	None
Type of Operation -PERSONAL	Fi	re	Crew	0	1	0	0
Flight Conducted Under -14 CFR 91	Ν	IONE	Pass	0	3	2	0
Accident Occurred During -LANDING							
ircraft Information							
Make/Model - BEECH A36TC		- CONTINENTAL	TSI0-520-				
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines			S	itall Warni	ng System	- YES
Max Gross Wt - 3650		- RECIP-FUEL	INJECTED				
No. of Seats - 6	Rated Power						
nvironment/Operations Information							
eather Data	Itinerary				Proximity		
Wx Briefing - NO RECORD OF BRIEFIN		Point		OFF AI	RPORT/STRI	Р	
Method - N/A	CHESTER, CA						
Completeness - N/A	Destination			Airport D			
Basic Weather - VMC	CONCORD, CA			PARADI			
Wind Dir/Speed- 190/008 KTS					Ident		
Visibility - 25.0 SM	ATC/Airspace				Lth/Wid		80
Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE	Type of Flight				Surface		
Obstructions to Vision- NONE	Type of Clearar Type Apch/Lndg			Runway	Status	- DRY	
Precipitation - NONE	Type Apch/ Lindg	- FURCED	LANDING				
Condition of Light - DAYLIGHT							
ersonnel Information							
Pilot-In-Command	Age - 51	Medical	Certificat	e - VALIC	MEDICAL-N	O WAIVERS	/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Revie	W	Fligh	nt Time (⊦	lours)		
PRIVATE	Cunnont - N	10 Toto	1	510	Last 2	4 Hrs -	1
SE LAND	Months Since - 2 Aircraft Type - 0	7 Make	/Model-	89	Last 3	0 Days-	
	Aircraft Type - C				Last 9	0 Days-	58
		Mult	i-Eng -	10			
Instrument Rating(s) - NONE							

PROCEDURE TRAINING AND BIENNIAL FLIGHT REVIEW. POST ACCIDENT INSPECTION REVEALED THE FUEL INLET FITTING WAS PARTIALLY BLOCKED BY A MASS OF "SLUDGE"; HOWEVER, THE BYPASS FITTING WAS UNRESTRICTED. NO OTHER FAILURE/MALFUNCTION WITH EITHER THE ENG OR ACFT WAS NOTED.

Brief	of	Accident	(Continued)

File No 247	8 8/21/88	PARADISE,CA	A/C Reg. No. N1830R	Time (Lcl) - 1704 PDT
Occurrence #1 Phase of Operation	-	DWER		
	EDURE - NOT PERFO	RMED - PILOT IN COMM PROCEDURE(S)) - PIL		
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGE	NCY		
inding(s) 5. GEAR EXTENSION - 6. PROPER GLIDEPATH				
Occurrence #3 Phase of Operation			FER	
inding(s) 7. TERRAIN CONDITIC 8. TERRAIN CONDITIC 9. UNSUITABLE TER	N - MOUNTAINOUS/H	ILLY D - PILOT IN COMMANE	)	
Probable Cause				
he National Transpor s/are finding(s) 1,		rd determines that t	the Probable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 4,5,6,7,8

File No 2487 9/07/88 CAMAI	RILLO,CA A/C	Reg. No. N8743W	Т	Time (Lcl) - 2125 PDT			
Basic Information Type Operating Certificate-NONE (GENER/		aft Damage ROYED	Fatal	Injur Serious	ies Minor	None	
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire	Cree ROUND Pas	w 1	00	0 0	0	
Aircraft Information Make/Model - PIPER PA-28-235 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2900 No. of Seats - 4	Number Engines - Engine Type -	LYCOMING 0-540-B4B5 1 RECIPROCATING-CARBU 235 HP	S	Installed/4 tall Warnir			
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - IMC Wind Dir/Speed- 280/005 KTS Visibility - 15.0 SM Lowest Sky/Clouds - 15000 FT SCA Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - NIGHT(DARK)	CAMARILLO,CA Destination ELK GROVE,CA ATC/Airspace	n - NONE - NONE	OFF AI Airport D Runway Runway Runway	Ident - Lth/Wid - Surface -	- N/A - N/A - N/A - N/A - N/A		
Personnel Information ' Pilot-In-Command Certificate(s)/Rating(s)	Age - 32 Biennial Flight Review		ate - VALID ght Time (H		) WAIVERS/	'LIMIT	
PRIVATE SE LAND	Current - YES Months Since - 1	Total - Make/Model-				3 15	
JE EAND	Aircraft Type - PA-2	•	0	Last 90		39	

Instrument Rating(s) - NONE

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----Narrative----

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THE ACFT LANDED AT NIGHT WITH KNOWN ELECTRICAL DEFICIENCY. WITNESSES INDICATED THE PLT STATED HE HAD AN ELECTRICAL PROBLEM, HAD TO HAND PROP THE ENG TO START IT AND HAD TO USE A FLASHLIGHT TO SEE THE INSTRUMENTS. THE PLT ELECTED TO FLY HOME DURING THE HOURS OF DARKNESS RATHER THAN FIX ELECTRICAL SYSTEM. THE WX AT THE AIRPORT WAS IMC DUE TO FOG. THE PLT WAS NOT INSTRUMENT RATED. THE ACFT CRASHED ABOUT ONE MINUTE AFTER TAKEOFF. THE WRECKAGE DISTRIBUTION WAS INDICATIVE OF A SPIRAL.

	9/0//88	CAMARILLO,CA	A/C Reg. No. N8743W	Time (Lcl) - 2125 PDT
ccurrence #1 I hase of Operation				
<ol> <li>OVER CONFIDENCE</li> <li>LIGHT CONDITION -</li> <li>WEATHER CONDITION</li> </ol>	OWN DEFICIENCIES CE IN PERSONAL AE DARK NIGHT - FOG - NOT MAINTAINE	IN EQUIPMENT - PERFO ILITY - PILOT IN COM D - PILOT IN COMMAND		
ccurrence #2 ] hase of Operation [		OLLED	R	

is/are finding(s) 2,6

Factor(s) relating to this accident is/are finding(s) 1,3,4,5,7

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information Type Operating Certificate-NONE (GENERA		aft Damage			Injur	ies	
Type operating certhicate None (denera		ROYED		Fatal			None
Type of Operation -PERSONAL	Fire		Crew		1	0	0
Flight Conducted Under -14 CFR 91	NONE		Pass	2	0	0	0
Accident Occurred During -DESCENT							
Aircraft Information							
Make/Model - PIPER PA-28-140	Eng Make/Model -		E 3D		installed/A		
Landing Gear - TRICYCLE-FIXED	Number Engines -				all Warnin	g System	- YES
Max Gross Wt - 2150	Engine Type -		ARBURET	OR			
No. of Seats - 4	Rated Power -	150 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport P			
Wx Briefing - UNK/NR	Last Departure Poi	nt		OFF AIR	PORT/STRIP		
Method - UNK/NR	BIG BEAR,CA						
Completeness - WEATHER NOT PERTINENT			A	linport Da			
Basic Weather - VMC	LONG BEACH,CA				RCITY	07	
Wind Dir/Speed- 050/010 KTS Visibility - 50.0 SM	ATC/Airspace				Ident - Lth/Wid -	07	75
Lowest Sky/Clouds - CLEAR	Type of Flight Pla				Surface -		/5
Lowest Ceiling - NONE	Type of Clearance					N/A N/A	
Obstructions to Vision- NONE	Type Apch/Lndg			Kunway	Status	IN/ A	
Precipitation - NONE	Type Apen/Endg	NONE					
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 32	Medical Cert	ificate	e - VALID	MEDICAL-WA	IVERS/LI	MIT
Certificate(s)/Rating(s)	Biennial Flight Review		Flight	t Time (Ho	ours)		
PRIVATE	Current - YES	Total	-	93	Last 24	Hrs -	4
SE LAND	Current - YES Months Since - 14 Aircraft Type - PA-2	Make/Mod	el-	56	Last 30 Last 90 Rotorcr	Days-	5
	Aircraft Type - PA-2	8 Instrume	nt-	2	Last 90	Days-	6
		Multi-En	g -	2	Rotorcr	aft - U	NK/NR
Instrument Rating(s) - NONE							
Narrative NIGHT BEFORE THE ACCIDENT THE PLT & 2 PAX						. –	

DEPART FM THE BIG BEAR ARPT HE LEFT THE MIXTURE CONTROL IN THE FULL RICH POSITION. AS THE ACFT TRANSITIONED OUT OF GROUND EFFECT IT STALLED. THE PLT HELD THE YOKE AFT AS THE ACFT ENTERED AN UNCONTROLLED DESCENT & CRASHED 1880 FT BEYOND THE RUNWAY'S END. THE FRONT RIGHT SEATED PAX VIDEO TAPED THE ACCIDENT FLIGHT. THE 93-HR TOTAL TIME PLT HAD 33-HRS IN MAKE & MODEL ACFT. NO EVIDENCE WAS FOUND OF HIM HAVING RECEIVED DUAL INSTRUCTION IN HIGH DENSITY ALTITUDE TAKEOFFS. THE DA WAS IN EXCESS OF 8500 FT. THE ACFT'S CERTIFICATED MAX GROSS WEIGHT WAS EXCEEDED. A BOX CONTAINING MARIJUANA WAS FOUND IN THE ACFT WRECKAGE. TOX RESULTS CONFIRMED MARIJUANA IN THE PLT'S BLOOD & IN THE CAMERMAN/PAX'S URINE.

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Occurrence #1 LOSS OF CONTR Phase of Operation TAKEOFF - INI Finding(s)			
Finding(s)			
<ol> <li>WEATHER CONDITION - HIGH DENSI</li> <li>AIRCRAFT WEIGHT AND BALANCE</li> <li>OVER CONFIDENCE IN AIRCRAF</li> <li>MIXTURE - IMPROPER - PILOT IN</li> <li>LACK OF TOTAL EXPERIENCE I</li> <li>AIRSPEED - NOT MAINTAINED - PI</li> <li>STALL/MUSH - INADVERTENT - PIL</li> <li>REMEDIAL ACTION - IMPROPER - P</li> <li>PHYSICAL IMPAIRMENT(DRUGS)</li> <li>PHYSICAL IMPAIRMENT(DRUGS)</li> </ol>	- EXCEEDED - PILOT IN CO T'S ABILITY - PILOT IN C COMMAND N TYPE OPERATION - PILOT LOT IN COMMAND OT IN COMMAND ILOT IN COMMAND - PILOT IN COMMAND	OMMAND	
I Occurrence #2 Phase of Operation Finding(s) 11. TERRAIN CONDITION - OPEN FIELD	ONTROLLED	R	

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 6

Factor(s) relating to this accident is/are finding(s) 1,2,4,5,8,9

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Basic Information Type Operating Certificate-ON-DEMAND		aft Damage		Injur	ina	
	HELICOPTER INC. SUBS		Fatal			None
Type of Operation -NON SCHED,		Cre		0	0	1
Flight Conducted Under -14 CFR 135	IN F	LIGHT Pas	·· •	õ	õ	2
Accident Occurred During -LANDING			•	Ū	Ū	-
Aircraft Information						
Make/Model - BELL 206L-1		ALLISON 250 C-28	ELT	Installed/A	ctivated	- YES/NC
Landing Gear - TRICYCLE-FIXED	Number Engines -		S	tall Warning	g System	- NO
Max Gross Wt - 4150	Engine Type -					
No. of Seats - 7	Rated Power -	500 HP				
Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - COMPANY	Last Departure Poi			PORT		
Method - IN PERSON	PLATFORM HONDO, C	CA CONTRACT				
Completeness - FULL Basic Weather - VMC	Destination		Airport Da			
Wind Dir/Speed- 150/008 KTS	SANTA BARBARA,CA	BARA, CA		BARBARA CO.	UNK/NR	
Visibility - 20.0 SM	ATC/Airspace			Ident - Lth/Wid -		
Lowest Sky/Clouds - CLEAR	Type of Flight Pla	D - COMPANY (VEP)			ASPHALT	
Lowest Ceiling - NONE	Type of Clearance				DRY	
Obstructions to Vision- NONE	Type Apch/Lndg	- STRAIGHT-IN	Ranway	514145	DICI	
Precipitation - NONE	type Apelly Energy	FULL STOP				
Condition of Light - DAYLIGHT		FORCED LANDING				
Personnel Information ·						
Pilot-In-Command	Age - 32	Medical Certific			WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review		ght Time (Ho			
PRIVATE, COMMERCIAL	Current - YES		4485	Last 24		1
SE LAND	Months Since - UNK/					38
HELICOPTER	Aircraft Type - PA-2					89
		Multi-Eng -	UNK/NR	Rotorcra	aft -	4332

THE PLT REPORTED THE ENGINE FAILED AT 25-30 FEET AGL DURING FINAL APCH. THE PLT INITIATED AN AUTOROTATION TO THE ASPHALT SURFACE OF THE HELICOPTER PARKING RAMP. STEEL PLATES WERE PLACED ON THE PARKING SPOTS TO PREVENT RAMP EROSION. THE LEFT FRONT SKID TUBE COLLIDED WITH ONE OF THE STEEL PLATES, FRACTURING THE FRONT CROSS TUBE. THE NOSE OF THE HELICOPTER PITCHED DOWN AND THE MAIN ROTOR DISC FLEXED, SEVERING THE TAIL BOOM AFT OF THE HORIZONTAL STABILIZER. EXAM OF THE ENGINE REVEALED THE NO. 1 TURBINE WHEEL FAILED AS A RESULT OF PREVIOUS CYCLES OF HIGH TEMP (2300 DEG F).

File No 249	9/29/88	SANTA BARBARA,CA	A/C Reg. No. N2246Q	Time (Lc1) - 1140 PDT
		OWER(TOTAL) - MECH FAI ATTERN - FINAL APPROAG		
		RBINE - FAILURE,TOTAL RBINE - PREVIOUS DAMAG	GE	
Occurrence #2 Phase of Operation		NCY		
Finding(s) 3. AUTOROTATION - 1	NITIATED - PILOT	IN COMMAND		
Occurrence #3 Phase of Operation				
Finding(s) 4. AIRPORT FACILIT 5. LANDING GEAR,SKI				
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

Factor(s) relating to this accident is/are finding(s) 3,4,5

File No 2411 10/06/88 SALINAS	,CA A/C Re	g. No. N1787R	Time (Lcl) - 1808 PDT			
Basic Information Type Operating Certificate-NONE (GENERAL /	AVIATION) Aircraft	Damage		Injur	ies	
	DESTROY		Fatal	Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew	1	0	0	0
Flight Conducted Under -14 CFR 91	NONE		0	ō	õ	Ō
Accident Occurred During -APPROACH						
Aircraft Information						
Make/Model - CESSNA 182R	Eng Make/Model - LYC	OMING 0-540-J3C5D	ELT	Installed/A	ctivated	- YES/YE
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1		S	tall Warnin	g System	- YES
Max Gross Wt - 3100	Engine Type - REC	IPROCATING-CARBURE	TOR			
No. of Seats - 4	Rated Power -	235 HP				
Environment/Operations Information						
Weather Data	Itinerary		Airport	Proximity		
Wx Briefing - FSS	Last Departure Point			RPORT/STRIP		
Method - TELEPHONE	FRESNO,CA					
Completeness - PARTIAL,LMTD BY PILOT	Destination		Airport D	ata		
Basic Weather - IMC	WATSONVILLE, CA			S MUN.		
Wind Dir/Speed- 300/007 KTS			Runwav	Ident -	N/A	
Visibility - 20.0 SM	ATC/Airspace				N/A	
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan -	IFR	Runwav	Surface -	N/A	
Lowest Ceiling - 1800 FT OVERCA	ST Type of Clearance -	IFR			N/A	
Obstructions to Vision- NONE	Type Apch/Lndg -	ILS-COMPLETE	-			
Precipitation - NONE						
Condition of Light - NIGHT(DARK)						
	ge - 70	Medical Certificat		MEDICAL -WA	TVERS/ITM	тт
	iennial Flight Review		t Time (H		I TERO/ LIM	<b>•</b> 1
PRIVATE	Current - YES	Total -			Hrs - UN	
SE LAND, ME LAND	Months Since - 3			Last 30	Days- UN	
SE LAND, ME LAND	Aircraft Type - C-182	Instrument- UN	<td>Last 90</td> <td>Days UN</td> <td></td>	Last 90	Days UN	
		Multi-Eng - UN		2451 50	aft - UN	

Instrument Rating(s) - AIRPLANE

----Narrative----

AFTER RECEIVING A LIMITED WEATHER BRIEFING THAT REPORTED AN OVERCAST SKY AT 1,500 FEET AGL AT HIS DESTINATION, THE PILOT TOOKOFF WITHOUT FILING A FLIGHT PLAN. UPON ARRIVING AT HIS DESTINATION, ABOVE THE WEATHER, THE PILOT REQUESTED AND RECEIVED AN ILS APPROACH TO THE AIRPORT. AFTER PASSING THE INITIAL APPROACH FIX AND DESCENDING TO 2,200 FEET MSL OUTSIDE THE OUTER MARKER, THE PILOT INFORMED THE AIR TRAFFIC CONTROLLER THAT HE WAS EXECUTING A MISSED APPROACH. THIS WAS THE LAST COMMUNICATION WITH THE AIRCRAFT. APPROXIMATELY ONE MINUTE AND THIRTY FIVE SECONDS LATER THE CONTROLLER HEARD AN ELT SIGNAL. THE AIRCRAFT'S WRECKAGE WAS FOUND AT 0700 HOURS PDT ON OCTOBER 7, 1988, BY A GROUND SEARCH PARTY. THE WRECKAGE WAS AT AN ELEVATION OF 2,350 FEET, ON THE SIDE OF A 3,560 FOOT HIGH MOUNTAIN, ABOUT 7 MILES SOUTH OF THE ILS APPROACH COURSE. ANOTHER PILOT WHO WAS AIRBORNE IN THE AREA ABOUT 30 MINUTES AFTER THE ACCIDENT PILOT REPORTED HIS MISSED APPROACH STATED THAT THE CLOUD TOPS WERE AT 2,400 FEET.

File No 24	11 10/06/88	SALINAS,CA	A/C Reg. No. N1787R	Time (Lcl) - 1808 PDT	
Occurrence #1 Phase of Operation	IN FLIGHT COLLIS APPROACH - MISSE	ION WITH TERRAIN/WAT D APPROACH (IFR)	ER		
Finding(s) 1. WEATHER CONDITIC 2. MISSED APPROAC 3. TERRAIN CONDITIC	CH - NOT FOLLOWED	- PILOT IN COMMAND ILLY			
Probable Cause					

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 1,3

	ERAL AVIATION) Aircraft	Damage	Injur	ies	
Type of Openation	DESTROYE		al Serious		None
Type of Operation -PERSONAL	Fire	Crew	1 O 1 O	0	0
Flight Conducted Under -14 CFR 91	ON GROUN	D Pass	1 0	0	0
Accident Occurred During -DESCENT					
Aircraft Information					
Make/Model - CESSNA 172P	Eng Make/Model - LYCO		ELT Installed/A		
Landing Gear - TRICYCLE-FIXED	Number Engines - 1		Stall Warnin	g System -	YES
Max Gross Wt - 2150	Engine Type - RECI				
No. of Seats - 4	Rated Power - 1	60 HP			
Environment/Operations Information					
Weather Data	Itinerary		ort Proximity		
Wx Briefing - FSS	Last Departure Point	OF	F AIRPORT/STRIP		
Method - TELEPHONE	HAYWARD, CA				
Completeness - FULL	Destination	Airpo	ort Data		
Basic Weather - VMC	LOCAL	_	. <del>.</del>		
Wind Dir/Speed- CALM				N/A	
Visibility - 10.0 SM Lowest Sky/Clouds - 1500 FT S	ATC/Airspace		nway Lth/Wid - nway Surface -	N/A N/A	
Lowest Ceiling - NONE	Type of Clearance -			N/A N/A	
Obstructions to Vision- NONE	Type Apch/Lndg -		niway status	N/ A	
Precipitation - NONE	Type Apen/Endg	NONE			
Condition of Light - NIGHT(DARK	)				
		odical Contificato - L	INK/NR		
Personnel Information Pilot-In-Command	Age - 35 M				
	Age - 35 M Biennial Flight Review	Fliaht Tim	ne (Hours)		
Pilot-In-Command	Biennial Flight Review	Flight Tim Total - 155	Last 24	Hrs - UNK/	'NR
Pilot-In-Command Certificate(s)/Rating(s)	Age - 35 M Biennial Flight Review Current - UNK/NR Months Since - UNK/NR	Flight Tim Total - 155 Make/Model- UNK/NR	Last 24 Last 30	Hrs - UNK/ Days- UNK/	
Pilot-In-Command Certificate(s)/Rating(s) PRIVATE	Biennial Flight Review Current - UNK/NR	Flight Tim Total - 155 Make/Model- UNK/NR	Last 24 Last 30		'NR
Pilot-In-Command Certificate(s)/Rating(s) PRIVATE	Biennial Flight Review Current - UNK/NR Months Since - UNK/NR	Flight Tim Total - 155	Last 24 Last 30	Days- UNK/	'NR 'NR

GROUND. FOG WAS REPORTED IN THE VICINITY BY THE WITNESSES. IMPACT FORCES AND POST-CRASH FIRE DESTROYED THE AIRCRAFT.

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File No 24	09 10/19/88 UNION CITY,CA	A/C Reg. No. N52222	Time (Lc1) - 0614 PDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL - IN FLIGHT MANEUVERING		
3. SPATIAL DIS 4. WEATHER CONDITI 5. WEATHER EVALU	TO IMC - INADVERTENT - PILOT IN COMMAND ORIENTATION - PILOT IN COMMAND	)	
	IN FLIGHT COLLISION WITH TERRAIN/WATER DESCENT - UNCONTROLLED	2	
Probable Cause			
The National Transpo is/are finding(s) 2	rtation Safety Board determines that the ,3	e Probable Cause(s) of this accide	nt

Factor(s) relating to this accident is/are finding(s) 1,4,5,6

File No 2494 10/19/88 PASO ROBLES	,CA A/C Reg. No. M			ime (Lcl) -		
-Basic Information Type Operating Certificate-ON-DEMAND AIR TAXI	Aircraft Damage DESTROYED		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -APPROACH	Fire NONE	Crew Pass	1 0	0	0 0	0 0
-Aircraft Information Make/Model - CESSNA TR-182 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 3100 No. of Seats - 4	<b>o</b> ,		S	Installed/A tall Warnir		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	tinerary Last Departure Point VISALIA,CA Destination			Proximity RPORT/STRIP	,	
Completeness - N/A Basic Weather - IMC Wind Dir/Speed- 360/003 KTS Visibility250 SM A Lowest Sky/Clouds - PART OBS Lowest Ceiling - 200 FT OBSCURED Obstructions to Vision- FOG Precipitation - DRIZZLE Condition of Light - DAYLIGHT	PASO ROBLES,CA TC/Airspace Type of Flight Plan - NONE		Runway Runway Runway	/ Ident - / Lth/Wid - / Surface - / Status -	N/A N/A	
Certificate(s)/Rating(s) Bienn COMMERCIAL C SE LAND,ME LAND M		Flight al - 17	t Time (H 7900 K/NR K/NR	lours) Last 24 Last 30 Last 90		K/NR K/NR

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PLT DEPARTED VFR AND WHILE EN ROUTE ENCOUNTED IMC NEAR THE DESTINATION. THE PLT REQUESTED AN IFR CLEARANCE FOR A VOR-DME APCH. THE PLT WAS INFORMED BY ATC TO EXPECT A DELAY DUE TO ANOTHER ACFT EXECUTING THE MISSED APCH. THE PLT WAS ISSUED THE WX AS INDEFINATE 200 OBS, VIS 1/4 MILE. ONE MILE VIS WAS REQUIRED FOR A STRAIGHT-IN LANDING. THE PLT ACCEPTED THE APCH CLEARANCE AND STARTED A DESCENT. THE ACFT DESCENDED 1,200 BELOW THE APCH PROFILE AND COLLIDED WITH TREES. POST ACCIDENT INVESTIGATION REVEALED THE PLT WAS VERY FAMILIAR WITH THE TERRAIN AND WAS KNOWLEDGEABLE OF RANCH AIRSTRIPS WHERE HE HAD LANDED PREVIOUS TO THIS FLT TO WAIT OUT THE WX AT THE SAME DESTINATION ARPT. THE COURSE BEING FLOWN BY THE PLT WOULD HAVE TAKEN HIM DIRECT TO ONE OF THESE RANCHES.

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File No 2494	10/19/88	PASO ROBLES,CA	A/C Reg. No. N739YS	Time (Lc1) - 0812 PDT
Occurrence #1 IN	FLIGHT COLLIS	SION WITH TERRAIN/WATER		
Phase of Operation APP	ROACH - IAF 1	O FAF/OUTER MARKER (IFR	)	
Finding(s)				
1. WEATHER CONDITION -	RAIN			
2. WEATHER CONDITION -	FOG			
3. WEATHER CONDITION -	LOW CEILING			
<ol><li>FLIGHT INTO KNOWN</li></ol>	ADVERSE WEATH	IER - INITIATED - PILOT	IN COMMAND	
5. ALTITUDE - NOT MAINT	AINED - PILOT	IN COMMAND		
6. WEATHER CONDITION -	BELOW APPROAC	CH MINIMUMS		
<ol><li>7. MINIMUM DESCENT AL</li></ol>	TITUDE - DISF	REGARDED - PILOT IN COMM	AND	
	T PERFORMED -	PILOT IN COMMAND		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 5,7,8

Factor(s) relating to this accident is/are finding(s) 1,2,3,6

File No 2434 10/26/88 REDL	ANDS,CA A/O	C Reg. No. N7	′9H₩ 		Time (Lc1)	- 1900 PD7	T 
Basic Information Type Operating Certificate-NONE (GENER.	-	raft Damage TROYED		Fatal		uries Minor	None
Type of Operation -BUSINESS Flight Conducted Under -14 CFR 91 Accident Occurred During -APPROACH		GROUND	Crew Pass	. 1	õ	0 0	0 0
Aircraft Information Make/Model - PIPER PA31P-350 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 7245 No. of Seats - 7	Eng Make/Model - Number Engines - Engine Type -	LYCOMING TIC	)-540-V2AD	) ELT	Installed Stall Warn	/Activated ing System	
Environment/Operations Information Weather Data Wx Briefing - FSS Method - TELEPHONE Completeness - FULL Basic Weather - IMC Wind Dir/Speed- CALM Visibility - 1.000 SM Lowest Sky/Clouds - PART OBS Lowest Ceiling - OBSCURED Obstructions to Vision- HAZE Precipitation - NONE Condition of Light - NIGHT(DARK)	Itinerary Last Departure Po IMPERIAL,CA Destination REDLANDS,CA ATC/Airspace Type of Flight Pla Type of Clearance Type Apch/Lndg	an - IFR - SPECIAL - ILS-COMP TRAFFIC FULL STO	VFR VLETE PATTERN	Airport OFF A Airport I REDLAI Runway Runway Runway	Proximity IRPORT/STR Data NDS MUNI y Ident y Lth/Wid	IP - 08 - 4500/ - ASPHALT	75
Personnel Information , Pilot-In-Command Certificate(s)/Rating(s)	Age - 43 Biennial Flight Review			e - VALI( t Time ()		WAIVERS/LIN	ЛІТ
PRIVATE SE LAND, ME LAND	Current - YES Months Since - 9 Aircraft Type - PA-3	Make/ B1P Instr	/Model- cument- -Eng -	200 98	Last	24 Hrs - 30 Days- 90 Days-	1 6 18
Instrument Rating(s) - AIRPLANE							
Narrative HE ARPT IS NEXT TO NORTON AFB. THE WEATHER ( DMPLETED AN ILS TO A LOW APPROACH AT NORTON IRCLING MDA FOR NORTON IS 1,700 FT MSL. NOR MSL. THE CIRCLING MDA FOR NORTON IS 138 F HOWED THAT THE FLT DESCENDED TO 1,800 FT ON AST RADAR RETURN WAS ABOUT 1 MI FROM THE REI LY OVER RUNWAY 8 IN A SOUTH TO NORTH DIRECT HEREAFTER. EVIDENCE AT THE ACCIDENT SITE REV ANK IN A SLIGHT NOSE DOWN ATTITUDE. FEW GROU	AND RECEIVED A SPECIAL VI TON AFB ELEV IS 1,100 FT M T ABOVE THE REDLANDS AIRPO THE ILS, THEN THE MODE C DLANDS ARPT AT 1,600 FT M ION, "LOW AND FAST." THE V VEALED THE ACFT LEFT WING	R CLEARANCE MSL, AND THE DRT ARPT ELEV VARIED BETWE SL. A WITNESS VITNESS HEARD CONTACTED TH	TO PROCEE REDLANDS 7. THE REC EN 1,700 ON THE A O THE CRAS IE GROUND	D TO REDI AIRPORT ( ORDED RAI AND 1,600 IRPORT SA H SOUNDS IN A 42 [	LANDS. THE ELEV IS 1, DAR DATA D FT. THE AW THE ACF IMMEDIATE DEGREE LEF	572 T LY T	

File No 24	34 10/26/88	REDLANDS, CA	A/C Reg. No. N79HW	Time (Lcl) - 1900 PDT	
Occurrence #1 Phase of Operation	IN FLIGHT COLLISI CIRCLING (IFR)	ON WITH TERRAIN/WAT	ER		
3. VISUAL/AURA 4. LIGHT CONDITION 5. LACK OF TOT 6. IN-FLIGHT PLANN	DE – NOT MAINTAINED L PERCEPTION – PILO – DARK NIGHT AL EXPERIENCE IN TY	PE OPERATION - PILO - PILOT IN COMMAND	T IN COMMAND		

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 1,4,5,6,7

File No 2437 11/01/88 CABAZO	N, CA	A/C Reg.	No. N33850		Time (Lcl) -	- 1613 PS	Г
Basic Information Type Operating Certificate-NONE (GENERAL Type of Operation -BUSINESS Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	AVIATION)	Aircraft D DESTROYED Fire ON GROUND	Cro Pa	ss O	Injur Serious O O	Minor O O	None O O
Aircraft Information Make/Model - CESSNA 421A Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 6300 No. of Seats - 7	Eng Make/M Number Eng Engine Typ Rated Powe	odel - CONTI lines - 2 e - RECIP		520-A ELT D		Activated ng System	- YES
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - IMC Wind Dir/Speed- 300/003 KTS Visibility - 1.250 SM Lowest Sky/Clouds - PART OBS Lowest Ceiling - 1000 FT BROKE Obstructions to Vision- HAZE Precipitation - NONE Condition of Light - DAYLIGHT		CA ght Plan - N arance - N		OFF A Airport BANNI Runwa Runwa Runwa Runwa	Proximity IRPORT/STRIF Data NG MUNI y Ident y Lth/Wid y Surface y Status	- 26 - 5200/ - ASPHALT	150
	Age - 55 Biennial Flight R Current Months Since Aircraft Type	eview - UNK/NR - UNK/NR	Total -	ight Time ( 7000	Hours) Last 24	NIVERS/LII Hrs - UI Days- UI Days- UI Paft - UI	NK/NR NK/NR NK/NR
Instrument Rating(s) - AIRPLANE							
THE PLT CONTACTED THE ARSA CONTROLLER FOR ADVI CONTROLLER ADVISED THE PLT THAT HIS POSITION W AIR FORCE BASE. THE PLT ADVISED THAT HE DESIRE OBTAIN SERVICE. THE PLT THEN INFORMED THE CONT MAINTAIN ALT DUE TO THE PROPELLER NOT FEATHERI OPERATOR THAT HE WOULD ATTEMPT TO LAND ON AN I TRANSMISSION LINE AND COLLIDED WITH A RESIDENC FRACTURED ALLOWING THE HEAD TO DISPLACE OUTWAR AND CYLINDER. THE PROPELLER GOVERNOR OPERATED	AS NEAR A CIVILIA D TO CONTINUE TO ROLLER THAT HE CO NG. THE ACFT OVER NTERSTATE HWY. T E. POST ACCIDENT D 3/8 INCH. FRACT	N ARPT WITH A LARGER CIV ULD BARLEY S FLEW A SMALL HE ACFT OVER INSPECTION R URE RESULTED	LIMITED MAINT ILIAN ARPT ALC EE THE GROUND CIVILIAN ARP FLEW THE HWY EVEALED THE R FROM FATIGUE	ENANCE FACI DNG HIS ROU AND THAT H T AND THE P AND IMPACTE IGHT ENG #3 AT THREADE	LITIES AND A TE WHERE HE IE WAS UNABLE LT TOLD THE D AN ELECTRI CYLINDER HE D AREA BTW H	N COULD TO UNICOM CAL	

	37 11/01/88	CABAZON, CA	A/C Reg. No. N3385Q	Time (Lc1) - 1613 PST
ccurrence #1 hase of Operation	LOSS OF ENGINE P CRUISE - NORMAL	POWER(TOTAL) - NON-MEG	CHANICAL	
inding(s) 1. ENGINE ASSEMBLY 2. ENGINE ASSEMBLY 3. PROPELLER FEA 4. UNDETERMINED	,CYLINDER - SEPARA THERING - NOT POSS	TION SIBLE - PILOT IN COMM/		
ccurrence #2 hase of Operation	FORCED LANDING DESCENT - EMERGE	ENCY		
5. IN-FLIGHT PLANN	ENCE IN AIRCRAFT'S			
6. OVER CONFID	ENCE IN AIRCRAFT'S UDGED - PILOT IN C  IN FLIGHT COLLIS	S ABILITY - PILOT IN ( COMMAND SION WITH OBJECT		
5. IN-FLIGHT PLANN 6. OVER CONFID 7. DISTANCE - MISJ Contrained #3 Thase of Operation finding(s) 8. OBJECT - WIRE,T 9. OBJECT - RESIDE	ENCE IN AIRCRAFT'S UDGED - PILOT IN C IN FLIGHT COLLIS DESCENT - EMERGE RANSMISSION NCE	S ABILITY - PILOT IN C COMMAND SION WITH OBJECT ENCY		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,5

Factor(s) relating to this accident is/are finding(s) 3,4,6,8,9

Basic Information Type Operating Certificate-NONE (GENERAL		t Damage			Injur	ice	
Type operating centificate-None (GENERAL	DESTRO		Fa		ous	Minor	None
Type of Operation -PERSONAL	Fire		Crew		0	0	0
Flight Conducted Under -14 CFR 91	NONE		Pass	0	ō	ŏ	Ō
Accident Occurred During -DESCENT							
Aircraft Information							
Make/Model - BEECH 95	Eng Make/Model - Li		1A	ELT Instal			
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2			Stall W	larning	g System	- YES
Max Gross Wt - 4000	<b>o</b> ,.	CIPROCATING-CA	RBURETOR				
No. of Seats - UNK/NR	Rated Power -	180 HP					
Environment/Operations Information							
Weather Data	Itinerary			port Proxim			
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point		0	FF AIRPORT/	SIRIP		•
Method - N/A Completeness - N/A	LIVERMORE,CA Destination		Airn	ort Data			
Basic Weather - VMC	SAN JOSE,CA		Anp	or t bata			
Wind Dir/Speed- 310/008 KTS	344 0002,04		R	unway Ident		N/A	
Visibility - 30.0 SM	ATC/Airspace			unway Lth/W		N/A	
	ERED Type of Flight Plan	- NONE		unway Surfa		N/A	
Lowest Ceiling - NONE	Type of Clearance	~ NONE		unway Statu		N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE					
Precipitation - NONE							
Condition of Light - NIGHT(BRIGHT)							
Personnel Information							4
<pre>Pilot-In-Command Certificate(s)/Rating(s)</pre>	Age - 28 Rieppiel Elight Deview	Medical Certi		MELID MEDIC me (Hours)	AL-NU	WAIVERS	/LIMII
ATP,CFI	Biennial Flight Review Current - YES	Total			st 24	Hrs - U	
SE LAND, ME LAND	Months Since - UNK/NF	Make/Mode				Days-	33
JE EAND, ME EAND	Aircraft Type - UNK/N					Days-	
		Multi-Eng					
Instrument Rating(s) - AIRPLANE							

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DESTINATION ARPT. NO EVIDENCE WAS FOUND OF ANY AIRFRAME OR ENGINE MALFUNCTIONS.

### Brief of Accident (Continued)

File No 24	20 11/17/88	MILPITIS,CA	A/C Reg. No. N663Q	Time (Lc1) - 1815 PST
Occurrence #1 Phase of Operation		- IN FLIGHT		
Finding(s) 1. LIGHT CONDITION 2. AIRCRAFT HAND 3. UNDETERMINED		NED - PILOT IN COMMANE		
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATER ROLLED		
Probable Cause			· · · · · · · · · · · · · · · · · · ·	
The National Transpo	rtation Safety Boa	rd determines that the	Probable Cause(s) of this accid	ent

.

is/are finding(s) 2,3

Basic Information				T		
Type Operating Certificate-NONE (GENE		aft Damage ROYED	Fatal	Injur Serious		r None
Type of Operation -PERSONAL	Fire		rew 2	0	0	
Flight Conducted Under -14 CFR 91			ass O	Ō	ō	Ō
Accident Occurred During -DESCENT						
Make/Model - CESSNA 182R		CONTINENTAL 0-470				ed - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines -			Stall Warnin	ng Syste	em – YES
Max Gross Wt - 3100		RECIPROCATING-CARE	BURETOR			
No. of Seats - 4	Rated Power -	230 HP				
-Environment/Operations Information				_		
Weather Data	Itinerary			Proximity		
'WxBriefing - FSS Method - TELEPHONE	Last Departure Poi CHINO,CA	nt	UFF AI	RPORT/STRIP		
Completeness - FULL	Destination		Airport [	)ata		
Basic Weather - IMC	BAKERSFIELD,CA		Anport			
Wind Dir/Speed- 330/010 KTS			Runway	/Ident -	• N/A	
Visibility - 7.0 SM	ATC/Airspace		Runway	/Lth/Wid -	N/A	
Lowest Sky/Clouds - 3000 FT SC/				/ Surface -		
Lowest Ceiling - 6000 FT OV			Runway	/Status -	N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE				
Precipitation - NONE						
Condition of Light - DAYLIGHT						
-Personnel Information						
Pilot-In-Command	Age - 47 Biennial Flight Review	Medical Certif	icate - VALIE	MEDICAL-NO	WAIVE	RS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review		light lime (F			
PRIVATE SE LAND	Current - UNK/ Months Since - UNK/	NR Total				
SELAND	Aircraft Type - UNK/					
		Multi-Eng			baye	
Instrument Rating(s) - AIRPLANE						

THE PROPOSED FLIGHT ROUTE, THE INSTRUMENT RATED PRIVATE PILOT AND AN INSTRUCTOR PILOT TOOKOFF ON A PERSONAL INSTRUMENT FLIGHT OVER MOUNTAINOUS TERRAIN. AS THE AIRCRAFT BEGAN ITS DESCENT FOR LANDING THE CREW REPORTED THEY HAD ENTERED AN UNCONTROLLED DESCENT. SHORTLY THEREAFTER, COMMUNICATIONS WITH THE AIRCRAFT WERE LOST, THE AIRCRAFT'S RADAR TARGET DISAPPEARED AND AN ELT RADIO SIGNALS WERE DETECTED. GROUND SEARCH PARTIES INITIATED A SEARCH AND THE WRECKAGE WAS LOCATED TEN HOURS LATER.

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Brief of Accident (Continued)

File No 24	35 11/25/88	GORMAN, CA	A/C Reg. No. N5545N	Time (Lc1) - 1520 PST
Occurrence #1 Phase of Operation		- IN FLIGHT		
inding(s)				
	ON - MOUNTAIN WAVE ATION - POOR - PIL			
		ABILITY - PILOT IN - ATTEMPTED - PILO		
				· · · · · · · · · · · · · · · · · · ·

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,4

Factor(s) relating to this accident is/are finding(s) 1,3

File No 2506 11/27/88	HANFORD, CA A	/C Reg. No. N946			ime (Lcl) - 		
Basic Information Type Operating Certificate-NONE (G		anoft Domono			Tanétian		
Type uperating centricate-none (a		craft Damage		Fatal	Injur Serious	Minor	None
Type of Operation -PERSONA			Crew	1	0	M MOP	NONE
Flight Conducted Under -14 CFR			Pass	-	0	0	0
Accident Occurred During -APPROAC			F 4 3 3	. 0	Ū	Ū	0
Aircraft Information							
Make/Model - BEECH N35	Eng Make/Model	- CONTINENTAL IC	)-470-N	ELT	Installed/A	ctivated ·	- YES/M
Landing Gear - TRICYCLE-RETRACTAE	LE Number Engines	- 1		S	tall Warnin	g System ·	- YES
Max Gross Wt - 3125	Engine Type	- RECIP-FUEL IN.	JECTED				
No. of Seats - 4	Rated Power	- 260 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport	Proximity		
Wx Briefing - NO RECORD OF BRI	EFING Last Departure F	Point		OFF AI	RPORT/STRIP		
Method - N/A	OXNARD, CA						
Completeness - N/A	Destination			Airport D	ata		
Basic Weather - IMC	HANFORD,CA			HANFOR	D		
Wind Dir/Speed- UNK/NR				Runway	Ident -	N/A	
Visibility250 SM	ATC/Airspace					N/A	
Lowest Sky/Clouds - UNK/NR	Type of Flight F					N/A	
Lowest Ceiling - 400 FT				Runway	Status -	N/A	
Obstructions to Vision- FOG	Type Apch/Lndg	- VOR/DME					
Precipitation - NONE			•				
Condition of Light - NIGHT(DA	RK)						
Personnel Information ,							
Pilot-In-Command	Age - 59					IVERS/LIM	[T
Certificate(s)/Rating(s)	Biennial Flight Review			nt Time (H		_	
COMMERCIAL, CFI	Current - YE				Last 24		2
SE LAND, ME LAND	Months Since - 4	Make/Mc	odel-	1080	Last 30	Days- UN	
	Aircraft Type - BE	-35 Instrum	nent-	190	Last 90	Days-	121
		Multi-E	Ena -	25	Rotorcr	aft - UNH	

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PLT DECLARED A MISSED APCH DURING A VOR CIRCLING APCH TO THE PLT'S HOME ARPT. THE ACFT DESCENDED BELOW MIMIMUM DESCENT ALT, COLLIDED WITH A TELEPHONE CABLE AND CAME TO REST IN A COTTON FIELD APRX 1 MILE NORTHEAST OF THE ARPT. THE ACFT WAS IN THE LANDING CONFIGURATION AT IMPACT. THE WX WAS BELOW APCH MINIMUMS, 1/4 MILE VISIBILITY WITH FOG AND A 400 FOOT OBSCURED CEILING. THERE WAS NO EVIDENCE OF A MECHANICAL FAILURE OR MALFUNCTION.

File No 25	06 11/27/88	HANFORD, CA	A/C Reg. No. N9469Y	Time (Lcl) - 1904 PST	
ccurrence #1				·	
hase of Operation	APPROACH - MISSE	) APPROACH (IFR)			
inding(s)					
1. WEATHER CONDITION	N - BELOW APPROACH	H MINIMUMS			
		ER - PERFORMED - PILO	DT IN COMMAND		
3. WEATHER CONDITION					
4. WEATHER CONDITIO				)	
		ER - PERFORMED - PILO	JI IN COMMAND		
6. OBJECT - WIRE,S		VED - PILOT IN COMMAN			
-		ARDED - PILOT IN COMMAN			
			"AND		
ccurrence #2	IN FLIGHT COLLIS	ON WITH TERRAIN/WAT	ER		
hase of Operation	DESCENT - UNCONTR	ROLLED			
Probable Cause					

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 7,8

Factor(s) relating to this accident is/are finding(s) 1,2,3,4,5,6

Basic Information	D TAXT				Tanàna		
Type Operating Certificate-ON-DEMAND Al Name of Carrier - FPA HELICOPI				Fatal	Injur Serious		None
Name of Carrier-ERA HELICOP1Type of Operation-NON SCHED.DCFlight Conducted Under-14 CFR 135	DMESTIC.PAX/CARGO	Fire	Crew		0	0	0
Flight Conducted Under -14 CFR 135		NONE	Pass		2	0	0
Accident Occurred During -DESCENT			·				
Aircraft Information							
Make/Model - AEROSPATIALE AS-355F-1			DN 250-C20F				
Landing Gear - EMERGENCY FLOAT	Number Eng			S	tall Warnin	ng System	- NO
Max Gross Wt - 5291		e - TURBOS					
No. of Seats - 6	Rated Powe	er - 425	5 HP				
Environment/Operations Information	<b>-</b> • • • • • • •			•••	0		
Weather Data	Itinerary				Proximity RPORT/STRIP		
Wx Briefing - COMPANY Method - TELEPHONE	Last Depart	IN 617,GM		UFF AI	KPURI/SIRIP		
Completeness - WEATHER NOT PERTINEN		•		Airport D	a+a		
Basic Weather - VMC	LOCAL			•	ERON 617		
Wind Dir/Speed- 180/025 KTS	EGONE					N/A	
Visibility - 10.0 SM	ATC/Airspace				Lth/Wid -	•	
Lowest Sky/Clouds - N/A	Type of Fli	ght Plan - CC	OMPANY (VFR)		Surface -		
Lowest Ceiling - 1500 FT BROK	KEN Type of Cle	earance - Nú	DNE	Runway	Status -	WATER -	СНОРРҮ
Obstructions to Vision- NONE	Type Apch/L	.ndg - N(	DNE				
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 43 Biennial Flight R		dical Certifica	ate - VALID ght Time (H		IVERS/LI	MII
Certificate(s)/Rating(s)	Current		Total -				6
	Months Since	- 1	Make/Model-	1081	Last 30		81
HELICOPTER	Aircraft Type	- 105CB5	Make/Model- Instrument-	233	Last 90	Days-	
HEETOOT FER		. 100000	morrametre	200		aft -	
			-				0,10
Instrument Rating(s) - HELICOPTER							
Narrative							
WAS DEPARTING AN ELEVATED HELIDECK ON AN							
AIL ROTOR THRUST AND ACFT CONTROL DUE TO							
PLT INITIATED HIS TAKEOFF WITH THE ACFT H	AVING JUST CLEADER	) THE DECK AND	) RECOVERY WAS	NOT POSSIB	L F .		
STIGATION REVEALED THAT THE DRIVE SHAFT F							

RE-DESIGNED AND THE FLEET RETROFITTED.

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File No 25	12 11/04/88 W. CAMERON 617,GM	A/C Reg. No. N355EH	Time (Lcl) - 0651 CST
Occurrence #1 Phase of Operation	AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFU TAKEOFF - INITIAL CLIMB	NCTION	
2. AIRCRAFT/EQU	TEM,TAIL ROTOR DRIVE SHAFT - SEPARATION JIPMENT,INADEQUATE DESIGN - MANUFACTURER TEM,TAIL ROTOR DRIVE SHAFT - FATIGUE		
	LOSS OF CONTROL - IN FLIGHT TAKEOFF - INITIAL CLIMB		
	IN FLIGHT COLLISION WITH TERRAIN/WATER DESCENT - UNCONTROLLED		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3  $\,$ 

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2477 6/04/88 LIHUE,	HI A/C Re	g. No. N53EP	Τ	ime (Lc1) -	1200 HS	Τ
Type of Operation SIGHTSEEING	SUBSTAN Fire	TIAL Crew	-	Injur Serious 0	Minor O	None 1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE	Pass	0	0	0	4
Aircraft Information Make/Model - FAIRCHILD-HILLER FH-1100 Landing Gear - SKID Max Gross Wt - 2850 No. of Seats - 5	Number Engines - 1 Engine Type - TUR			Installed/A tall Warnin		- YES-UNK/N - NO
Environment/Operations Information						
Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure Point LIHUE,HI			Proximity RPORT/STRIP		
Completeness - N/A Basic Weather - VMC	Destination LOCAL		Airport D	ata		
Wind Dir/Speed- 090/014 KTS					N/A	
Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR	ATC/Airspace Type of Flight Plan -	NONE			N/A N/A	
Lowest Ceiling - NONE	Type of Clearance -				N/A N/A	
Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Type Apch/Lndg -		Kunway	Status	N/ A	
Personnel Information Pilot-In-Command	Age - 40	Medical Certifica	τρ - VALID	MEDICAL-NO	WATVERS	/I TMTT
	Biennial Flight Review		ht Time (H			/ []
PRIVATE, COMMERCIAL	Current - YES	Total -	6032	Last 24	Hrs -	5
SE LAND	Months Since - 14	Make/Model-	134	Last 30		47
HELICOPTER	Aircraft Type - BH206B	Instrument-	46	Last 90	Days-	123
				Rotorcr	aft -	5918

Instrument Rating(s) - NONE

----Narrative----

THE PILOT SAID THAT THE AIRCRAFT WAS IN NORMAL CRUISE FLIGHT WHEN HE NOTICED THAT THE ENGINE WAS NO LONGER DRIVING THE ROTOR SYSTEM. THE PILOT ENTERED AN AUTOROTATION AND HAD TO STRETCH THE GLIDE SLIGHTLY TO A SUITABLE LANDING AREA ON AN OFF SHORE REEF. THE HELICOPTER MADE A HARD LANDING ON THE REEF IN ABOUT ONE FOOT OF WATER. ON SITE EXAMINATION OF THE HELICOPTER BY FAA AIRWORTHINESS INSPECTORS REVEALED THAT THE BENDIX COUPLING ON THE ENGINE TO TRANSMISSION SHAFT HAD RUPTURED ON THE ENGINE END OF THE SHAFT. METALLURGICAL EXAMINATION OF THE FAILED COUPLING REVEALED A FATIGUE FRACTURE IN A CIRCUMFERENTIAL ORIENTATION ON THE COUPLING DISK. THE DRIVE SHAFT COUPLINGS ARE THE SUBJECT OF A RECURRING AD WHICH MANDATES ALIGNMENT MEASUREMENTS OF THE DRIVE SHAFT EVERY 100 HOURS. THE LAST ALIGNMENT CHECK WAS DONE ABOUT 60 HOURS PRIOR TO THE ACCIDENT.

	77 6/04/88	LIHUE,HI	A/C Reg. No. N53EP	Time (Lcl) - 1200 HST
Occurrence #1 Phase of Operation		NT/SYSTEM FAILURE/N	MALFUNCTION	
2. MAINTENANCE,A 3. ROTOR DRIVE SYS	LIGNMENT - IMPROPE TEM,ENGINE TO TRAN	SMISSION DRIVE - FA R - SMISSION DRIVE - FA SMISSION DRIVE - DI	ILURE, TOTAL	
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGE	NCY		
inding(s) 5. TERRAIN CONDITI	- ATTEMPTED - PILO	T IN COMMAND		
6. AUTOROTATION 7. TERRAIN CONDITI				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3,4

Factor(s) relating to this accident is/are finding(s) 5,7

-Basic Information					<b>-</b> .		
Type Operating Certificate-NONE (GENE	RAL AVIATION)	Aircraft Damage SUBSTANTIAL	. F	atal	Injur Serious		None
Type of Operation -PERSONAL		Fire	Crew	0	0		1
Flight Conducted Under -14 CFR 91		NONE	Pass	0	0	Ō	0
Accident Occurred During -LANDING							
-Aircraft Information							
Make/Model - BEECH B-19A		del - LYCOMING 0-32			Installed/A		
Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2150		nes - 1 - RECIPROCATINO			tall Warnin	g System	- YES
No. of Seats - 4		- 150 HP	-CARDURE I UP	¢.			
-Environment/Operations Information Weather Data	Thingson			meant [	Proximity		
Wx Briefing - UNK/NR	Itinerary Last Departu	re Point		ON AIRF			
Method - UNK/NR	SAME AS AC				UK I		
Completeness - UNK/NR	Destination	-,	Air	port Da	ata		
Basic Weather - VMC	LOCAL			MARSHAL	_L CO.		
Wind Dir/Speed- 160/008 KTS						18	
Visibility - 10.0 SM	ATC/Airspace				Lth/Wid -		50
Lowest Sky/Clouds - 25000 FT SC Lowest Ceiling - NONE		nt Plan - NUNE rance - NONE			Surface - Status -		
Obstructions to Vision- NONE		dg - TRAFFIC F		Runway	status -	DRT	
Precipitation - NONE	Type Aperly En		ATTERN				
Condition of Light - DAYLIGHT							
-Personnel Information							
Pilot-In-Command	Age - 38		ertificate -			IVERS/LIM	IT
Certificate(s)/Rating(s)	Biennial Flight Re		Flight 1				
STUDENT	Current Months Since	- N/A Total	- ŪNK/N 10de1- UNK/N		Last 24	Hrs - UN	
	Aircraft Type	- N/A Make/N	ment- UNK/M		Last 30	Days-UN	IK/NR IK/ND
	Anciait Type	Multi-	ment- UNK/N Eng - UNK/N	NR .	Rotorcr	aft - UN	IK/NR
			5				
Instrument Rating(s) - NONE							
-Narrative							
STUDENT PILOT WAS PRACTICING A TOUCH AN							
EMPTED A GO AROUND WITH THE FLAPS FULL D	OWN, AND WHEN THE PLA	NE DIDN'T CLIMB HE	LET THE AIR	RCRAFT L	AND HARD O	N	

# Brief of Accident (Continued)

File No 24:	21 5/31/88 LACON,IL	A/C Reg. No	o. N4306S	Time (Lcl) - 1400 CDT	
Occurrence #1 Phase of Operation	LOSS OF CONTROL - IN FLIGHT GO-AROUND (VFR)				
	5 - NOT PERFORMED - PILOT IN COMM L EXPERIENCE - PILOT IN COMMAND	<b>/AND</b>			
Occurrence #2 Phase of Operation	HARD LANDING LANDING – FLARE/TOUCHDOWN				
4. FLARE - IMPROPER	MAINTAINED - PILOT IN COMMAND 2 - PILOT IN COMMAND CONTROL - IMPROPER USE OF - PILOT	T IN COMMAND			
Probable Cause					
The National Transpo is/are finding(s) 1	tation Safety Board determines t 3,4,5	that the Probable Cause(s	) of this acc	ident	

Factor(s) relating to this accident is/are finding(s) 2

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Type Operating Certifica	te-AGRICULTURA	AIRCRAFT	Aircraft	Damage			Injur	ries	
			SUBSTAN			Fatal	Serious	Minor	None
Type of Operation Flight Conducted Under	-AERIAL APPL	CATION	Fire	(	Crew	0	0	0	1
			NONE	F	ass	0	0	0	0
Accident Occurred During	J -LANDING								
Aircraft Information				1					
Make/Model - GRUMMAN				R1340-AN			Installed/#		
Landing Gear - TAILWHEE	L-ALL FIXED	Number Engine					tall Warnir	ng Systei	m - YES
Max Gross Wt - 4500				IPROCATING-CAP	RBURET	OR			
No. of Seats - 1		Rated Power		650 HP 					
Environment/Operations Inf	ormation								
Weather Data		Itinerary					Proximity		
Wx Briefing - NO REC	ORD OF BRIEFING		e Point			OFF AI	RPORT/STRIF	)	
Method - N/A		CHENOA, IL				linnant D			
Completeness - N/A Basic Weather - VMC		Destination LOCAL			4	Airport D	ata		
Wind Dir/Speed- 290/00	17 VTS	LUCAL				Bubbbb	Ident ·	- N/A	
Visibility - 6.0		ATC/Airspace					Lth/Wid -		
Lowest Sky/Clouds -			t Plan -	NONE			Surface -		
Lowest Ceiling -	NONE	Type of Clear	ance -	NONE				- N/A	
Obstructions to Visior	- HAZE	Type Apch/Lnd	a -	FORCED LANDIN	IG	Rannay	514140	11/ 6	
Precipitation			5						
Condition of Light									
Personnel Information									
Pilot-In-Command		Age - 44		Medical Certif	icate	e - VALID	MEDICAL-NO	WAIVER:	S/LIMIT
Certificate(s)/Rating(s	;)	Biennial Flight Rev	iew	F	light	: Time (H	ours)		
COMMERCIAL	Ň	Current - Months Since -	YES	Total	- 5	5745	Last 24	1 Hrs -	
		Months Since -	21	Make/Mode1	-	225	Last 30		
SE LAND, ME LAND	.R	Aircraft Type -	PC-6	Instrument	t	254	Last 90	) Days-	305
SE LAND,ME LAND HELICOPTER ,GLIDE				Multi-Eng		159	Rotorcr	raft -	114

Brief of	Accident (	(Continued)
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File No 24	57 8/03/88 CHENOA, I	L A/C Reg. No. N8980H	Time (Lc1) - 1145 CDT
	LOSS OF ENGINE POWER(PARTI MANEUVERING – AERIAL APPLI		
Finding(s) 1. UNDETERMINED			
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGENCY		
Occurrence #3 Phase of Operation	NOSE OVER LANDING - ROLL		
Finding(s) 2. TERRAIN CONDITI 3. UNSUITABLE TE	DN - SOFT RRAIN - ENCOUNTERED - PILOT	IN COMMAND	

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,3  $\,$ 

Factor(s) relating to this accident is/are finding(s) 2

## National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

-Basic Information Type Operating Certificate-NONE (GENERAL		craft Damage			Injur	ios	
Type operating certificate NoNE (GENERAL		STROYED		Fatal			None
Type of Operation -PERSONAL	Fir	e	Crew				0
Flight Conducted Under -14 CFR 91	NO	NE	Pass	0	0 0	0	0
Accident Occurred During -DESCENT							
-Aircraft Information							
Make/Model - AIR COMMAND 503	Eng Make/Model	- ROTAX 3693276		ELT I	nstalled/A		
Landing Gear - TRICYCLE-FIXED	Number Engines	- 1		St	all Warnir	ng System	- NO
Max Gross Wt - 590		- RECIPROCATING-	CARBURET	OR			
No. of Seats - 1	Rated Power	- 47 HP					
-Environment/Operations Information							
Weather Data	Itinerary			Airport P			
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure P	oint		OFF AIR	PORT/STRIF	)	
Completeness - N/A	Destination		A	irport Da	ta		
Basic Weather - VMC	LOCAL				<b>-</b> ·		
Wind Dir/Speed- 100/012 KTS					Ident -		
Visibility - 20.0 SM	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE	Type of Flight P Type of Clearanc				Surface - Status -		
Obstructions to Vision- NONE	Type Apch/Lndg			Runway	Status	IN/ A	
Precipitation - NONE	Type Apen/Endg	NONL					
Condition of Light - DAYLIGHT							
-Personnel Information	· · · · · · · · · · · · · · · · · · ·						
Pilot-In-Command	Age - 39	Medical Cer	tificate	e - VALID	MEDICAL-NO	) WAIVERS,	/LIMIT
Certificate(s)/Rating(s)	Age - 39 Biennial Flight Review	1	Flight	: Time (Ho	ours)		
STUDENT	Current - N/	A Total	-	6	Last 24	Hrs - UN	NK/NR
	Months Since - N/	A Make/Mo	odel-	6	Last 30	) Days- UN	NK/NR
	Months Since - N/ Aircraft Type - N/	A Instrum	nent-	0	Last 90 Rotorcr	) Days- UN raft -	NK/NR 6
Instrument Rating(s) - NONE							
-Narrative GYROPLANE WAS DESTROYED AND THE PILOT SUS							

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File No 248	84 11/13/88	SULLIVAN, IL	A/C Reg. No.	NONE	Time (Lc1) - 1600 CST
Occurrence #1 Phase of Operation	LOSS OF CONTROL MANEUVERING	- IN FLIGHT			
	- NOT MAINTAINED	- PILOT IN COMMAND _OT IN COMMAND			
Occurrence #2 Phase of Operation	IN FLIGHT COLLIS DESCENT - UNCONT		ER		
Probable Cause	· •				

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The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1

Factor(s) relating to this accident is/are finding(s) 2

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

-Basic Information Type Operating Certificate-NONE (GENERAL		craft Damage			Tojur	ios				
Type operating certificate NoNE (GENERAL		ATION) Aircraft Damage SUBSTANTIAL			Injuries Fatal Serious Minor None					
Type of Operation -INSTRUCTIONAL			Crew	0	0					
Type of Operation -INSTRUCTIONAL Flight Conducted Under -14 CFR 91	NO	NE	Pass	· 0	0	0	0			
Accident Occurred During _TAKEOFF										
-Aircraft Information										
Make/Model - CESSNA 152II	Eng Make/Model	/Model - LYCOMING 0-235-L2C			ELT Installed/Activated - YES/YE					
Landing Gear - TRICYCLE-FIXED	Number Engines	- 1		St	tall Warnin					
Max Gross Wt - 1670	Engine Type		-CARBURE	TOR						
No. of Seats - 2	Rated Power	- 110 HP								
-Environment/Operations Information										
Weather Data	Itinerary			Airport F	Proximity					
Wx Briefing - NO RECORD OF BRIEFING	Last Departure P	Last Departure Point			PORT					
Method - N/A Completeness - N/A	LAKE IN THE HL	S,IL								
compreteness N/A	Destination			Airport Da						
Basic Weather - VMC	LOCAL	LOCAL				LAKE IN THE HILLS				
Wind Dir/Speed- 230/012 KTS						26	~			
	ATC/Airspace				Lth/Wid -					
Lowest Sky/Clouds - N/A	Type of Flight P				Surface -		.T			
Lowest Ceiling - 25000 FT BROKE				Runway	Status -	DRY				
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE								
Precipitation - NONE										
Condition of Light - DAYLIGHT										
-Personnel Information										
	5				cate - VALID MEDICAL-WAIVERS/LIMIT ight Time (Hours)					
	Biennial Flight Review		Fligh	t lime (Ho	ours)	11				
STUDENT	Current - N/ Months Since - N/ Aircraft Type - N/	A Iotal	- -	23	Last 24	Hrs -				
	Ainchaft Type - N/	A Make/MC	Juer-	23	Last 30	Days-				
	Afficiant type iny		lient	U		Days	UNK/ NK			
Instrument Rating(s) - NONE										

FOR A CROSSWIND WHILE ON TAKEOFF ROLL. THE AIRPLANE WAS TRAVELING AT 50-55 KNOTS WHEN SHE ATTEMPTED TO BRAKE, TO NO AVAIL. THE AIRPLANE DEPARTED THE RUNWAY AND COLLIDED WITH A BERM, CAUSING SUBSTANTIAL DAMAGE TO THE AIRPLANE.

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File No 240	6 12/16/88	LAKE IN THE HLS,IL	A/C Reg. No. N714ZE	Time (Lc1) - 0900 CST
Occurrence #1 Phase of Operation				
3. COMPENSATION FOR	NTROL - NOT MAINT	AINED - PILOT IN COMMAND - EXCESSIVE - PILOT IN CO OT IN COMMAND	IMMAND	
Occurrence #2 Phase of Operation		ON WITH TERRAIN/WATER RUN		
Finding(s) 5 <sub>1</sub> TERRAIN CONDITIO	N - BERM			
Probable Cause	-			×
The National Transpor is/are finding(s) 2,		d determines that the Pr	obable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 1,4

Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION) Aircraft	Damage		Injuri	<b>e</b> s	
	SUBSTAN		Fatal		Minor	None
Type of Operation -PERSONAL	Fire	Crev		0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass	s 0	0	0	1
Accident Occurred During -LANDING						
-Aircraft Information						
Make/Model - CESSNA 210L	Eng Make/Model - CON	INENTAL IO-520-1		[nstalled/Ac		
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	_		tall Warning	System ·	- YES
Max Gross Wt - 3800	Engine Type - RECI					
No. of Seats - 4	Rated Power - 3	300 HP				
-Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - UNK/NR	Last Departure Point		OFF AI	RPORT/STRIP		
Method - ACFT RADIO	WHEELING, IL					
Completeness - UNK/NR Basic Weather - VMC	Destination		Airport Da	ata		
Wind Dir/Speed- 320/015 KTS	WAUKEGAN, IL		Pupuay	Ident - I	N/A	
Visibility - 15.0 SM	ATC/Airspace				N/A	
Lowest Sky/Clouds - N/A	Type of Flight Plan -	NONE			N/A	
Lowest Ceiling - 2000 FT BROKE	N Type of Clearance -	NONE			N/A	
Obstructions to Vision- NONE	Type Apch/Lndg -		,			
Precipitation - NONE						
Condition of Light - DAYLIGHT						
-Personnel Information						
Pilot-In-Command		Medical Certifica			VERS/LIM	IΤ
	Biennial Flight Review	Flig	ght Time (Ho	ours)		0
PRIVATE	Current - YES	Total -	1250	Last 24 I		0
SE LAND, ME LAND, SE SEA	Months Since - 6	Make/Model-	800	Last 30 I		1
	Months Since - 6 Aircraft Type - C-210L	Multi-Epc -	50	Last 90   Rotorcra		16 0
		Murti-Eng -	50	ROLUICIA		0
Instrument Rating(s) - AIRPLANE						

DURING THE ENGINE WERE DISDUCESSFUL THE LANDING GEAR AND SELECTED A TWO LANE ROAD AND PERFORMED AN OFT AIRPORT PORCED EARDING. DURING THE DESCENT THE PLT EXTENDED THE LANDING GEAR AND SELECTED FULL FLAP EXTENSION. THE PLT OBSERVED A GAP IN THE TRAFFIC ON THE ROAD AND SLIPPED THE AIRPLANE IN ORDER TO POSITION THE AIRPLANE FOR LANDING IN THE OPEN AREA. THE NO POWER GLIDE, FLARE, AND TOUCHDOWN WERE SUCCESSFUL AND HARD BRAKING SLOWED THE AIRPLANE TO APPROXIMATELY 30 KTS BEFORE THE RIGHT WING STRUCK SMALL ROADSIDE TREES CAUSING THE AIRPLANE TO SWERVE RIGHT. TWO OF THE THREE LANDING GEAR FAILED AS THE AIRPLANE CROSSED THROUGH A SHALLOW DITCH AND CAME TO A STOP. POST ACCIDENT EXAMINATION OF THE FUEL SYSTEM DISCLOSED THE PRESENCE OF WATER.

# Brief of Accident (Continued)

File No 24	02 12/17/88	BANNOCK BURN, IL	A/C Reg. No. N5225K	Time (Lc1) - 1232 CST
Occurrence #1 Phase of Operation		OWER(TOTAL) - NON-MECHA E	NICAL	
Finding(s) 1. FLUID,FUEL - CO 2. FLUID,FUEL - WA	FER			``````````````````````````````````````
Occurrence #2 Phase of Operation				
Occurrence #3 Phase of Operation		ION WITH OBJECT		
Finding(s) 3. TERRAIN CONDITI 4OBJECT - TREE(S	)			
Probable Cause				

is/are finding(s) 1,2,3

Factor(s) relating to this accident is/are finding(s) 4

File No 2480 3/24/88 SERVI/	A,IN A/C Reg	. No. N7797Q	Time (Lc1) - 0938 EST			
Basic Information Type Operating Certificate-NONE (GENERAI	_ AVIATION) Aircraft DESTROYE		Fatal	Injur Serious	ies Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire NONE	Crew Pass	1 0	0	0 0	0
Aircraft Information Make/Model - CESSNA 310Q Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 5300 No. of Seats - 6	Eng Make/Model - CONT Number Engines - 2 Engine Type - RECI Rated Power - 2			Installed/A all Warnin		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure Point HAVELOCK.NC		Airport F OFF AIF	Proximity RPORT/STRIP		
Completeness - N/A Basic Weather - VMC Wind Dir/Speed- UNK/NR	Destination UNK/NR		Airport Da		N/A	
Wind Dir/Speed-UNK/NR Visibility - UNK/NR Lowest Sky/Clouds - N/A Lowest Ceiling - OVERCAST Obstructions to Vision- UNK/NR Precipitation - RAIN	ATC/Airspace Type of Flight Plan - Type of Clearance - Type Apch/Lndg -		Runway Runway	Lth/Wid - Surface -	N/A N/A N/A	
Personnel Information Pilot-In-Command	Age - 69 M	edical Certificat				
Certificate(s)/Rating(s) FOREIGN SE LAND,ME LAND	Biennial Flight Review Current - UNK/NR Months Since - UNK/NR Aircraft Type - UNK/NR	Fligh	t Time (Ho 1975 K/NR K/NR	burs) Last 24 Last 30 Last 90	Hrs - UN Days- UN Days- UN aft - UN	K/NR K/NR

# Instrument Rating(s) - NONE

#### ----Narrative----

WITNESS'S REPORT A THUNDERSTORM WITH HEAVY RAIN AND LIGHTNING IN THE AREA WHEN THEY OBSERVED THE ACCIDENT AIRCRAFT BREAK UP IN FLIGHT. ALL WITNESSES REPORT HEARING UNUSUAL ENGINE NOISES WHICH THEY CHARACTERIZED AS DIVING SOUNDS, AND OBSERVING PARTS OF THE AIRCRAFT BREAK AWAY AS IT DESCENDED INTO THE GROUND. AT THE TIME OF THE ACCIDENT THE CANADIAN CITIZEN WHO WAS ACTING AS PILOT OF THE AIRPLANE WAS NOT CERTIFIED FOR FLIGHT EITHER BY HIS OWN GOVERNMENT OR BY THE UNITED STATES.

File No 24	30 3/24/88	SERVIA, IN	A/C Reg.	No. N7797Q		Time (Lc1) - 0938 EST
Occurrence #1 Phase of Operation		TER WITH WEATHER				
Finding(s) 1. WEATHER CONDITIO	DN - THUNDERSTORM					
Occurrence #2 Phase of Operation			ALFUNCTION			
3. SPATIAL DIS	DRIENTATION - PILO	- EXCEEDED - PILOT 7 IN COMMAND - ATTEMPTED - PILO				
Probable Cause						
	 rtation Safety Boar				ccident	

Factor(s) relating to this accident is/are finding(s) 1,3

			t Damage			Inju	163	
		DESTRO	-		Fatal	Serious		None
Type of Operation -AERIAL APPL	ICATION	Fire		Crew	1	0	0	0
Flight Conducted Under -14 CFR 137		ON GRO	UND	Pass	~ <b>O</b>	0	0	0
Accident Occurred During -MANEUVERING								
ircraft Information								
Make/Model - TOMCAT MK-5			COMING 0-435			Installed//		
Landing Gear - SKID						tall Warniı	ng System	n - NO
Max Gross Wt - 2450		•	CIPROCATING-	CARBURE	OR			
No. of Seats - 1	Rated Pow	er -	200 HP					
nvironment/Operations Information								
leather Data	Itinerary					Proximity	_	
Wx Briefing - NO RECORD OF BRIEFIN					OFF AI	RPORT/STRI	5	
Method - N/A Completeness - N/A	SAME AS Destination					- + -		
Basic Weather - VMC	SAME AS			,	Airport Da	ala		
Wind Dir/Speed- 210/002 KTS	SAME AS	ACC/ INC			Runway	Ident	- N/A	
Visibility ~ 4.000 SM	ATC/Airspace						- N/A	
Lowest Sky/Clouds - CLEAR	Type of F1		- NONE				- N/A	
Lowest Ceiling - BROKEN	Type of Cl	earance	- NONE		Runway	Status ·	- N/A	
Obstructions to Vision- HAZE	Type Apch/	Lndg	- NONE					
Precipitation - NONE								
Condition of Light - DAYLIGHT								
ersonnel Information								
Pilot-In-Command	Age - 42						AIVERS/LI	MIT
Certificate(s)/Rating(s)	Biennial Flight Current	Review	Tata 1	Flight	t Time (Ho 3074		<b>4</b>     = = =	
COMMERCIAL SE LAND	Current Months Sinco	- YES	lotai Mako/Mo		3074 7/ND	Last 24	4 Hrs - U D Days- U	
HELICOPTER	Months Since Aircraft Typ	P = C = 172	Instrum	ent- UNF	K/NR K/NR	Last 9	) Days- U	
		0 172	Multi-E		•		raft -	
Instrument Rating(s) - AIRPLANE								
larrative								
CCIDENT OCCURRED DURING AN AREIAL APPLI	CATION FLT. AFTER HELICOPTER ENTERED						TOR	

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File No 24	73 8/10/88 REDKEY,IN	A/C Reg. No. N25561	Time (Lc1) - 1215 EST
	IN FLIGHT COLLISION WITH OBJECT MANEUVERING - AERIAL APPLICATION		
3. PHYSICAL IM	) ACH - MISJUDGED - PILOT IN COMMAND PAIRMENT(DRUGS) - PILOT IN COMMAND MAINTAINED - PILOT IN COMMAND		
	IN FLIGHT COLLISION WITH TERRAIN/WATE DESCENT - UNCONTROLLED	ER	
Finding(s) 5. TERRAIN CONDITI	ON - CROP		
Probable Cause		· · · · · · · · · · · · · · · · · · ·	
	rtation Safety Board determines that th	ne Probable Cause(s) of this accid	ent

Factor(s) relating to this accident is/are finding(s) 1

File No 2474 9/21/88 ELKHAF	21/88 ELKHART,IN A/C Reg. No. NO			ime (Lcl) -	1655 EST	
Basic Information Type Operating Certificate-NONE (GENERAL Type of Operation -TEST FLIGHT Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF	DES <sup>°</sup> Fire	raft Damage IROYED Crew E Pass		Injur Serious O O	Minor	None O O
Aircraft Information Make/Model - JONES NONE Landing Gear - TAILWHEEL-RETRACTABLE MA Max Gross Wt - UNK/NR No. of Seats - 1	AINS Number Engines -	ROTAX 532 1 RECIPROCATING-CARBUR 65 HP	S	Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 290/005 KTS Visibility - 10.0 SM Lowest Sky/Clouds - 3500 FT SCATT Lowest Ceiling - 20000 FT BROKE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Itinerary Last Departure Po ELKHART,IN Destination LOCAL ATC/Airspace TERED Type of Flight Pla N Type of Clearance Type Apch/Lndg	an - NONE - NONE	OFF AII Airport Da MIDWAY Runway Runway Runway	Ident - Lth/Wid - Surface -	09 2600/ 1 GRASS/TUR DRY	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE SE LAND	Age - 34 Biennial Flight Review Current - UNK, Months Since - UNK, Aircraft Type - UNK,	Flig /NR Total - /NR Make/Model-U	ht Time (Ho 500 NK/NR	ours) Last 24 Last 30		8

Instrument Rating(s) - NONE

----Narrative----

AIRCRAFT WAS DESIGNED AND BUILT BY THE PILOT INVOLVED IN THE ACCIDENT. THIS WAS THE FIRST TEST FLIGHT. ON FIRST ATTEMPT TO TAKEOFF THE AIRCRAFT GOT 12 TO 18 INCHES OFF THE GROUND. PILOT MADE SOME ADJUSTMENTS TO AIRCRAFT AND GOT AIRBORNE ON SECOND ATTEMPT. AIRCRAFT CLIMBED TO AN ALTITUDE OF APPROXIMATELY 15 FEET AND STRUCK LOWER TELEPHONE CABLE ON UTILITY POLES ONE-QUARTER MILE OFF DEPARTURE END OF RUNWAY.

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# Brief of Accident (Continued)

File No 247	4 9/21/88	ELKHART, IN	A/C Reg. No. NONE	Time (Lcl) - 1655 EST
Occurrence #1 Phase of Operation				
	ATE - NOT ATTAINED	) - PILOT IN COMMAND SILITY - UNDETERMINED	)	
Occurrence #2 Phase of Operation		-	R	
Finding(s) 4. TERRAIN CONDITIO				
Probable Cause	-			
The National Transpor	tation Safety Boar	d determines that th	e Probable Cause(s) of this acc	ident

is/are finding(s) 2,3

File No 2483 11/17/88 DELPHI,IN		A/C Reg. No. N3RJ			Time (Lcl) - 1625 EST				
Basic Information Type Operating Certificate-NONE (GENERAL	-	aft Damage ROYED		Fatal	Injur Serious	ies Minor	None		
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -MANEUVERING	Fire NONE		Crew Pass	1 0	0 0	0 0	0 0		
Aircraft Information Make/Model - PITTS S-15 Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1150 No. of Seats - 1	Eng Make/Model - I Number Engines - Engine Type - I Rated Power -	1 RECIP-FUEL INJEC			Installed/A tall Warnin		•		
Environment/Operations Information Weather Data	Itinerary			Ainpont	Proximity				
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Poin LAFAYETTE.IN	nt			RPORT/STRIP				
Completeness - N/A Basic Weather - VMC	Destination LOCAL		Α	irport D	ata				
Wind Dir/Speed- 210/010 KTS Visibility - 20.0 SM	ATC/Airspace			Runway	Lth/Wid -				
Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Type of Flight Plan Type of Clearance Type Apch/Lndg				Surface - Status -	N/A N/A			
 Personnel Information Pilot-In-Command	Age - 22	Medical Certi	 E:00+0						
Certificate(s)/Rating(s)	Biennial Flight Review			Time (H					
PRIVATE	Current - NO	Total		447	Last 24		1		
SE LAND, ME LAND	Months Since - 30 Aircraft Type - UNK/N	Make/Mode NR Instrumen		27 64		-	1		
		Multi-Eng				aft - UN	K/NR		

Instrument Rating(s) - AIRPLANE

----Narrative----

WITNESSES OBSERVED THE ACFT PERFORMING A SERIES OF HAMMERHEAD TYPE CLIMBS AND DIVES. THE ACFT THEN WAS OBSERVED TO PERFORM A CLIMB AND ENTER A SPIN FROM WHICH THERE WAS NO RECOVERY. THE PILOT HAD RECEIVED 10 HOURS INSTRUCTION IN THE ACFT OVER TWO YEARS PRIOR TO ACCIDENT AND HAD LOGGED 27 HOURS FLIGHT TIME IN THE ACFT. THE PILOT HAD NOT FLOWN IN 27 MONTHS AT THE TIME OF THE ACCIDENT. HIS LAST FLIGHT IN THE ACCIDENT ACFT WAS 28 MONTHS PRIOR TO THE ACCIDENT.

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File No 2483	11/17/88 DELPHI,IN	A/C Reg. No. N3RJ	Time (Lcl) - 1625 EST
Occurrence #1 / Phase of Operation /			
2. OVER CONFIDENC 3. ALTITUDE - INADEQU	DRMED - PILOT IN COMMAND CE IN PERSONAL ABILITY - PILOT IN CO JATE - PILOT IN COMMAND CORRECTED - PILOT IN COMMAND	DMMAND	
Occurrence #2 ] Phase of Operation [	IN FLIGHT COLLISION WITH TERRAIN/WAT DESCENT - UNCONTROLLED	TER	
Finding(s) 5 <sub>1</sub> TERRAIN CONDITION	- OPEN FIELD		
Probable Cause			
The National Transporta	ation Safety Board determines that t	the Probable Cause(s) of this acci	dent

is/are finding(s) 2,4

Factor(s) relating to this accident is/are finding(s) 1,3

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information						
Type Operating Certificate-NONE (GENERAL		ft Damage ANTIAL	Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -CRUISE	Fire NONE		0	0 0	0 0	1 1
Aircraft Information Make/Model - CESSNA 172 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2200 No. of Seats - 4	Number Engines -	ECIPROCATING-CARBURE	S	Installed/A tall Warnin		
Environment/Operations Information Weather Data	Itinerary		Airport	Proximity		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Poin PATOKA,IN	t		RPORT/STRIP	,	
Completeness - N/A Basic Weather - VMC	Destination INDIANAPOLIS,IN		Airport D	ata		
Wind Dir/Speed- 045/010 KTS Visibility - 25.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	ATC/Airspace Type of Flight Plan Type of Clearance Type Apch/Lndg	- NONE	Runway Runway	Lth/Wid - Surface -	N/A N/A N/A N/A	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s)	Age - 52 Biennial Flight Review	Medical Certificat			IVERS/LIM	 IТ
PRIVATE SE LAND	Biennial Flight Review Current - YES Months Since - 14 Aircraft Type - C-172	Total - Make/Model- Instrument- UN Multi-Eng - UN	225 135 K/NR K/NR	Last 24 Last 30 Last 90 Rotorcr		1 4 9 

----Narrative----

THE ACFT WAS IN CRUISE FLIGHT AT 2,000 FEET AGL WHEN A LARGE BIRD, PRESUMED TO HAVE BEEN A GOOSE, APPEARED FROM ABOVE THE ACFT AND STRUCK THE RIGHT WING IN THE WING ROOT AREA. NO EVASIVE ACTION WAS TAKEN DUE TO THE SPONTANEITY OF THE EVENT. THE ACFT WAS LANDED WITHOUT PROBLEMS. DAMAGE TO WING LEADING EDGE AND SUPPORTING STRUCTURE WAS SUBSTANTIAL.

File No 248	12/03/88	GREENCASTLE, IN	A/C Reg. No. N5728A	Time (Lc1) - 0920 EST	
Occurrence #1	IN FLIGHT COLLIS	ION WITH OBJECT			
Phase of Operation	CRUISE - NORMAL				
Finding(s) 1. OBJECT - BIRD(S)	)				

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1

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### National Transportation Safety Board Washington, D.C. 20594

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Brief of Accident

			Time (Lc1) - 0700 CDT				
Basic Information Type Operating Certificate-ON-DEM Name of Carrier -CENTR/ Type of Operation -NON SC Flight Conducted Under -14 CFF Accident Occurred During -TAKEOF	NL AIR SOUTHWEST CHED,DOMESTIC,CARGO R 135 F	NONE	Crew Pass	0 0	Injur Serious O O		None 0 0
Aircraft Information Make/Model - AERO COMMANDER 50 Landing Gear - TRICYCLE-RETRACT/ Max Gross Wt - 6750 No. of Seats - 2	NBLE Number Eng Engine Typ	odel - LYCOMING IO-	540-E1A5	ELT	Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - FSS Method - ACFT RADIO Completeness - WEATHER NOT PEF Basic Weather - VMC Wind Dir/Speed- 220/007 KTS Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAWN	Itinerary Last Depart SAME AS A PTINENT Destination UNK/NR ATC/Airspace Type of Flin Type of Cle			ON AIR Airport D HAYS Runway Runway Runway Runway	ata Ident - Lth/Wid - Surface - Status -	ASPHALT DRY	100
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI SE LAND,ME LAND	Age - 40 Biennial Flight R Current Months Since Aircraft Type	eview -YES Total -1 Make/ -500B Instr	Fligh - Model-	nt Time (H 3967 2328 822	Last 24 Last 30	Hrs - Days- Days-	MIT 7 23 65 0

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----Narrative----

ABOUT 10 MIN AFTER LANDING, DRG A CARGO OPN, THE PLT WAS PREPARING FOR THE NEXT LEG OF THE FLT, BUT WAS UNABLE TO MAKE A NORMAL START OF THE RGT ENG. HE ATTEMPTED TO START (AIR START) THE ENG BY WINDMILLING THE PROP ON A TAKEOFF TYPE OF RUN. HOWEVER, DRG THE ATTEMPT, HE LOST CONTROL OF THE ACFT & IT VEERED OFF THE RWY, CROSSED A TWY & WENT THRU A BOUNDRY FENCE BEFORE STOPPING. IT CAME TO REST, 160 DEG FROM THE RWY HDG. NO PRE-ACDNT PART FAILURE/MALFUNCTION WAS FOUND.

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File No 24	52 9/16/88 HAYS,KS	A/C Reg. No. N1189Z	Time (Lc1) - 0700 CDT
	LOSS OF CONTROL - ON GROUND TAKEOFF - GROUND RUN		
3. OPERATION WITH 4. DIRECTIONAL CON	ERATIVE JRE - IMPROPER - PILOT IN COMMAND KNOWN DEFICIENCIES IN EQUIPMENT - A FROL - NOT MAINTAINED - PILOT IN CC RVE - UNCONTROLLED -		
Occurrence #2 Phase of Operation	ON GROUND COLLISION WITH OBJECT TAKEOFF - ABORTED		
Finding(s) 6. OBJECT - FENCE			
Probable Cause			
The National Transpo	rtation Safety Board determines tha	it the Probable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 2,6

is/are finding(s) 3,4

Basic Information Type Operating Certificate-NONE (GENER/		Aircraft [	Jamage		Inii	ries	
Type operating certificate None (GENERA	AL AVIATION)	SUBSTANT		Fatal	•		None
Type of Operation -PERSONAL		Fire	C	rew 0	0	0	1
Flight Conducted Under -14 CFR 91		NONE	Pa	ass O	0	0	0
Accident Occurred During -DESCENT							
-Aircraft Information							
Make/Model - SCHWEIZER TG3A	Eng Make/Mo			EL	T Installed/		
Landing Gear - SKID	Number Engi				Stall Warni	ng System	- NO
Max Gross Wt - 857 No. of Seats - 2	Engine Type Rated Power						
		- N/A					
-Environment/Operations Information							
Weather Data	Itinerary	ne Deint			t Proximity	<b>D</b>	
Wx Briefing - FSS Method - TELEPHONE	Last Departu YODER.KS	ire Point		UFF	AIRPORT/STRI	. P	
Completeness - WEATHER NOT PERTINEN				Airport	Data		
Basic Weather - VMC	LOCAL			•	LOWER		
Wind Dir/Speed- 350/008 KTS					ay Ident	- 35	
Visibility - 15.0 SM	ATC/Airspace			Runw	ay Lth/Wid	- 7000/	300
Lowest Sky/Clouds - 25000 FT SCAT	TTERED Type of Flig	<mark>y</mark> ht Plan - I	NONE	Runw	ay Surface	- GRASS/TU	RF
Lowest Ceiling - NONE	Type of Clea	arance - I	NONE		ay Status		
	Type Apch/Lr	ndg - I	FORCED LANDIN	G		HIGH VEG	ETATION
Precipitation - NONE							
Condition of Light - DAYLIGHT							
-Personnel Information							
Pilot-In-Command	Age - 22		edical Certif				
Certificate(s)/Rating(s)	Biennial Flight Re			light Time - 76		4 11	
STUDENT	Current Months Since		Make/Model			24 Hrs - UN 80 Days-	
GLIDER	Aircraft Type	•		- UNK/NR		0 Days-	6
GEIDER	Anciart Type	N/ A	Multi-Eng			craft - UN	
			Martin Eng	0.117/111			
Instrument Rating(s) - NONE							
-Narrative							
LE BEING TOWED TO ALTITUDE, THE STUDENT PI	LINT SATE THAT THE T		NE AT ABOUT	200 TO 300	FEET AGL. HE	-	
CUTED A TURN FOR AN EMERGENCY LANDING, AND							
ONTROLLED COLLIDING WITH TREES, THEN THE							
KEN NEAR THE GLIDER TOW HOOK.							

### Brief of Accident (Continued)

File No 24	39 10/02/88	YODER,KS	A/C Reg. No. N73483	Time (Lc1) - 1430 CDT
Occurrence #1 Phase of Operation	AIRFRAME/COMPONE TAKEOFF - INITIA	NT/SYSTEM FAILURE/M	MALFUNCTION	
Finding(s) 1. GLIDER LAUNCH/T 2. EMERGENCY PROCE				
Occurrence #2 Phase of Operation			(EMERGENCY)	
Finding(s) 3. MANEUVER - PERF 4. STALL/SPIN - EN		IN COMMAND		
Occurrence #3 Phase of Operation				
Occurrence #4 Phase of Operation	DESCENT - UNCONT	ROLLED		
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,4

File No 2500 1/23/88 MENDON	N, MA A/CR	eg. No. N663FL	Time (Lc1) - 0830 EST					
Basic Information Type Operating Certificate-NONE (GENERAL	DESTRO	ION) Aircraft Damage DESTROYED			Injuries Fatal Serious Minor			
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire NONE	Crew Pass	0 0	0 1	0 1	1 1		
Aircraft Information Make/Model - PIPER PA-28 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2050 No. of Seats - 2	Eng Make/Model - LYG Number Engines - 1 Engine Type - REG Rated Power -	CIPROCATING-CARBURE	St	Installed/A all Warnin				
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 220/002 KTS Visibility - 12.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Itinerary Last Departure Point HOPEDALE,MA Destination BADER FIELD,NJ ATC/Airspace Type of Flight Plan Type of Clearance Type Apch/Lndg	- NONE - NONE	Airport Da Runway Runway Runway Runway	RPORT/STRIP ata Ident - Lth/Wid - Surface -	N/A N/A N/A N/A			
	Age - 40 Biennial Flight Review Current - YES Months Since - 6 Aircraft Type - UNK/NR	Total - Make/Model-	t Time (Ho 328 296 <td>ours) Last 24 Last 30 Last 90</td> <td>IVERS/LIM Hrs - UN Days- UN Days- aft - UN</td> <td>K/NR K/NR 3</td>	ours) Last 24 Last 30 Last 90	IVERS/LIM Hrs - UN Days- UN Days- aft - UN	K/NR K/NR 3		
Instrument Rating(s) - NONE								

----Narrative----

A SHORT FIELD TAKEOFF WAS BEING MADE DUE TO THE NEAR GROSS WEIGHT OF THE ACFT. SHORTLY AFTER TAKEOFF AT AN ALT OF ABOUT 1,100 FT, THE ACFT EXPERIENCED A VIBRATION AND THE ENG BEGAN TO LOSE POWER. ALL ATTEMPTS TO REGAIN POWER WERE UNSUCCESSFUL. AFTER COMPLETING A 180 DEG TURN TOWARD THE AIRPORT, POWER WAS COMPLETELY LOST. INSUFFICIENT ALT REMAINED TO LAND SAFELY ON THE RUNWAY. THE ACFT WAS STALLED INTO TREES AND SUBSEQUENTLY COLLIDED WITH THE TERRAIN. POST ACCIDENT INSPECTION OF THE ENG AND ACFT FAILED TO REVEAL THE CAUSE OF THE POWER LOSS.

		Brief of	Accident (Continued)	
File No 250	00 1/23/88	MENDON, MA	A/C Reg. No. N663FL	Time (Lc1) - 0830 EST
Occurrence #1 Phase of Operation Finding(s) 1. UNDETERMINED	CLIMB			
Occurrence #2 Phase of Operation				
Finding(s) 2. AIRSPEED - NOT I 3. STALL - ENCOUNTI				
Occurrence #3 Phase of Operation			ER	
Finding(s) 4. OBJECT - TREE(S				
Probable Cause				· · · · · · · · · · · · · · · · · · ·

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3

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Basic Information Type Operating Certificate-NONE (GENERA		ft Damage		Injur	ios	
Type operating certificate work (GENERA	DESTR		Fatal			None
Type of Operation -PERSONAL	Fire	Crev		0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass		ō	õ	õ
Accident Occurred During -DESCENT						
-Aircraft Information						
Make/Model - MOONEY M2OK		ONTINENTAL TSIO-36				
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines -		S	tall Warnin	ng System	- YES
Max Gross Wt - 2900		ECIP-FUEL INJECTED				
No. of Seats - 4	Rated Power -	210 HP				
-Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Poin	it	OFF AI	RPORT/STRIP	,	
Method - N/A Completeness - N/A	WORCESTER,MA Destination		Airport Da	. * .		
Basic Weather - IMC	BRIDGEPORT,CT		A Triport Da	ata	·	
Wind Dir/Speed- 180/007 KTS	BRIDGELORT, OT		Runway	Ident -	N/A	
Visibility - 7.0 SM	ATC/Airspace			Lth/Wid -		
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan	- IFR		•	N/A	
Lowest Ceiling - 600 FT OVER					N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE	-			
Precipitation - NONE	·, · · · –					
Condition of Light - NIGHT(DARK)						
-Personnel Information						
Pilot-In-Command	Age - 55 Biennial Flight Review	Medical Certifica			IVERS/LIN	4I T
Certificate(s)/Rating(s)	Biennial Flight Review	Flig	ght Time (He	•		
PRIVATE	Current - YES				Hrs - UN	•
SE LAND	Months Since - 17	Make/Model-	206	Last 30	Days-	
	Aircraft Type - C-172	Instrument-	134 INIZ /ND	Last 90	) Days- haft - UN	
		Multi-Eng - l	JINK / INK	KUTUPCP	ait - UN	
Instrument Rating(s) - AIRPLANE						

HIS DEPARTURE INSTRUMENT DEPARTORE WITH A MAXIMUM ASSIGNED ALTITUDE OF 4,000 FT. THE PLT FAILED TO FOLLOW HIS DEPARTURE INSTRUCTIONS CONCERNING ROUTING. HE CLIMBED TO 4,000 FT AND WHEN QUERIED, SAID HE WAS HAVING AUTOPILOT PROBLEMS. A FEW MINUTES LATER, THE ACFT DISAPPEARED FROM RADAR. THE ACFT IMPACTED A LINE OF TREES AT A HIGH SPEED AND WAS EXTENSIVELY BROKEN UP. THE WRECKAGE WAS SCATTERED OVER 450 FT. THE AUTOPILOT PROBLEM WAS NOT IDENTIFIED DUE TO THE EXTENT OF IMPACT DAMAGE; HOWEVER, NO PROBLEM WAS NOTED WITH THE AIRFRAME OR ENGINE. THE PLT WAS CURRENT WITH INSTRUMENTS, BUT NOT FOR NIGHT FLIGHT. THE ACFT PITOT STATIC SYSTEM AND TRANSPONDER WERE BOTH OUT OF INSPECTION.

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# Brief of Accident (Continued)

File No 24	91 11/16/88	HOLDEN, MA	A/C Reg. No. N1170Z	Time (Lc1) - 1850 EST
Occurrence #1 Phase of Operation				
Finding(s) 1. AUTOPILOT/FLIGH 2. MAINTENANCE,I		ERMINED AFT - NOT PERFORMED	- -	
Occurrence #2 Phase of Operation				
	DN - FOG			
Occurrence #3 Phase of Operation	IN FLIGHT COLLIS DESCENT - UNCONT	ION WITH TERRAIN/WAT ROLLED	ER	
Finding(s) 8. OBJECT - TREE(S	)			
Probable Cause				· · · · · · · · · · · · · · · · · · ·
The National Transpo is/are finding(s) 6	rtation Safety Boa	rd determines that t	he Probable Cause(s) of this accid	dent

Factor(s) relating to this accident is/are finding(s) 1,3,4,5,7

File No 2425 11/29/88 SHARON	, MA	A/C Reg. No. N9035U			ime (Lcl) -	1128 ES	т	
-Basic Information Type Operating Certificate-NONE (GENERAL		Aircraft Damage			Injuries Fatal Serious Minor N			
Type of Operation -INSTRUCTIONAL		SUBSTANTIAL ire	Crew				None O	
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING		NONE		0	õ	2 0	õ	
-Aircraft Information Make/Model - ROBINSON R22 Landing Gear - SKID Max Gross Wt - 2350	Engine Type	s - 1 - RECIPROCAT		S	Installed/A tall Warnin		•	
No. of Seats - 2	Rated Power	- 124 HP						
-Environment/Operations Information								
Weather Data	Itinerary				Proximity			
Wx Briefing - NO RECORD OF BRIEFING	Last Departure			OFF AI	RPORT/STRIP			
Method - N/A	SOUTH BOSTON	, MA						
Completeness - N/A	Destination			Airport Da	ata			
Basic Weather - VMC	LOCAL							
Wind Dir/Speed- 260/008 KTS						N/A		
Visibility - 10.0 SM	ATC/Airspace				•	N/A		
Lowest Sky/Clouds - CLEAR	Type of Flight					N/A		
Lowest Ceiling - NONE	Type of Cleara			Runway	Status -	N/A		
Obstructions to Vision- NONE	Type Apch/Lndg	- FORCED	LANDING					
Precipitation - NONE								
Condition of Light - DAYLIGHT								
-Personnel Information							(. <b>-</b>	
Pilot-In-Command	Age - 32	Medical	Certificat	e - VALID	MEDICAL-NO	WAIVERS	/LIMIT	
Certificate(s)/Rating(s)	Biennial Flight Revi Current	ew	Fligh	nt Time (He				
COMMERCIAL, CFI	Current -	YES Tot	al -	997			4	
	Months Since -	8 Mak	e/Model-	941	Last 30			
HELICOPTER	Aircraft Type -	UNK/NR Ins	trument-	0		Days- aft -		
Instrument Rating(s) - NONE								

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----Narrative----

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AFTER THE INSTRUCTOR PILOT TOOK CONTROL OF THE HELICOPTER FOR A LANDING, THE HELICOPTER LOST POWER. THE PILOT AUTOROTATED TO A HARD LANDING AND THE HELICOPTER ROLLED OVER ONTO ITS RIGHT SIDE. A POST ACCIDENT EXAMINATION OF THE ENGINE DID NOT REVEAL ANY MECHANICAL DISCREPANCIES, HOWEVER ONLY 3/10TH OF A GALLON OF FUEL WAS FOUND IN THE FUEL SYSTEM. THE FUEL CAPACITY IS 19.8 GALLONS OF WHICH 19.2 GALLONS IS USEABLE.

# Brief of Accident (Continued)

		A/C Reg. No. N9035U	Time (Lcl) - 1128 EST
LOSS OF ENGINE P LANDING	OWER		
AUSTION ION - INADEQUATE	- PILOT IN COMMAND		· · · · · · · · · · · · · · · · · · ·
G - NOT MAINTAINE	D - PILOT IN COMMAND		
ROLL OVER LANDING			
	~		
	LANDING AUSTION CON - INADEQUATE LOSS OF CONTROL DESCENT - EMERGE G - NOT MAINTAINE ROLL OVER LANDING	AUSTION CON - INADEQUATE - PILOT IN COMMAND LOSS OF CONTROL - IN FLIGHT DESCENT - EMERGENCY G - NOT MAINTAINED - PILOT IN COMMAND ROLL OVER LANDING	LANDING AUSTION ION - INADEQUATE - PILOT IN COMMAND LOSS OF CONTROL - IN FLIGHT DESCENT - EMERGENCY G - NOT MAINTAINED - PILOT IN COMMAND ROLL OVER LANDING

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,3

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Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION) Aircra	ft Damage		Injur	ies	
Type operating certificate hole (deleter)			Fatal			None
Type of Operation -INSTRUCTIONAL	_ Fire		rew 1	0		· O
Flight Conducted Under -14 CFR 91	NONE	Р	ass O	0	0	0
Accident Occurred During -DESCENT						
-Aircraft Information						
Make/Model - BELL 47D1	Eng Make/Model - F			Installed/A		
Landing Gear - SKID	Number Engines -			Stall Warnir	ng System	- NO
Max Gross Wt - 2950	Engine Type - R		BURETOR			
No. of Seats - 3	Rated Power -	200 HP				
-Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Poin	t,	UNK/N	R		
Method - N/A Completeness - N/A	WESTFIELD,MA Destination		Airport			
Basic Weather - UNK/NR	GRT. BARRINGTON, M	٨				
Wind Dir/Speed- 300/013 KTS		~			N/A	
Visibility - 35.0 SM	ATC/Airspace				N/A	
Lowest Sky/Clouds - 3000 FT	Type of Flight Plan		Runwa	y Surface -	N/A	
Lowest Ceiling - 3000 FT	Type of Clearance		Runwa	y Status –	N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE				
Precipitation - NONE Condition of Light - DAYLIGHT						
-Personnel Information				-		
Pilot-In-Command Certificate(s)/Rating(s)	Age - 46 Biennial Flight Review	Medical Certif	light Time (		J WAIVERS/	LIMII
COMMERCIAL, CFI	Current - YES	Total	- 1218	last 24	Hrs - UN	IK / NR
SE LAND, ME LAND, SE SEA	Months Since - 18	Make/Model	- 42	Last 30	) Davs-	9
	Months Since - 18 Aircraft Type - C-172	Instrument	- 42 - 142 - 41	Last 90	) Days-	21
		Multi-Eng	- 41	Rotorcr	aft -	42
Instrument Rating(s) - AIRPLANE						
-Narrative						

AND HAD FAILED OPPOSITE THE DIRECTION OF ROTATION. THE STABILIZER BAR WAS NOT RECOVERED. THERE WAS EVIDENCE OF BLADE FLAPPING AND LOW ROTOR RPM CONDITIONS. NO EVIDENCE OF A FAILURE ON THE FLIGHT CONTROL SYSTEM, OTHER THAN THE MISSING STABILIZER CONTROL BAR WAS FOUND. NO EVIDENCE OF A ENGINE FAILURE WAS NOTED, ALTHOUGH CONDITIONS WERE PRESENT FOR THE FORMATION OF CARBURETOR ICE.

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File No 24	42 12/02/88 RUSSELL,MA	A/C Reg.	No. N163B	Time (Lc1) - 1015 EST
Occurrence #1 Phase of Operation	LOSS OF CONTROL - IN FLIGHT CRUISE			
2. ROTOR RPM - NOT	HT CONTROLS - IMPROPER USE OF - MAINTAINED - PILOT IN COMMAND NG - NOT POSSIBLE - PILOT IN COM			·
	IN FLIGHT COLLISION WITH TERR DESCENT - UNCONTROLLED	AIN/WATER		
Finding(s) 4. TERRAIN CONDITIO	DN - HIGH VEGETATION			
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

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### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information Type Operating Certificate-NONE (GEN	ERAL AVIATION)	Aircraft Damage		Injur	ies	
		DESTROYED	Fatal		Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91		Fire NONE	Crew 1 Pass O	0	0	0
Accident Occurred During -DESCENT		NUNE	Pass 0	0	0	0
Aircraft Information						
Make/Model - LAMB SHOESTRING S-10		Model - LYCOMING O				
Landing Gear - TAILWHEEL-RETRACTABLI Max Gross Wt - 1100		ngines - 1 vpe - RECIPROCAT		Stall Warnir	ng System	- UNK/NR
No. of Seats - 1		ver - 110 HP	ING CARBORLION			
Environment/Operations Information						
Weather Data	Itinerary	ture Point		t Proximity		
Wx Briefing - NO RECORD OF BRIEF Method - N/A	ING Last Depar GAITHERS		UFF	AIRPORT/STRIP	,	
Completeness - N/A	Destination		Airport	Data		
Basic Weather - VMC	LOCAL					
Wind Dir/Speed- 310/016 KTS					N/A	
Visibility - 15.0 SM	ATC/Airspace	2		ay Lth/Wid -		
Lowest Sky/Clouds - 5000 FT S( Lowest Ceiling - NONE	CATTERED Type of FI	ight Plan - NONE		ay Surface - ay Status -	· N/A · N/A	
Obstructions to Vision- NONE	Type of Ci Type Apch/	'Inda - NONE	Ruliw	ay status -	N/A	
Precipitation - NONE		21109				
Condition of-Light - DAYLIGHT						
Personnel Information Pilot-In-Command	4.00 11	Madiaal	Certificate - VAL			
Certificate(s)/Rating(s)	Age - 44 Biennial Flight	Medical Review	Flight Time		WAIVERS/	
COMMERCIAL.CFI	Current	- UNK/NR Tot	al - 1200		Hrs - UN	K/NR
SE LAND, ME LAND, SE SEA	Months Since	e – UNK/NR Mak	e/Model- UNK/NR trument- UNK/NR	Last 30	) Days- UN	K/NR
	Aircraft Typ	e-UNK/NR Ins	trument- UNK/NR	Last 90	) Days- UN	K/NR
		Mul	ti-Eng - UNK/NR	Rotorcr	`aft - UN	K/NR
Instrument Rating(s) - AIRPLANE						
Narrative						
RDING TO WITNESSES, THE PLT MADE SEVER	AL TAKEOFFS AND LAND	INGS PRIOR TO DEPA	RTING THE AIRPORT	AREA. THE ACF	T WAS	
SEEN AT AN ALT OF APRX 300 FT AGL OVER						

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File No 2495	4/24/88	GAITHERSBURG, MD	A/C Reg. No. N47CL	Time (Lc1) - 1600 EDT
Occurrence #1 LO Phase of Operation MA		- IN FLIGHT		
Finding(s) 1. AEROBATICS - PERFO 2. ALTITUDE - INADEQU 3. AIRCRAFT HANDLING	TE - PILOT IN	COMMAND		
Occurrence #2 IN Phase of Operation DI				
Finding(s) 4. OBJECT - TREE(S)				
Probable Cause				· · · · · · · · · · · · · · · · · · ·
The National Transporta is/are finding(s) 2,3	ion Safety Boa	rd determines that the	Probable Cause(s) of this accid	dent

Factor(s) relating to this accident is/are finding(s) 1

Basic Information					<b>.</b> .	•	
Type Operating Certificate-NONE (GEN	IERAL AVIATION)	Aircraft Damage DESTROYED		Fatal	Injur Serious		None
Type of Operation -PERSONAL		Fire	Crew	1	0	0	
Flight Conducted Under -14 CFR 91		NONE	Pass	2	0	0	Ō
Accident Occurred During -APPROACH							
Aircraft Information							
Make/Model - PIPER PA-34-200		del – LYCOMING IO	)-360-C1E6		Installed/A		
Landing Gear - TRICYCLE-RETRACTABLE				Si	tall Warnir	ng Syste	m - YES
Max Gross Wt - 4200		- RECIP-FUEL	INJECTED				
No. of Seats - 6	Rated Power	- 200 HP					
Environment/Operations Information							
Weather Data	Itinerary	- <b>D</b> +			Proximity		
Wx Briefing - NO RECORD OF BRIEF Method - N/A				OFF AIF	RPORT/STRIP	)	
Completeness - N/A	FOREST HIL Destination	_, MD	A i .	rport Da	a+a		
Basic Weather - VMC	OCEAN CITY	MD	A11	port ba	ata		
Wind Dir/Speed- 240/005 KTS		,		Runwav	Ident -	N/A	
Visibility - 7.0 SM	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - N/A	Type of Flig	nt Plan - NONE		Runway	Surface -	N/A	
Lowest Ceiling - 5000 FT B	<b>,</b>	rance - NONE		Runway	Status ~	· N/A	
Obstructions to Vision- NONE	Type Apch/Ln	dg - NONE					
Precipitation - NONE							
Condition of Light - NIGHT(DARK							
Personnel Information							
<pre>Pilot-In-Command    Certificate(s)/Rating(s)</pre>	Age - 56 Biennial Flight Re	Medical	Certificate	- EXPIRE			
PRIVATE		- UNK/NR Tota	1 - 27(	11111e (Ho	Last 24	Hre -	
SE LAND, ME LAND	Months Since	- UNK/NR Make	/Model- 189	50	Last 30		
SE EAND, ME EAND	Aircraft Type	- UNK/NR Inst	e/Model- 189 rument- UNK/M	NR	Last 90		
		Mult	i-Eng - UNK/M	NR	Rotorcr		
			5 .				
Instrument Rating(s) - AIRPLANE							
Narrative							
TNESSES SAW THE ACFT FLYING ABOUT 2 MILE							
OUT 600 FT AGL. THE ACFT CROSSED THE SHO							
TURNED SOUTH. ACCORDING TO WITNESSES, T							
ASHED INTO THE WATER, ABOUT A MILE NORTH							
TNESSES ALSO REPORTED DARK NIGHT CONDITI							
MECHANICAL MALFUNCTION. THE PLT WAS DEN FICIENCES THE PLT'S BODY WAS NOT RECOVE		IFICATE IN AUGUS	1, 1986 BECAU	JSE OF C	CARDIOVASCU	ILAR	

DEFICIENCES. THE PLT'S BODY WAS NOT RECOVERED.

File No 251	1 10/28/88 OC	EAN CITY,MD	A/C Reg. No. N666RW	Time (Lcl) - 2040 EDT
Occurrence #1 Phase of Operation	IN FLIGHT COLLISION	WITH TERRAIN/WATER		
Finding(s) 1. TERRAIN CONDITIC 2. LIGHT CONDITION 3. AIRCRAFT HANDLIN 4. UNDETERMINED		PILOT IN COMMAND		
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 3,4

Factor(s) relating to this accident is/are finding(s) 1,2

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File No 2479 4/18/88 BRIGH		. No. N2326L			- 1930 EDT	
Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION) Aircraft			Iniu	nios	
Type operating centricate-none (General	_ AVIATION) Aircraft   SUBSTANT		Fatal	Inju Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew	0	0	1	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1	2
Accident Occurred During -APPROACH						
Aircraft Information						
Make/Model - BEECH 23	Eng Make/Model - LYCO	MING 0-320-D2B			Activated	
Landing Gear - TRICYCLE-FIXED	Number Engines - 1			all Warni	ng System	- YES
Max Gross Wt - 2300	Engine Type - RECI		TOR			
No. of Seats - 4	Rated Power - 1	50 HP				
Environment/Operations Information						
Weather Data	Itinerary		Airport P		_	
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point		OFF AIR	PORT/STRI	P	
Method - N/A	SAME AS ACC/INC					
Completeness - N/A	Destination		Airport Da			
Basic Weather - VMC	SAME AS ACC/INC		HYNE FI		00	
Wind Dir/Speed- 320/012 KTS Visibility - 15.0 SM	ATC/Airspace				- 22	30
Lowest Sky/Clouds - 4000 FT SCAT		NONE		Surface	- 1800/	30
Lowest Ceiling - NONE	Type of Clearance -			Status		
Obstructions to Vision- NONE	Type Apch/Lndg -		Kullway	Status	DRT	
Precipitation - NONE		FORCED LANDING				
Condition of Light - DAYLIGHT		ences enterna				
Personnel Information						
Pilot-In-Command	Age - 42 M	edical Certificat	e - VAITD	MEDICAL-W	ATVERS/LTM	тт
	Biennial Flight Review		nt Time (Ho		A102.00/210	
PRIVATE	Current - YES	Total -	74	Last 2	4 Hrs -	1
SE LAND	Months Since - 5	Make/Model-	6	Last 3	0 Days-	6
	Months Since - 5 Aircraft Type - CE-150	Instrument-	2	Last 9	0 Days-	6
Instrument Rating(s) - NONE						
Narrative						
E PILOT STATED THAT, AFTER A LOCAL PLEASURE	FLIGHT WITH HIS CHILDREN AS	PASSENGERS, HE RE	TURNED TO	HIS		
PARTURE AIRPORT AND RE-ENTERED THE TRAFFIC F					E	
DN'T LIKE THE WAY THINGS LOOKED AND CHOSE TO						
RMALLY AND BEGAN TO CLIMB, BUT "IMMEDIATELY				ROSSLY		
T-OF-BALANCE." THE PILOT PERFORMED EMERGENCY						
		TO ADEA FOD ALTER				
NTINUEDLAKE LANDING WAS VERY SUSPECT DU RCRAFT STRUCK THE TOP OF A LARGE TREE AND TH	•	-				

PILOT AND PASSENGERS WERE ABLE TO EXIT THE AIRCRAFT BEFORE IT SANK. THE AIRCRAFT WAS SUBMERGED FOR MORE THAN 20 HOURS BEFORE IT WAS RECOVERED FROM THE LAKE. A SUBSEQUENT ENGINE RUN-UP WAS SATISFACTORILY ACCOMPLISHED.

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File No 24	79 4/18/88 BRIGHTON,MI	A/C Reg. No. N2326L	Time (Lcl) - 1930 EDT
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER GO-AROUND (VFR)		
3. LACK OF TOTA 4. GO-AROUND - PER	H - NOT ATTAINED - PILOT IN COMMAND AL EXPERIENCE - PILOT IN COMMAND FORMED - PILOT IN COMMAND DURE - PERFORMED - PILOT IN COMMAND AIN		
	IN FLIGHT COLLISION WITH OBJECT DESCENT - EMERGENCY		
	IN FLIGHT COLLISION WITH TERRAIN/WATER DESCENT - EMERGENCY		
inding(s) 8. TERRAIN CONDITIO	DN - WATER		
Probable Cause			
Probable Cause The National Transpo is/are finding(s) 1	tation Safety Board determines that the Pr	robable Cause(s) of this accid	ent

Factor(s) relating to this accident is/are finding(s) 2,3,4,7

					2000 EDT	
-Basic Information Type Operating Certificate-NONE (GENERAL /	AVIATION) Aircraft SUBSTAN		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91	Fire NONE	Crew Pass	0	0	1	0
Accident Occurred During -LANDING	NONE	Fass	0	0	Ū	0
-Aircraft Information						
Make/Model - CESSNA 150	Eng Make/Model - CON	TINENTAL 0-200		installed/A		
Landing Gear - TRICYCLE-FIXED Max Gross Wt - 1500	Number Engines – 1 Engine Type – REC			tall Warnin	ng System	- YES
No. of Seats - 2	<b>e</b> ,.	100 HP	TUR			
-Environment/Operations Information						
Weather Data	Itinerary		Airport F			
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point		OFF AIF	PORT/STRIP		
Method - N/A	SOUTH BEND, IN					
Completeness - N/A	Destination		Airport Da	ata		
Basic Weather - VMC	JACKSON, MI		Dunner	Idant	N/A	
Wind Dir/Speed- VARIABLE/005 KTS Visibility - 15.0 SM	ATC / Aincreace				N/A N/A	
Lowest Sky/Clouds - 5000 FT SCATTER	ATC/Airspace	NONE			N/A N/A	
Lowest Ceiling - 25000 FT BROKEN					N/A N/A	
Obstructions to Vision- NONE	Type Apch/Lndg -		Runway	Status	N/A	
Precipitation - NONE		FORCED LANDING				
Condition of Light - DAYLIGHT		TORCED EANDING				
-Personnel Information Pilot-In-Command Addition	ne - 26 I	Medical Certificat		MEDICAL-NO		ТМТТ
	iennial Flight Review		t Time (Ho		, WAIVERS/	
PRIVATE	Current - YES	Total -	485	Last 24	Hrs -	3
SE LAND	Months Since - 8	Make/Model-	200	Last 30	) Davs-	12

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Instrument Rating(s) - AIRPLANE

#### ----Narrative----

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AFTER A ONE HOUR X-COUNTRY FLT, THE PLT NOTICED THE CYLINDER HEAD TEMPERATURE DROPPING AS HE NEARED HIS DESTINATION. THE PLT MADE A DESCENT AND REPORTED A THREE MILE FINAL TO LAND. THE ENG QUIT WHEN THE PLT PUT THE MIXTURE CONTROL TO RICH. HE ATTEMPTED TO RESTART THE ENG TO NO AVAIL AND A FORCED LANDING WAS MADE IN A DRIED UP SWAMP WHERE THE ACFT NOSED OVER. CARBURETOR ICE PROBABILITY CHARTS SHOW THAT CONDITIONS WERE FAVORABLE TO THE FORMATION OF MODERATE CARB ICE DURING CRUISE AND SERIOUS CARB ICE DURING GLIDE. TEMP WAS 76 DEGS/ DEWPOINT WAS 51 DEGS. THE ENG OPERATED NORMALLY DURING POST ACCIDENT INSPECTION.

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File No 250	04 6/17/88	JACKSON,MI	A/C Reg. No. N5810E	Time (Lc1) ~ 2000 EDT
Occurrence #1 Phase of Operation				
Finding(s) 1. CARBURETOR HEAT 2. WEATHER CONDITIO 3. FUEL SYSTEM,CARE	ON - CARBURETOR IC BURETOR - ICE	ING CONDITIONS		
Occurrence #2 Phase of Operation	DESCENT - EMERGE	NCY		
Occurrence #3 Phase of Operation				
inding(s) 4. TERRAIN CONDITIC			· · · · · · · · · · · · · · · · · · ·	
Probable Cause				

is/are finding(s) 1,3

Factor(s) relating to this accident is/are finding(s) 2,4

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-Basic Information Type Operating Certificate-NONE (GENERAL		ft Damage ANTIAL	Fatal	Injur Serious		None
Type of Operation -PERSONAL	Fire	C	rew O	0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE	F	ass O	0	0	0
-Aircraft Information Make/Model - PERKINS DRAGONFLY	Eng Make/Model - H	ADI MOTORS 60-20	M 51	T Installed/A	etiveted	- NO -N//
Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1150	Number Engines - Engine Type - R	1		Stall Warnir		
No. of Seats - 2	Rated Power -					
-Environment/Operations Information						
Weather Data	Itinerary			t Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Poir	it	ON A	IRSTRIP		
Method - N/A	SAME AS ACC/INC		• • • •			
Completeness - N/A	Destination		Airport			
Basic Weather - VMC Wind Dir/Speed- CALM	LOCAL			E GROVE av Ident -	27	
Visibility - 15.0 SM	ATC/Airspace			ay Lth/Wid -		110
Lowest Sky/Clouds - CLEAR	Type of Flight Plan			ay Surface -		
Lowest Ceiling - NONE	Type of Clearance					
Obstructions to Vision- NONE	Type Apch/Lndg			,		
Precipitation - NONE Condition of Light - DAYLIGHT		FULL STOP				
-Personnel Information Pilot-In-Command	Age - 46	Medical Certif	icate - VAL	ID MEDICAL-NO	WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Age - 46 Biennial Flight Review	F	light Time			
COMMERCIAL	Current - YES	lotal	- 476	Last 24	Hrs -	1
SE LAND	Months Since - 23	Make/Model	- 3			3
	Aircraft Type - C-152	Instrument Multi-Eng	- 14 - 1	Last 90	) Days-	8
Instrument Rating(s) - NONE						

THE PILOT INDICATED THAT HE HAD 3 HOURS TOTAL FLIGHT EXPERIENCE IN THE HOMEBUILT AIRCRAFT. HE STATED THAT HE ATTEMPTED A POWER-OFF LANDING AND THE AIRCRAFT BOUNCED. ON THE THIRD BOUNCE "THE (RIGHT WING) SPAR POPPED." THE PILOT STATED THAT "THIS IS A LEARNING CURVE ACCIDENT" AND INDICATED THAT MORE TIME PRACTICING SLOW FLIGHT AND LANDINGS IN THE ACCIDENT AIRCRAFT WOULD HAVE HELPED PREVENT THE ACCIDENT. THE AIRCRAFT HAD SUSTAINED SUBSTANTIAL DAMAGE TO THE LEFT WING DUE TO A HARD LANDING DURING IT'S MAIDEN FLIGHT IN APRIL, 1986. THE FLIGHT DURING WHICH THIS ACCIDENT OCCURRED WAS THE AIRCRAFT'S FIRST FLIGHT SINCE THAT ACCIDENT.

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### Brief of Accident (Continued)

	File No 2456	7/02/88	FOWLERVILLE, MI	A/C Reg. No. N192AP	Time (Lcl) - 0830 EDT	
00		LANDING				
Ph	ase of Operation LAND	ING - FLARE/	TOUCHDOWN			
	1. AIRCRAFT CONTROL - NO	T MAINTAINED	- PILOT IN COMMAND			
:	2. RECOVERY FROM BOUNCED	LANDING - N	OT PERFORMED - PILOT I	N COMMAND		

3. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

Factor(s) relating to this accident is/are finding(s) 3



#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident File No. - 2403 8/07/88 DETROIT.MI A/C Reg. No. N5796G Time (Lcl) - 1929 EDT ----Basic Information----Type Operating Certificate-NONE (GENERAL AVIATION) Aircraft Damage Injuries SUBSTANTIAL Fatal Serious Minor None Type of Operation -INSTRUCTIONAL 0 Fire Crew 0 0 1 Flight Conducted Under -14 CFR 91 NONE Pass 0 0 0 0 Accident Occurred During -LANDING ----Aircraft Information----Make/Model - CESSNA 150K Eng Make/Model - CONTINENTAL 0-200-A ELT Installed/Activated - YES/NO Landing Gear - TRICYCLE-FIXED Number Engines - 1 Stall Warning System - YES Max Gross Wt - 1600 Engine Type - RECIPROCATING-CARBURETOR No. of Seats -Rated Power - 100 HP 2 \_\_\_\_\_ \_\_\_\_\_ ----Environment/Operations Information----Weather Data Airport Proximity Itinerary Wx Briefing - NO RECORD OF BRIEFING Last Departure Point ON AIRPORT Method - N/A SAME AS ACC/INC Completeness - N/A Destination Airport Data Basic Weather - VMC LOCAL DETROIT CITY Wind Dir/Speed- CALM Runway Ident - 33 Visibility - 15.0 SM ATC/Airspace Runway Lth/Wid - 5500/ 100 Lowest Sky/Clouds -25000 FT SCATTERED Type of Flight Plan - NONE Runway Surface - ASPHALT Type of Clearance - VFR Runway Status - DRY Lowest Ceiling -NONE Obstructions to Vision- NONE Type Apch/Lnda - TRAFFIC PATTERN Precipitation - NONE Condition of Light - DAYLIGHT ----Personnel Information----Pilot-In-Command Aae -51 Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT Biennial Flight Review Certificate(s)/Rating(s) Flight Time (Hours) -22 STUDENT Current - N/A Total Last 24 Hrs -1 Months Since - N/A Make/Model-22 Last 30 Days-10 Last 90 Days 0 Aircraft Type - N/A Instrument-22 Multi-Eng -0 Rotorcraft -0 Instrument Rating(s) - NONE ----Narrative----THE STUDENT PILOT WITH ONLY 22 HOURS TOTAL TIME WAS PRACTICING A LANDING WHICH RESULTED IN A HARD LANDING AND

FAILURE OF THE NOSE GEAR. THE OVERLOAD FAILURE OF THE NOSEWHEEL ALLOWED THE YOKE TO DIG INTO THE ASPHALT RUNWAY RESULTING IN THE AIRCRAFT FLIPPING OVER.

Brief	of	Accident	(Continued)

3 8/07/88	DETROIT,MI	A/C Reg. No. N5796G	Time (Lc1) - 1929 EDT
HARD LANDING LANDING			
MITS OF AIRCRAFT	- EXCEEDED - PILOT	IN COMMAND	
NOSE GEAR COLLAP LANDING	SED		
SE GEAR - OVERLOAD			· · · · · · · · · · · · · · · · · · ·
NOSE OVER LANDING			
-	HARD LANDING LANDING IMITS OF AIRCRAFT NOSE GEAR COLLAPS LANDING SE GEAR - OVERLOAD NOSE OVER	LANDING IMITS OF AIRCRAFT - EXCEEDED - PILOT NOSE GEAR COLLAPSED LANDING SE GEAR - OVERLOAD NOSE OVER	HARD LANDING LANDING IMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND NOSE GEAR COLLAPSED LANDING SE GEAR - OVERLOAD NOSE OVER

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1

Basic Information						
Type Operating Certificate-NONE (GENER)		aft Damage		Inju		
		ANTIAL	Fatal	Serious	Minor	None
Type of Operation -BUSINESS	Fire		rew O	0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE	P	ass O	0	0	0
Aircraft Information						
Make/Model - CHAMPION 7KCAB	Eng Make/Model - L		EL	T Installed/		•
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines -			Stall Warni	ng System ·	- NO
Max Gross Wt - 1650	Engine Type - R		ED			
No. of Seats - 2	Rated Power -	150 HP				
Environment/Operations Information						
Weather Data	Itinerary		Airpor	t Proximity		
Wx Briefing - FSS	Last Departure Poir	OFF	OFF AIRPORT/STRIP			
Method - TELETYPE	GRAND HAVEN,MI					
Completeness - FULL	Destination		Airport	Data		
Basic Weather - VMC	LOCAL					
Wind Dir/Speed- 210/015 KTS					- N/A	
Visibility - 4.000 SM	ATC/Airspace				- N/A	
Lowest Sky/Clouds - CLEAR	Type of Flight Plar			· · · · · · · · · · · · · · · · · · ·	- N/A	
Lowest Ceiling - NONE	Type of Clearance			ay Status ·	- N/A	
Obstructions to Vision- HAZE	Type Apch/Lndg	- FURGED LANDIN	<b>G</b>			
Precipitation - NONE Condition of Light - DAYLIGHT						
Personnel Information						
Pilot-In-Command	Age - 29	Medical Certif			D WAIVERS/I	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review		light Time			
COMMERCIAL	Current - YES	Total		Last 24		<u>,</u> 1
SE LAND, ME LAND	Months Since - 2		- 72		0 Days- UN	
	Aircraft Type - PA-38	8 Instrument	- 116	Last 90	0 Davs-	110

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PILOT STATED THAT HE WAS TOWING BANNERS ON THE DAY OF THE ACCIDENT. AFTER TOWING THE THIRD BANNER FOR AN ESTIMATED 1 1/4 HOURS, HE WAS RETURNING TO THE DEPARTURE AIRPORT WHEN THE AIRCRAFT'S ENGINE FAILED COMPLETELY. HE SELECTED THE "CLOSEST FIELD THAT LOOKED THE BEST..." AND EXECUTED A FORCED LANDING ON AN AREA OF ROUGH SAND DUNES. THE PILOT HAD A COMMERCIAL PILOT'S CERTIFICATE WITH APPROXIMATELY 633 HOURS TOTAL FLIGHT TIME, OF WHICH 72 HOURS WERE IN THE ACCIDENT MAKE AND MODEL AIRCRAFT. THE PILOT REPORTED THAT HE HAD BEEN TOWING BANNERS FOR "TWO SEASONS" AND "ALWAYS TIMED...FUEL BURN TO LEAVE 1 HOUR RESERVE." HE STATED THAT HE JUDGED HIS FUEL QUANTITY BY THE CUMULATIVE HOURS THE AIRCRAFT HAD FLOWN SINCE THE AIRCRAFT HAD NO ELECTRIC FUEL QUANTITY INDICATOR. HE STATED THAT HE ESTIMATED THAT HE HAD ONE HOUR OF FUEL REMAINING WHEN THE ENGINE QUIT.

#### Brief of Accident (Continued)

IANICAL I COMMAND	
	4

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3

Factor(s) relating to this accident is/are finding(s) 4,5

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Basic Information							
Type Operating Certificate-NONE (	GENERAL AVIATION)	Aircraft Da SUBSTANTIA		Fatal	•	uries Minor	None
Type of Operation -PERSON	A I	Fire		rew 0	0	MITTON O	1
Flight Conducted Under -14 CFR		NONE		ass 0	õ	ŏ	Ó
Accident Occurred During -LANDING							
Make/Model - HULLIBERGER STARD		'Model - CONTIN			T Installed,		
Landing Gear - TAILWHEEL-ALL FIX		ngines - 1			Stall Warn	ing System	n - NO
Max Gross Wt - UNK/NR		/pe - RECIP-		D			
No. of Seats - 2	Rated Pow	ver - UNK/NF	< 				
-Environment/Operations Information-							
Weather Data	Itinerary				t Proximity		
Wx Briefing - NO RECORD OF BR Method - N/A				UN A	IRPORT		
Completeness - N/A	WHITE CL Destination			Airport	Data	-	
Basic Weather - VMC	SAME AS				E CLOUD		
Wind Dir/Speed- 320/005 KTS	JAME AJ	A00/ 1N0			ay Ident	- 17	
	ATC/Airspace	2			ay Lth/Wid		50
Lowest Sky/Clouds - 5000 F			DNE		ay Surface		
Lowest Ceiling - NONE	Type of Cl	earance - NO	ONE		ay Status		
Obstructions to Vision- NONE	Type Apch/	'Lndg - ST	FRAIGHT-IN		-		
Precipitation - NONE			JLL STOP				
Condition of Light - DAYLIGH	T 						
-Personnel Information	-						
Pilot-In-Command	Age - UNK/NR		dical Certifi				
Certificate(s)/Rating(s)	Biennial Flight			ight Time		0.4.11	
UNK/NR	Current Months Since	- UNK/NR - UNK/NR	IOTAI -		Last	24 Hrs - L 30 Davs- L	
	Aircraft Typ	•	Instrument-		Last (	90 Days- L 90 Days- L	
			Make/Model- Instrument- Multi-Eng	· UNK/NR	Rotor	craft - L	
Instrument Rating(s) - UNK/N	२						
-Narrative							

File No 24	64 8/15/88	WHITE CLOUD,MI	A/C Reg. No. N939H	Time (Lc1) - 0930 EDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL LANDING - ROLL	- ON GROUND		
Finding(s) 1. STOLEN AIRCRAFT 2. AIRCRAFT CONTRO 3. GROUND LOOP/SWE	L - NOT MAINTAINED			
Occurrence #2 Phase of Operation	ON GROUND COLLIS LANDING - ROLL	ION WITH TERRAIN/WATER		
Probable Cause				

The<sub>l</sub>National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,3

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#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2463 8/17/88 SCHOO	LCRAFT,MI	A/C Reg. No. N48	8417	т	ime (Lcl) -	2000 ED1	
Basic Information Type Operating Certificate-AGRICULTURAL		rcraft Damage SUBSTANTIAL		Fatal	Injur. Serious		None
Type of Operation -AERIAL APPLI Flight Conducted Under -14 CFR 137 Accident Occurred During -LANDING	CATION Fi	re IONE	Crew Pass	0	0		1 0
Aircraft Information Make/Model - GRUMMAN G-164B Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - UNK/NR No. of Seats - 1	Number Engines	- P&W R-985 5 - 1 - RECIPROCATING - 600 HP		S	Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- UNK/NR Visibility - UNK/NR Lowest Sky/Clouds - UNK/NR Lowest Sky/Clouds - UNK/NR Precipitation - NONE Condition of Light - DAYLIGHT	DECATUR,MI Destination LOCAL ATC/Airspace Type of Flight Type of Clearar	Plan - NONE		OFF AI Airport D Runway Runway Runway Runway	Ident - Lth/Wid - Surface -	N/A Ń/A	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI SE LAND	Age - 46 Biennial Flight Revie Current - Y Months Since - Aircraft Type - B	ew 'ES Total 4 Make/M	Fligh - Model-	t Time (H 9045 64	Last 24 Last 30	Hrs - Days-	″∟IMIT 6 123 284

Instrument Rating(s) - AIRPLANE

----Narrative----

DURING AERIAL APPLICATION OPERATIONS, A HOSE BETWEEN THE CHEMICAL PUMP AND SPRAY BOOM DISCONNECTED ALLOWING THE CHEMICAL PESTICIDE TO DUMP OVERBOARD. THE PILOT ELECTED TO LAND AND ATTEMPT REPAIRS RATHER THAN FLY (DUMPING PESTICIDE) OVER POPULATED AREAS ON HIS WAY HOME. HE LANDED ON A DIRT ACCESS ROAD LOCATED IN THE FIELD HE WAS SPRAYING. DURING THE LANDING ROLL HE SWERVED TO AVOID A MOUND OF HIGH GRASS AND THE RIGHT WING CONTACTED THE CORN ALONG THE RIGHT SIDE OF THE ROAD. THE AIRCRAFT SWERVED FURTHER RIGHT AND SKIDDED TO A STOP, NOSE DOWN.

File No 2463	8/17/88	SCHOOLCRAFT,MI	A/C Reg. No.	N48417	Time (Lc1) - 2000 EDT
Occurrence #1 ON Phase of Operation LA		ON WITH TERRAIN/WATER			
Finding(s) 1. SPRAY/DUSTING EQUIP 2. PRECAUTIONARY LAN 3. TERRAIN CONDITION - 4. CLEARANCE - MISJU	DING - PERFORME CROP	D - PILOT IN COMMAND			
Occurrence #2 NC Phase of Operation LA					
Finding(s) 5. TERRAIN CONDITION -	GROUND				
Probable Cause					
The National Transportat	ion Safety Boar	d determines that the	Probable Cause(s)	of this accio	lent

Factor(s) relating to this accident is/are finding(s) 1,2,3

is/are finding(s) 4

κ.

Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft Dama DESTROYED	age	Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING		<sup>∓</sup> ire ON GROUND	Crew Pass	0	0 0	1 0	0 0
-Aircraft Information Make/Model - SACKETT J2 Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1821 No. of Seats - 2	Number Engin	⊜s - 1 - RECIPRO	N 6A4-150-B3 CATING-CARBURE HP	S	Installed/A Stall Warnir		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 050/008 KTS Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Itinerary Last Departury SAME AS ACC Destination LOCAL ATC/Airspace Type of Fligh Type of Clear Type Apch/Lnd	/INC t Plan - NON ance - NON g - TRA FUL	E	ON AIR Airport E LAMONT Runway Runway Runway Runway	)ata / Ident - / Lth/Wid - / Surface -	- 5217/	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE SE LAND	Age - 73 Biennial Flight Rev Current - Months Since - Aircraft Type -	iew NO <sup>·</sup> UNK/NR I	Fligh Total -	nt Time (H 272 2	lours) Last 24	1 Hrs - ) Days-	IT 1 2 3

\_\_\_\_\_

Instrument Rating(s) - NONE

#### ----Narrative----

THE PILOT STATED THAT HE WAS ATTEMPTING A POWER-OFF LANDING IN AN AIRCRAFT IN WHICH HE HAD VERY LITTLE FLIGHT EXPERIENCE. HE STATED THAT WHILE ON SHORT FINAL THE AIRCRAFT "WAS SINKING FASTER THAN I REALIZED...." THE AIRCRAFT IMPACTED THE GROUND SHORT OF THE RUNWAY, AND THE LANDING GEAR COLLAPSED. THE AIRCRAFT SKIDDED TO A STOP ON THE RUNWAY; A POST-IMPACT FIRE ENSUED, AND THE AIRCRAFT WAS DESTROYED.

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## Brief of Accident (Continued)

File No 246	8 8/19/88	DECKERVILLE,MI	A/C Reg. No. N33131	Time (Lc1) - 1700 EDT
Occurrence #1 Phase of Operation		TOUCHDOWN		
Finding(s) 1. PLANNED APPROACH 2. LACK OF TOTA 3. AIRSPEED - INADE	L EXPERIENCE IN T	YPE OF AIRCRAFT - PILO	T IN COMMAND	
Occurrence #2 Phase of Operation				
Finding(s) 4. LANDING GEAR - O'	VERLOAD			
Probable Cause				
The National Transporis/are finding(s) 1,3		rd determines that the	Probable Cause(s) of this accid	ent

Factor(s) relating to this accident is/are finding(s) 2

·						
-Basic Information Type Operating Certificate-NONE (GENERAL		aft Damage FANTIAL	Fatal	Injur Serious		None
Type of Operation -GLIDER TOW	Fire	Cre		0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF	NONE	Pas		0	0	Ο
-Aircraft Information Make/Model - CESSNA 305A Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 2100 No. of Seats - 2	Eng Make/Model - ( Number Engines -	CONTINENTAL 0-470-1 1 RECIPROCATING-CARBU	1B ELT SRETOR		ctivated g System	- YES-UNK/N - YES
-Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - FSS Method - TELEPHONE	Last Departure Poir	nt	ON AIR	PORT		
Completeness - WEATHER NOT PERTINENT	GREGORY,MI Destination		Airport D	12+2		
Basic Weather - VMC	GREGORY,MI		RICHMO			
Wind Dir/Speed- 290/005 KTS				Ident -	18	
Visibility - 10.0 SM	ATC/Airspace			Lth/Wid -		
Lowest Sky/Clouds - 3000 FT SCATT				Surface -		RE
Lowest Ceiling - NONE Obstructions to Vision- NONE	Type of Clearance		Runway	Status -	DRY	
Precipitation - NONE	Type Apch/Lndg	- FURCED LANDING				
Condition of Light - DAYLIGHT						
 -Personnel Information						
Pilot-In-Command	Age - 68	Medical Certifica	ate - VALID	MEDICAL-NO	WAIVERS/I	IMIT
	Biennial Flight Review		ght Time (⊦			
COMMERCIAL	Current - YES	Total -	2970	Last 24		2
SE LAND,ME LAND,SE SEA GLIDER	Months Since - 21 Aircraft Type - PA-28	Make/Model- 3 Instrument-	26	Last 30	Days- Days-	16 45
GLIDER	All chart Type - PA-26	Multi-Eng -		Last 90	Days-	45
Instrument Rating(s) - AIRPLANE						

BEGAN TO RUN ROUGH, AND THEN FAILED COMPLETELY. THE PILOT EXECUTED A FORCED LANDING IN A GRASSY, ROLLING FIELD, STRIKING A FENCE AND SMALL TREE BEFORE IMPACTING THE GROUND. THE GLIDER RELEASED AND LANDED WITHOUT INCIDENT. POST-ACCIDENT EXAMINATION OF THE POWERPLANT, IT'S SYSTEMS AND ACCESSORIES REVEALED NO EVIDENCE OF PRE-IMPACT MECHANICAL MALFUNCTION/DIFFICULTY. THE ENGINE PERFORMED SATISFACTORILY DURING A SUBSEQUENT RUN-UP. INVESTIGATORS DRAINED 7.5 GALLONS OF 80/87 OCTANE AVIATION FUEL FROM EACH OF TWO FUEL TANKS; THE AIRCRAFT HAS A "NO TAKEOFF" VALUE OF 6.75 GALLONS OR LESS. THIS VALUE WAS ESTABLISHED BECAUSE OF THE POSITIONING OF THE FUEL TANK OUTLETS AND THE RESULTANT POSSIBILITY OF FUEL FLOW INTERRUPTION IN VARIOUS FLIGHT ATTITUDES.

File No 24	66 8/28/88	GREGORY,MI	A/C Reg. No. N5166G	Time (Lcl) - 1300 EDT
Occurrence #1 Phase of Operation				
Finding(s) 1. FLUID,FUEL - LO 2. FLUID,FUEL - ST 3. EMERGENCY PRO 4. GLIDER TOW RELE 5. AIRCRAFT PREFLI	ARVATION CEDURE – ATTEMPTED ASE – PERFORMED –	- PILOT IN COMMAND IN COMMAND		
Occurrence #2 Phase of Operation				
Finding(s) 6. OBJECT - FENCE 7. OBJECT - TREE(S				
Occurrence #3 Phase of Operation 8. TERRAIN CONDITI	LANDING - FLARE/ <sup>-</sup> ON - DITCH			
Probable Cause				
The National Transpo is/are finding(s) 1		rd determines that the Pr	obable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 6,7

File No 2453 9/04/88 BOYNE CIT	Y,MI A/CR	eg. No. N52601	Т	ime (Lcl) -	1157 EDT	
Basic Information Type Operating Certificate-NONE (GENERAL AV	DESTRO		Fatal	Injur Serious		None
Type of Operation -AERIAL PHOTO Flight Conducted Under -14 CFR 91 Accident Occurred During -MANEUVERING	Fire NONE		1 0	0 1	0 0	0
Aircraft Information Make/Model - CESSNA 172P Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2400 No. of Seats - 4	Eng Make/Model - LY Number Engines - 1 Engine Type - RE Rated Power -		S	Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - FSS Method - TELEPHONE	Itinerary Last Departure Point HARBOR SPRINGS,MI			Proximity RPORT/STRIP		
Completeness - PARTIAL,LMTD BY PILOT Basic Weather - VMC	Destination LOCAL		Airport D	ata		
Wind Dir/Speed- VARIABLE/010 KTS Visibility - 3.000 SM Lowest Sky/Clouds - N/A Lowest Ceiling - 700 FT OVERCAST Obstructions to Vision- FOG Precipitation - RAIN SHOWERS Condition of Light - DAYLIGHT	ATC/Airspace Type of Flight Plan Type of Clearance Type Apch/Lndg	- NONE	Runway Runway	Lth/Wid - Surface -	N/A N/A N/A N/A	
	e - 39 ennial Flight Review Current - YES Months Since - 14 Aircraft Type - PA-28	Medical Certifica Flig Total - Make/Model- Instrument- U Multi-Eng -	nt Time (H 712 12 K/NR	lours) Last 24	Hrs - Days- UN Days-	2 K/NR

Instrument Rating(s) - NONE

----Narrative----

THE PILOT AND HIS PASSENGER WERE FLYING LOW OVER A SAILBOAT REGATTA TO PHOTOGRAPH SAILBOATS. AS THE PILOT MANEUVERED FOR A PHOTOGRAPH, HE THROTTLED BACK AND BANKED THE AIRCRAFT IN A STEEP BANK. SUBSEQUENTLY, THE AIRCRAFT STALLED AND THERE WAS INSUFFICIENT ALTITUDE TO RECOVER. THE AIRCRAFT IMPACTED THE WATER IN A LEFT WING LOW, NOSE DOWN ATTITUDE AND SANK ALMOST IMMEDIATELY. THE PASSENGER ESCAPED WITH SERIOUS INJURIES. HE TRIED TO HELP THE PILOT, BUT THE PILOT RECEIVED A HEAD INJURY, WHICH WAS FATAL. APRX 23 MI NNE AT PELLSTON, MI, THE 1152 EDT WX WAS IN PART: ESTD 700' OVC, VIS 3 MI WITH LIGHT RAIN SHOWERS & FOG. WINDS IN THE AREA WERE RPRTD TO BE VARIABLE.

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Brief of Accident (Continued)

File No 24	53 9/04/88	BOYNE CITY,MI	A/C Reg. No. N52601	Time (Lcl) - 1157 EDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL MANEUVERING	- IN FLIGHT		
Finding(s) 1. MANEUVER - INIT 2. WEATHER CONDITI 3. AIRSPEED - INAD 4. STALL - INADVER	DN - UNFAVORABLE W EQUATE - PILOT IN	IND COMMAND		
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATER ROLLED		
Finding(s) 5. ALTITUDE - INAD 6. TERRAIN CONDITI	-	COMMAND		
Probable Cause				
The National Transpo is/are finding(s) 3	-	rd determines that the	Probable Cause(s) of this accid	ent

Factor(s) relating to this accident is/are finding(s) 2,5

Basic Information Type Operating Certificate-NONE (GENERA		craft Damage			Injur	ies	
		STANTIAL		Fatal	Serious		None
Type of Operation -PERSONAL	Fire	5	Crew	1	0	0	0
Flight Conducted Under -14 CFR 91	NOM	NE	Pass	0	0	0	0
Accident Occurred During -DESCENT							
Aircraft Information							
Make/Model - VOLKSPLANE VP-1		- VOLKSWAGEN 1500	i i i	ELT I	nstalled/A		
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines				all Warnir	g System	- NO
Max Gross Wt - 750	<b>J</b> = 71	- RECIPROCATING-C - 65 HP	ARBUREI	OR			
No. of Seats - 1	Rated Power	- 65 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport P			
Wx Briefing - NO RECORD OF BRIEFING	•	pint		OFF AIR	PORT/STRIP		
Method - N/A	COLDWATER, MI				<b>.</b> _		
Completeness - N/A Basic Weather - VMC	Destination LOCAL		А	irport Da	τa CO MEM.		
Wind Dir/Speed- 240/010 KTS	LUCAL					24	
Visibility - 10.0 SM	ATC/Airspace				Lth/Wid -		75
Lowest Sky/Clouds - UNK/NR	Type of Flight Pl	an - NONF			Surface -		
Lowest Ceiling - 5000 FT BROK					Status -		
Obstructions to Vision- NONE	Type Apch/Lndg		TERN	·····,			
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 51					WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review			Time (Ho			
PRIVATE	Current - UN	K/NR Total	- UNK	/NR 122	Last 24	Hrs - UN	•
SE LAND	Months Since - UN	K/NR Make/Mod	el-	122	Last 30	Days- UN	
	Aircraft Type - UNH			O /NR		Days- UNI aft - UNI	
		MUITI-EN	g - UNK	/ NR	ROLOPER	art - UNI	V/NK
Instrument Rating(s) - NONE							
Narrative		WITNESSES DESCRI					

# Brief of Accident (Continued)

File No 248	5 10/08/88 COLDWATER,MI	A/C Reg. No. N131JT	Time (Lcl) - 1448 EDT	
	LOSS OF CONTROL – IN FLIGHT APPROACH – VFR PATTERN – DOWNWIND			
	OT MAINTAINED - PILOT IN COMMAND CORRECTED - PILOT IN COMMAND			
	IN FLIGHT COLLISION WITH TERRAIN/WATER DESCENT - UNCONTROLLED			
Finding(s) 3. TERRAIN CONDITIC	N - OPEN FIELD			
<sub>J</sub> Probable Cause				
The National Transpor is/are finding(s) 1,	tation Safety Board determines that the 2	Probable Cause(s) of this accide	ent	

Basic Information Type Operating Certificate-NONE (GENER	AL AVIATION) Aircr	aft Damage		Injur	ies	
·)po oporening oor to reade hand (allen		ROYED	Fatal		Minor	None
Type of Operation -PERSONAL	Fire	Crew	2	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During -DESCENT						
Aircraft Information						
Make/Model - MOONEY M2OJ	Eng Make/Model ~	LYCOMING IO-360-A3B6D	D ELT I	[nstalled/A	ctivated -	- YES/YE
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines -		St	tall Warnin	g System –	- YES
Max Gross Wt ~ 2740		RECIP-FUEL INJECTED				
No. of Seats - 4	Rated Power -	200 HP				
Environment/Operations Information						
Weather Data	Itinerary		Airport F	Proximity		
Wx Briefing - FSS	Last Departure Poi	nt	OFF AIF	RPORT/STRIP		
Method - TELEPHONE	LUDINGTON, MI					
Completeness - FULL	Destination		Airport Da	ata		
Basic Weather - IMC	WHEELING,IL					
Wind Dir/Speed- UNK/NR					N/A	
Visibility500 SM	ATC/Airspace			Lth/Wid -		
Lowest Sky/Clouds - 400 FT				Surface -		
Lowest Ceiling - 400 FT OVE			Runway	Status -	N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- NONE				
Precipitation - RAIN						
Condition of Light - DAYLIGHT						
Personnel Information ,						
Pilot-In-Command	Age - 62	Medical Certificat			IVERS/LIMI	ι <b>τ</b>
Certificate(s)/Rating(s)	Biennial Flight Review	Fligh	nt Time (Ho			
PRIVATE	Current - YES	Total -			Hrs - UNK	
SE LAND	Months Since - 19	Make/Model- UN		Last 30	Days- UNK	
	Aircraft Type - M2OJ	Instrument- UN		Last 90	Days- UNK	
		Multi-Eng ≠ UN	IK/NR	Rotorcr	aft -	0
Instrument Rating(s) - AIRPLANE						

REPORTED A COMPLETE GYRC FAILURE. THE PILOT WAS BEING GIVEN A NO-GYRC TURN TO THE NEAREST AVAILABLE AIRPORT WHEN THE AIRPLANE DISAPPEARED OFF RADAR. THE ACFT WAS RECOVERED IN A LAKE ALMOST DIRECTLY BENEATH THE LAST KNOWN RADAR LOCATION. POST ACCIDENT INSPECTION OF THE WRECKAGE REVEALED A SHEARED VACUUM PUMP SHAFT.

Time (Lcl) - 1050 EDT
- n

Factor(s) relating to this accident is/are finding(s) 3,4,5

is/are finding(s) 1,2,6

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sic Information						
Type Operating Certificate-NONE (GENERAL					uries	
· · · · · · · · · · · · · · · · · · ·	SUBSTAN		Fatal		Minor	None
Type of Operation-PERSONALFlight Conducted Under-14 CFR 91	Fire	Crew	0	0		1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE		0	0	0	0
rcraft Information	```					
Make/Model - EXPERIMENTAL BARRACUDA	Eng Make/Model - LYC	OMING IO-360-A1A			/Activated	
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1		S	tall Warn	ing System	- NO
Max Gross Wt - 2300	Engine Type - REC					
No. of Seats - 2	Rated Power -	200 HP				
vironment/Operations Information						
eather Data	Itinerary		Airport	Proximity		
Wx Briefing - FSS	Last Departure Point		ON AIR			
Method - TELEPHONE	INDIANAPOLIS, IN					
Completeness - WEATHER NOT PERTINENT	Destination		Airport D	ata		
Basic Weather - IMC	YPSILANTI,MI		WILLOW			
Wind Dir/Speed- 230/015 KTS			Runwa∨	Ident	- 23	
Visibility - 3.000 SM	ATC/Airspace				- 7526/	150
Lowest Sky/Clouds - N/A	Type of Flight Plan -	IFR			- ASPHALT	
Lowest Ceiling - 800 FT BROKE	N Type of Clearance -	IFR	Runway	Status	- WET	
Obstructions to Vision- FOG	Type Apch/Lndg -	ILS-COMPLETE				
Precipitation - RAIN						
Condition of Light - NIGHT(DARK)						
ersonnel Information						
	Age - 60	Medical Certificat	e - VALID	MEDICAL -	ATVERS/LT	мтт
	Biennial Flight Review		nt Time (H			
PRIVATE	Current - YES	Total -	1500	Last :	24 Hrs -	0
SE LAND	Months Since - 11				30 Days-	10
	Aircraft Type - UNK/NR				90 Days-	30

Instrument Rating(s) - AIRPLANE

----Narrative----

WHILE ENROUTE TO LANSING, MICHIGAN (LAN) THE PILOT OF THIS AMATEUR BUILT BARRACUDA WAS FORCED TO DEVIATE TO YPSILANTI'S WILLOW RUN AIRPORT (YIP), DUE TO THUNDERSTORMS ON THE FLIGHT PATH. ON LANDING, HE EXPERIENCED A HARD TOUCHDOWN AND THE ACFT BEGAN TO PORPOISE. WHILE ATTEMPTING A GO-AROUND, THE ACFT HIT HARD AGAIN, DRIVING THE MAIN GEAR THROUGH THE WINGS.

File No 25	10 10/16/88	YPSILANTI,MI	A/C Reg. No. N48DS	Time (Lc1) - 2005 EDT
Occurrence #1 Phase of Operation				
Finding(s) 1. FLARE - IMPROPE 2. ABORTED LANDING				
Occurrence #2 Phase of Operation		SED		
	BOUNCED LANDING -	) IMPROPER - PILOT IN YPE OPERATION - PILO		<u>.</u>
Probable Cause		·		· · · · · · · · · · · · · · · · · · ·
		ard determines that t	he Probable Cause(s) of this accio	dent

is/are finding(s) 1,4

Factor(s) relating to this accident is/are finding(s) 2,5

File No 2472 12/22/88 BENTON	HARBOR, MI	A/C Reg. No. N	50331	т	ime (Lcl) -	· 1330 EST	
-Basic Information Type Operating Certificate-NONE (GENERAL		rcraft Damage UBSTANTIAL		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fi	re ONE	Crew Pass	0	0		1 0
-Aircraft Information Make/Model - CESSNA 150H Landing Gear - TRICYCLE-FIXED Max Gross Wt - 1600 No. of Seats - 2	Eng Make/Model Number Engines Engine Type Rated Power	- CONTINENTAL - 1 - RECIPROCATI	0-200-A	S	Installed/A tal! Warnir		
-Environment/Operations Information							
JWeather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure GAYLORD,MI	Point			Proximity RPORT/STRIF	)	
Completeness - N/A Basic Weather - VMC	Destination BENTON HARBOR	,MI		Airport D			
Wind Dir/Speed- 140/019 KTS Visibility - 7.0 SM Lowest Sky/Clouds - N/A	ATC/Airspace Type of Flight	Plan - NONE		Runway		- N/A - N/A - N/A	
Lowest Ceiling - 11000 FT OVERCA Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT		ce - NONE - FORCED	LANDING	Runway	Status -		
-Personnel Information Pilot-In-Command							
Certificate(s)/Rating(s)	Siennial Flight Revie	w	Flia	nt Time (H	lours)		
COMMERCIAL	Current - Y	ES Tota	1 -	1950	Last 24	Hrs -	4
SE LAND	Current - Y Months Since - Aircraft Type - C	1 Make	Model-	1600	Last 30 Last 90	) Days-	20 35
	Andrait Type - C		rument- i-Eng -		Lasi 90	Days-	30

\_\_\_\_\_

Instrument Rating(s) - AIRPLANE

----Narrative----

\_\_\_\_\_\_

A TOTAL LOSSS OF ENGINE POWER WAS EXPERIENCED DURING CRUISE FLT AT 2,500 FT. THE PLT ATTEMPTED AND EMERGENCY LANDING IN OPEN FIELD BUT STRUCK SEVERAL SMALL TREES SHORT OF POINT OF INTENDED LANDING. TREE IMPACT SHEARED THE NOSE GEAR AND THE ACFT IMPACTED LEFT WING DOWN IN AN OPEN FIELD. POST ACCIDENT INVESTIGATION REVEALED NO FUEL IN RIGHT TANK, AND 7/8 INCH OF FUEL IN LEFT TANK. A FUEL SAMPLE FROM THE LEFT TANK SUMP CONTAINED WATER AND DIRT. A CARBURETOR SAMPLE CONTAINED WATER AND DIRT. THE PLT STATED THAT HE KNEW HE WAS GETTING LOW ON FUEL AND HAD PLANNED TO REFUEL AT ROSS FIELD, WHICH WAS 3 MILES FROM THE ACCIDENT SITE.

File No 24	72 12/22/88 BENTON HARBOR,MI	A/C Reg. No. N50331	Time (Lcl) - 1330 EST
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER(TOTAL) - NON- CRUISE	MECHANICAL	
Finding(s) 1. 1 ENGINE - 2. FUEL CONSUMPT 3. FLUID,FUEL - CO 4. FUEL SYSTEM - S	TARVATION		
Occurrence #2 Phase of Operation	DESCENT - EMERGENCY		
	IN FLIGHT COLLISION WITH OBJECT DESCENT - EMERGENCY		
7. UNSUITABLE TERR	ACH - MISJUDGED - PILOT IN COMMAND AIN - ENCOUNTERED - PILOT IN COMMAND		
	IN FLIGHT COLLISION WITH TERRAIN/W DESCENT - UNCONTROLLED	ATER	
Finding(s) 8. TERRAIN CONDITI			

is/are finding(s) 3,4,6,7

Factor(s) relating to this accident is/are finding(s) 2

## National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information					T		
Type Operating Certificate-ON-DEMAND AI		rcraft Damage ESTROYED		Fatal	Injur Serious		None
Type of Operation -INSTRUCTIONAL			Crew	0			1
Type of Operation -INSTRUCTIONA Flight Conducted Under -14 CFR 91	N	IONE	Pass	ŏ	õ	0 0	-
Accident Occurred During -LANDING							Ŭ
Aircraft Information							
Make/Model - CESSNA 152II	Eng Make/Model	- LYCOMING 0-23	35-L2L	· ELT I	installed/Ad	ctivated	- YES/N
Landing Gear - TRICYCLE-FIXED	Number Engines				all Warning	g System	- YES
Max Gross Wt - 1670		- RECIPROCATING	G-CARBURE	TOR			
No. of Seats - 2	Rated Power	- 110 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport f			
Wx Briefing - NO RECORD OF BRIEFING				ON AIRF	PORT		
Method - N/A	GRAND RAPIDS,	MI					
Completeness - N/A	Destination			Airport Da			
Basic Weather - VMC	SAME AS ACC/I	NC			UNTY INT'L		
Wind Dir/Speed- 120/006 KTS						26L	
Visibility - 8.0 SM	ATC/Airspace				Lth/Wid -		150
Lowest Sky/Clouds - CLEAR	Type of Flight				Surface -		
Lowest Ceiling - NONE Obstructions to Vision- NONE	Type of Clearar	- TRAFFIC		Runway	Status -	DRY	
	Type Apch/Lhdg	- TRAFFIC I	PATTERN				
Precipitation - NONE							
Condition of Light - DAYLIGHT							·
Personnel Information Pilot-In-Command	Age - 60	Medical Co	artificat		MEDICAL-WA		ATT
Certificate(s)/Rating(s)	Biennial Flight Revie			t Time (Ho		IVERS/EI	
STUDENT	Current - N		-	32	Last 24	Hrs -	1
_ · · · · · ·	Months Since - N	I/A Make/I	lode1-	10	Last 24 Last 30 Last 90	Davs-	7
	Aircraft Type - N	I/A Instru	ument-	2	Last 90	Davs-	10
	·····	Multi	-Eng -	0	Rotorcra	aft -	0
Instrument Rating(s) - NONE							

727. THE PILOT WAS UNABLE TO MAINTAIN CONTROL OF THE AIRCRAFT, AND IT STRUCK THE RUNWAY AND NOSED OVER INVERTED.

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ccurrence #1 V( hase of Operation Af inding(s) 1. IN-FLIGHT PLANNING/				
3. VISUAL SEPARATION - 4. WAKE TURBULENCE - E	XPERIENCE IN TYPE INADEQUATE - PIL NCOUNTERED - PILC		COMMAND	
ccurrence #2 IN hase of Operation LA		N WITH TERRAIN/WATER		
inding(s) 6. TERRAIN CONDITION 7. AIRCRAFT CONTROL		- PILOT IN COMMAND		
Probable Cause				

is/are finding(s) 1,2,3

Factor(s) relating to this accident is/are finding(s) 4,5

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#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2481 4/05/88 ST. P		A/C Reg. No. I			ime (Lc1) -		
Basic Information Type Operating Certificate-ON-DEMAND AI		Ainonoft Domogo			Tradium	inc	
Name of Carrier -CRITICAL CAR		Aircraft Damage SUBSTANTIAL		Fatal	Injur Serious		None
Type of Operation -NON SCHED DO	MESTIC DASSENGED	Fire	Crew		0	0	4
Type of Operation -NON SCHED, DOI Flight Conducted Under -14 CFR 135	NONE	Pass		0	0		
Accident Occurred During -CRUISE		NONE	1455		0	0	•
Aircraft Information							
Make/Model - BEECH B90		del - P&W PT6A-1:	35	ELT	Installed/A	ctivated	- YES/N
Landing Gear ~ TRICYCLE-RETRACTABLE	Number Engi	nes - 2		S	tall Warnir	ng System	- YES
Max Gross Wt - 9650	Engine Type	- TURBOPROP					
No. of Seats - 7	Rated Power	- 550 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport	Proximity		
Wx Briefing - NWS	Last Departu	re Point		OFF AI	RPORT/STRIP	•	
Method - TELEPHONE	MINOT,ND						
Completeness - WEATHER NOT PERTINENT	Destination			Airport D	ata		
Basic Weather - IMC	ST. PAUL,M	N					
Wind Dir/Speed- UNK/NR				Runway	Ident -	N/A	
Visibility - UNK/NR	ATC/Airspace			Runway	Lth/Wid -	N/A	
Lowest Sky/Clouds - UNK/NR	Type of Flig	ht Plan - IFR		Runway	Surface -	N/A	
Lowest Ceiling - UNK/NR	Type of Clea	rance - IFR		Runway	Status -	N/A	
Obstructions to Vision- UNK/NR	Type Apch/Ln	dg - NONE					
Precipitation - UNK/NR							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 41				MEDICAL-NO	WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Re			ht Time (H			
ATP	Current		al -			Hrs - UN	•
SE LAND, ME LAND	Months Since				Last 30		
	Aircraft Type			600		Days-	
		Mul	ti-Eng -	4300	Rotorcr	aft - UN	K/NR
Instrument Rating(s) - AIRPLANE							

----Narrative----

THE AIRPLANE WAS BEING OPERATED AS AN AIR AMBULANCE WHEN IT SUSTAINED SUBSTANTIAL DAMAGE DURING AN UNCOMMANDED HARD PITCHOVER. THE AIRPLANE WAS OPERATING IN VISUAL CONDITIONS ABOVE A SOLID CLOUD LAYER USING INSTRUMENT FLIGHT RULES. THE AIRPLANE RECOVERED FROM THE EXCURSION AND CONTINUED ON TO ITS DESTINATION. THE ATP RATED PILOT, THREE MEDICAL ATTENDANTS AND ONE PATIENT WERE NOT INJURED. TESTING OF THE PILOT'S WHEEL TRIM SWITCH SHOWED THE SWITCH WOULD STICK IN THE CLOSED OR ACTUATED POSITION AND NOT RETURN TO THE "CENTER OFF" POSITION. THIS OCCURRED DURING TEMPERATURE CYCLING FROM ROOM TEMPERATURE TO BELOW FREEZING AND BACK AGAIN. THE CABIN HEATER HAD FAILED WITH AN OUTSIDE AIR TEMPERATURE OF -26 DEGS CELSIUS AND THE CABIN WAS COLD.

File No 2481	4/05/88	ST. PAUL,MN	A/C Reg. No. N181LL	Time (Lcl) - 1515 CDT

Occurrence #1 ALTITUDE DEVIATION, UNCONTROLLED Phase of Operation CRUISE

Finding(s)

1. ELECTRICAL SYSTEM, ELECTRIC SWITCH - FAILURE, PARTIAL

2. REMEDIAL ACTION - PERFORMED - PILOT IN COMMAND

3. AIR COND/HEATING/PRESSURIZATION, CABIN TEMP CONTROL - INOPERATIVE

4. DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED -

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,4

Factor(s) relating to this accident is/are finding(s) 3

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

-Basic Information Type Operating Certificate-NONE ((	GENERAL AVIATION)	Aircraft Damag	ie .		Injurie	s	
		DESTROYED		tal Se	-	Minor	None
Type of Operation -INSTRU(		Fire	Crew	2	0	0	0
Flight Conducted Under -14 CFR		NONE	Pass	0	0	0	0
Accident Occurred During -DESCEN	Г <sup>,</sup>						
-Aircraft Information							
Make/Model - PIPER PA-38-112			0-235 L2C		alled/Act		
Landing Gear - TRICYCLE-FIXED	Number Eng			Stall	Warning	System	- YES
Max Gross Wt - 1670	Engine Typ		TING-CARBURETOR				
No. of Seats - 2	Rated Powe	r - 112 HF	, 				
-Environment/Operations Information-							
Weather Data	Itinerary			port Prox			
Wx Briefing - NO RECORD OF BRI		ure Point	0	FF AIRPOR	T/STRIP		
Method - N/A	ANOKA, MN		• •				
Completeness - N/A	Destination	,	Airp	ort Data			
Basic Weather - VMC Wind Dir/Speed- 180/015 KTS	LOCAL		n	unway Ide	nt - N	1/4	
Visibility - 15.0 SM	ATC/Airspace			unway lue unway Lth			
	SCATTERED Type of Flip	obt Plan - NONE		unway Sur			
Lowest Ceiling - NONE		arance - NONE		unway Sta			
Obstructions to Vision- NONE		ndg - NONE		<b>,</b>			
Precipitation - NONE		•					
Condition of Light - DAYLIGH	r						
-Personnel Information	Age - 41		al Certificate -	VALID MED	ICAL-NO W	AIVERS/	LIMIT
Personnel Information Pilot-In-Command			Flight Ti				
Pilot-In-Command Certificate(s)/Rating(s)	Biennial Flight R						
Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI	Current	- UNK/NR To	otal - 950	1	Last 24 H		
Pilot-In-Command Certificate(s)/Rating(s)	Current Months Since	- UNK/NR To - UNK/NR Ma	ake/Model- UNK/NR		Last 30 D	ays- UN	IK/NR
Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI	Current	- UNK/NR To - UNK/NR Ma - UNK/NR Ir	ake/Model- UNK/NR hstrument- UNK/NR		Last 30 D Last 90 D	)ays- UN )ays- UN	IK/NR IK/NR
Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI	Current Months Since	- UNK/NR To - UNK/NR Ma - UNK/NR Ir	ake/Model- UNK/NR		Last 30 D	)ays- UN )ays- UN	IK/NR IK/NR

File No 24	43 7/03/88	HAMM LAKE,MN	A/C Reg. No	N2485N	Time (Lcl) - 1246 CDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL	- IN FLIGHT			
	NOT MAINTAINED PAIRMENT(DRUGS) - [	- PILOT IN COMMAND(CI DUAL STUDENT	-I)		·
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATEN ROLLED	R		
Finding(s) 3. TERRAIN CONDITI	DN - GROUND	-			
Probable Cause					

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1

Basic Information Type Operating Certificate-NONE (GENERAL A	VIATION) Aircraf SUBSTA	t Damage NTIAL	Fatal	Injur Serious		None
Type of Operation -PERSONAL	Fire	Cre		0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	NONE	Pas	s 0	<b>O</b> .	0	2
Aircraft Information				Treate 11 and /A		
Make/Model - PIPER PA-22-150 Landing Gear - TAILWHEEL-ALL FIXED	Eng Make/Model - LY Number Engines - 1			Installed/A tall Warnin		
Max Gross Wt - 2000	Engine Type - RE			tari warnin	ig system	- 163
No. of Seats - 4	S 21	150 HP	KLIOK			
Environment/Operations Information						
Weather Data	Itinerary		Airport	Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point		ON AIR	PORT		
Method - N/A	COHASSET, MN					
Completeness - N/A	Destination		Airport D	ata		
Basic Weather - VMC	COHASSET, MN					
Wind Dir/Speed- 360/010 KTS			Runway	Ident -	27	
Visibility - 15.0 SM	ATC/Airspace		Runway	Lth/Wid -	2500/	100
Lowest Sky/Clouds - N/A	Type of Flight Plan	- NONE	Runway	Surface -	GRASS/TL	JRF
Lowest Ceiling - 4000 FT BROKEN	Type of Clearance	- NONE	Runway	Status -	DRY	
Obstructions to Vision- NONE	Type Apch/Lndg	- FULL STOP				
Precipitation - NONE						
Condition of Light - DAYLIGHT						
Personnel Information						
	e - 21	Medical Certific	cate - VALID	MEDICAL-NO	WATVERS	/ITMTT
- · · · · · · · · · · · · · · · · · · ·	ennial Flight Review		ight Time (H			
PRIVATE	Current - YES	Total -			Hrs -	1
SELAND	Months Since - 1					16
	Aircraft Type - PA-22	Make/Model- Instrument-	4	Last 90	Days-	
		Multi-Eng -		Rotorcr	aft - UN	

----Narrative----

THE ACFT COLLIDED WITH TREES ON FINAL APCH TO LAND AT A PVT AIRSTRIP. THE PLT STATED THAT ON EARLIER ATTEMPTS TO LAND HE WAS HIGH AND FAST. HE STATED HE INTENTIONALLY SLOWED THE ACFT AND USED LESS ALT IN ORDER TO NOT LAND TOO LONG ON THE AIRSTRIP. HE STATED THAT ON SHORT FINAL, THE ACFT DESCENDED BELOW THE TREE LINE BECAUSE OF A DOWNDRAFT. HE STATED HE ADDED POWER BUT WAS AFRAID THAT IF HE RAISED THE NOSE, THE ACFT WOULD STALL. THEREFORE, HE KEPT THE NOSE LEVEL AND FLEW THROUGH THE TREE TOPS. THE ACFT CONTACTED ONE LARGE TREE AND DESCENDED TO THE AIRSTRIP.

H OBJECT - FINAL APPROACH				
LOT IN COMMAND				
H TERRAIN/WATER				
	H TERRAIN/WATER	H TERRAIN/WATER	H TERRAIN/WATER	H TERRAIN/WATER

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 3,4

Factor(s) relating to this accident is/are finding(s) 1,2

· · · · · · · · · · · · · · · · · · ·									
-Basic Information Type Operating Certificate-NONE (GEI	NERAL AVIATION)	Aircraft	Damage			Injur	ies		
		DESTROYE		Fa	tal	Serious		r None	e
Type of Operation -PERSONAL		Fire		rew	1	0	0		
Flight Conducted Under -14 CFR 9	1	NONE	Р	ass	0	Ō	ō		
Accident Occurred During -MANEUVER	ING					-	-		
-Aircraft Information									
Make/Mode1 - HOMEBUILT WOODSTOCK	Eng I	Make/Model - N/A			ELT I	nstalled/A	ctivate	ed - NO -1	N/
Landing Gear - HULL	Numbe	er Engines - N/A			St	all Warnin	g Syste	em - NO	
Max Gross Wt - 450	~ Engii	ne Type - N/A							
No. of Seats - 1	Rated	d Power - N/A							
Environment/Operations Information	-								
Weather Data	Itinera					roximity			
Wx Briefing - NO RECORD OF BRIE		Departure Point		0	FF AIR	PORT/STRIP			
Method - N/A		E AS ACC/INC							
Completeness - N/A	Destina			Airp	ort Da	ita			
Basic Weather - VMC	SAMI	E AS ACC/INC							
Wind Dir/Speed- 320/005 KTS							N/A		
Visibility - 15.0 SM	ATC/Air:					•	N/A		
		of Flight Plan -					N/A		
Lowest Ceiling - 6000 FT E	21 -		VFR	R	unway	Status -	N/A		
Obstructions to Vision- NONE	Туре и	Apch/Lndg -	NONE						
Precipitation - NONE									
Condition of Light - DAYLIGHT									
Personnel Information									
Pilot-In-Command	Age - 59		ledical Certif				IVERS/I	LIMIT	
Certificate(s)/Rating(s)	Biennial Fl			light Ti					
PRIVATE	Current		Total			Last 24			
SE LAND		Since - 39	Make/Model						
GLIDER	Aircraf	t Type - 2-33	Instrument						
			Multi-Eng	- UNK/NR		Rotorcr	aft -	UNK/NR	
Instrument Rating(s) - NONE									

----Narrative----

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THE HOMEBUILT EXPERIMENTAL GLIDER EXPERIENCED AN INFLIGHT STRUCTURAL FAILURE OF BOTH WINGS WHICH SUBSEQUENTLY RESULTED IN A LOSS OF CONTROL AND IMPACT WITH THE TERRAIN. EXAMINATION REVEALED THE WINGS FAILED DUE TO OVERLOAD AT WING MIDSPAN NEAR THE SPOILERS. RECOVERY FROM LOOPS UTILIZING THE SPOILERS AS AIR BRAKES WILL CAUSE AN INCREASED BENDING MOMENT OUTBOARD OF THE SPOILERS AND REDUCE WING STRENGTH IN THE SPOILER BOX AREA. THE PLT HAD 35 HRS OF FLT TIME IN THE ACFT, AND HAD LOGGED PERFORMANCE OF LOOPS IN HIS PLT LOGBOOK. AEROBATICS ARE PROHIBITED IN THIS ACFT.

File No 24	98 9/05/88	MANKATO, MN	A/C Reg. No. N369DK	Time (Lcl) - 1830 CDT
Occurrence #1 Phase of Operation	AIRFRAME/COMPONEN MANEUVERING	JT/SYSTEM FAILURE/MA	LFUNCTION	
Finding(s) 1. AEROBATICS - PE 2. DESIGN STRESS L 3. WING - FAILURE,	IMITS OF AIRCRAFT - TOTAL	EXCEEDED - PILOT I	N COMMAND	· · · · · · · · · · · · · · · · · · ·
Occurrence #2 Phase of Operation		IN FLIGHT		
Occurrence #3 Phase of Operation			ER	
Finding(s) 4. TERRAIN CONDITIO	DN - CROP			
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2461 6/21/88	ELDON, MO	A/C Re	g. No. N4490T	Ti	me (Lc1) -	1600 CDT	
Basic Information Type Operating Certificate-NON	E (GENERAL AVIA	ATION) Aircraft	Damage		Injuri	es	
		SUBSTAN	TIAL	Fatal	Serious	Minor	None
Type of Operation -BUS	INESS	Fire	Crew	0	1	0	0
Flight Conducted Under -14 Accident Occurred During -LAN	CFR 91	NONE	Pass	0	0	0	0
Aircraft Information Make/Model - PIPER PA-28R-2		Eng Make/Model - LYC	OMING 10-360-C1C		nstalled/Ad		
Landing Gear - TRICYCLE-RETRA	CTABLE	Number Engines - 1		St	all Warning	g System	- YES
Max Gross Wt - 2600 No. of Seats - 4		Engine Type - REC Rated Power -	IP-FUEL INJECTED 200 HP				
Environment/Operations Informati							
Weather Data		Itinerary		Airport P			
Wx Briefing - NO RECORD OF	BRIEFING	Last Departure Point		ON AIRP	PORT		
Method - N/A		JEFFERSON CITY, MO					
Completeness - N/A Basic Weather - VMC		Destination		Airport Da ELDON	ιτα		
Wind Dir/Speed- 190/010 KTS		BENTONVILLE, AR			Ident -	18	
Visibility - 6.0 SM	,	ATC/Airspace			Lth/Wid ~		45
		Type of Flight Plan -	NONE		Surface -		<b>40</b>
Lowest Ceiling - NONE		Type of Clearance -				DRY	
Obstructions to Vision- HAZE			FORCED LANDING	······································			
Precipitation - NONE		, , p = , p = g					
Condition of Light - DAYL							
-Personnel Information							
Pilot-In-Command	Age		Medical Certificat			WAIVERS/	
Certificate(s)/Rating(s)		nial Flight Review Current - YES	Total -	nt Time (Ho 79	Last 24		2
PRIVATE SE LAND		Current - YES Months Since - 1			Last 24 Last 30		
JE LAND		Aircraft Type - UNK/NR	Instrument- UN		Last 90		32
	•		Multi-Eng -		Rotorcra		0
Instrument Rating(s) - NO	NE						
Narrative							
RING A BUSINESS, CROSS-COUNTRY FLI							
EARING ON THE WINDSHEILD. SHORTLY							
EMPTED ON AN AIRPORT, BUT THE ACF							

PAGE 124

THE ACFT CAME TO REST ABOUT 25 FEET FROM THE RUNWAY. POST ACCIDENT INVESTIGATION REVEALED A BROKEN ENGINE OIL

LINE WHICH RESULTED IN LOSS OF ENGINE OIL AND SUBSEQUENT TOTAL ENGINE FAILURE.

File No 246	6/21/88	ELDON, MO	A/C Reg. No. N4490T	Time (Lcl) - 1600 CDT
Occurrence #1 Phase of Operation		ER(TOTAL) - MECH FA	ILURE/MALF	
	EM,OIL LINE - RUPTU URE - INITIATED - P			· · · · · · · · · · · · · · · · · · ·
Occurrence #2 Phase of Operation		Υ	· · · · · · · · · · · · · · · · · · ·	
Occurrence #3 Phase of Operation			R	
Finding(s) 3. PROPER TOUCHDOWN 4. OBJECT - FENCE	POINT - NOT ATTAIN	ED - PILOT IN COMMAN	ND	

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,3

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File No 2438 7/09/88 LEXIN	GTON,MO A/C Reg	. No. N7578D	Т	ime (Lcl) -	1415 CD1	r 
Basic Information Type Operating Certificate-NONE (GENERA	L AVIATION) Aircraft SUBSTANT		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	Fire NONE	Crew Pass	0	0	0 0	1 5
Aircraft Information Make/Model - BEECH A-60 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 6775 No. of Seats - 6	Eng Make/Model - LYCO Number Engines - 2 Engine Type - RECI Rated Power - 3			Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - FSS Method - UNK/NR Completeness - WEATHER NOT PERTINENT Basic Weather - VMC Wind Dir/Speed- 180/013 KTS Visibility - 7.0 SM Lowest Sky/Clouds - 5000 FT SCAT Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	OLATHE,KS ATC/Airspace	I F R V F R	ON AIR Airport Da LEXING Runway Runway Runway Runway Runway	ata TON Ident - Lth/Wid - Surface -	O4 3200/ ASPHALT DRY	50
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI SE LAND,ME LAND	Age - 48 M Biennial Flight Review Current - YES Months Since - 3 Aircraft Type - UNK/NR	Total - Make/Model-	t Time (He 2500 24 384	ours) Last 24 Last 30 Last 90	IVERS/LIN Hrs - UN Days- UN Days- aft - UN	NK/NR NK/NR 48

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PIC BOARDED 5 PSNGR'S AND A FUEL LOAD OF 120 GALLONS FOR A 375 NM TRIP TO KANSAS. THE PIC STATED HE ENCOUNTERED STRONG WINDS ALOFT THAT REDUCED HIS FUEL SUPPLY TO A CRITICAL STATE. WHILE AT CRUISE FLT ABOUT 51 NM SHORT OF HIS DESTINATION THE RIGHT ENG QUIT DUE TO AN INADEQUATE FUEL SUPPLY. A RQST OF ATC FOR VECTORS TO THE CLOSEST ARPT WAS MADE. WITNESSES OSRVD THE ACFT CIRCLE THE ARPT SEVERAL TIMES WITH THE PIC STATING HE WAS CONCERNED ABT THE PRESENCE OF SKY JUMPERS IN THE AREA. THE CONCERN INCREASED WHEN AN ACFT PULLED ONTO THE ACTIVE RWY AT THE LEXINGTON ARPT AFTER THE ACFT WAS COMMITTED TO LAND. WITNESSES INDICATED THE ACFT LANDED NOSE WHEEL FIRST AND CAREENED TO THE RT SIDE OF THE RWY AND OFF INTO SOFT TERRAIN. DIRECTIONAL CONTROL WAS LOST AS THE ACFT DPTD THE RWY, FOLLOWED SHORTLY BY A LEFT GEAR COLLAPSE AND SEPERATION, AND NOSE GEAR COLLAPSE. REMAINING FUEL AT THE ACCIDENT SITE WAS DETERMINED TO BE 9 GALLONS IN THE LEFT WING TANK AND NONE IN THE RIGHT.

File No 24	38 7/09/88	LEXINGTON, MO	A/C Reg. No. N7578D	Time (Lcl) - 1415 CDT
Occurrence #1 Phase of Operation		OWER(PARTIAL) - NON-M	MECHANICAL	
3. WIND INFORMATIO	ING/PREPARATION - N - NOT OBTAINED -	INADEQUATE - PILOT IN		
Occurrence #2 Phase of Operation		NCY		
Occyrrence #3 Phase of Operation		ION WITH TERRAIN/WATE	ER	
	TROL - NOT MAINTAI REHENSION - PILOT	NED - PILOT IN COMMAN IN COMMAND	ND	

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 4,5

Factor(s) relating to this accident is/are finding(s) 2,3,6

-Basic Information								
Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage			Injuries			
	SU	BSTANTIAL		Fatal	Serious		None	
Type of Operation -PERSONAL	Fir		Crew	0	1	0	0	
Flight Conducted Under -14 CFR 91	NO	NE	Pass	0	1	0	0	
Accident Occurred During -DESCENT								
-Aircraft Information								
Make/Model - PIPER J3C-65	Eng Make/Model	- CONTINENTAL	C-65-8FJ	ELT I	[nstalled/A	ctivated	- NO -N/A	
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines	- 1		St	tall Warnin	g System	- NO	
Max Gross Wt - 1220	Engine Type	- RECIPROCATIN	IG-CARBURET	TOR				
No. of Seats - 2	Rated Power	- 65 HP						
-Environment/Operations Information								
Weather Data	Itinerary			Airport R	Proximity			
Wx Briefing - NO RECORD OF BRIEFING	Last Departure P	oint	OFF AIRPORT/STRIP					
Method - N/A	NEOSHO, MO							
Completeness - N/A	Destination Airport Data							
Basic Weather - VMC	LOCAL							
Wind Dir/Speed- 070/006 KTS				Runway		N/A		
Visibility - 10.0 SM	ATC/Airspace			Runway	Lth/Wid -	N/A		
Lowest Sky/Clouds - CLEAR	Type of Flight P				Surface -			
Lowest Ceiling - NONE	Type of Clearanc				Status -	N/A		
Obstructions to Vision- NONE	Type Apch/Lndg	- PRECAUT]	ONARY LANE	DING				
Precipitation - NONE								
Condition of Light - DAYLIGHT								
-Personnel Information '							-	
	Age - 42 Medical Certificate - VALID MEDICAL-NO WAIVERS/					LIMIT		
	Biennial Flight Review Flight				Time (Hours)			
PRIVATE	Current - UN	K/NR Total	-	450	Last 24	Hrs - UN		
SE LAND	Months Since - UN	K/NR Make/	/Model- rúment- UN⊧	,60 ,	Last 30	) Days- UN		
	Aircraft Type - UN					Days-		
		Multi	i-Eng - UNM	K/NR	Rotorcr	aft - UN	K/NR	
Instrument Rating(s) - NONE								

THE PILOT ENCOUNTERED HIGH ENGINE OIL TEMPERATURE AND A ROUGH RUNNING ENGINE DURING CRUISE. HE ELECTED TO EXECUTE A PRECAUTIONARY LANDING TO AN OPEN FIELD AND CONTACTED POWER LINES DURING THE APPROACH TO THE FIELD. THE PILOT STATED THAT HE COULD NOT SEE THE POWER LINES DUE TO THE BRIGHT SUN. TEARDOWN AND EXAMINATION OF THE ENGINE CONFIRMED PROBLEMS WITH THE IGNITION SYSTEM AND THE ENGINE LUBRICATING SYSTEM.

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File No 24	60 9/12/88	GOODMAN, MO	A/C Reg. No. N3533N	Time (Lcl) - 1930 CDT
Occurrence #1 Phase of Operation		WER(PARTIAL) - MECH	FAILURE/MALF	-
<ol> <li>IGNITION SYSTEM</li> <li>LUBRICATING SYSTEM</li> </ol>	,MAGNETO - ARCING FEM - PRESSURE TOO	GAGE - OVERTEMPERA LOW D - PILOT IN COMMAN		
Occurrence #2 Phase of Operation		ON WITH OBJECT		
Finding(s) 5. OBJECT - WIRE,T 6. LIGHT CONDITION 7. CLEARANCE - N	- SUNGLARE	OT IN COMMAND		
Occurrence #3 Phase of Operation			ER	
Finding(s) 8. TERRAIN CONDITIO				
Probable Cause				
The National Transpo is/are finding(s) 2		d determines that t	he Probable Cause(s) of this accide	ent

Factor(s) relating to this accident is/are finding(s) 5

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File No 2410 5/04/88 NELIG	θΗ, ΝΕ	A/C Reg. No. N2	872R	۲ ·	ime (Lcl) -	1930 CDT	
-Basic Information Type Operating Certificate-NONE (GENERA	S	rcraft Damage JBSTANTIAL		atal	Injur Serious	Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fi N	re DNE	Crew Pass	0	1 1	0 0	0
-Aircraft Information Make/Model - CESSNA 182K Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2800 No. of Seats - 4	Number Engines	- RECIPROCATIN			Installed/A tall Warnin		
-Environment/Operations Information							
Weather Data Wx Briefing - NO RECORD OF BRIEFING	•	Point			Proximity RPORT/STRIP	,	
Method - N/A Completeness - N/A	NELIGH, NE Destination			oort Da			
Basic Weather - VMC Wind Dir/Speed- 320/008 KTS	LOCAL			Runway		N/A	
Visibility - 20.0 SM Lowest Sky/Clouds - 2000 FT SCA1	ATC/Airspace	Plan - NONF			Lth/Wid - Surface -		
Lowest Ceiling - NONE	Type of Clearan Type Apch/Lndg	ce - NONE				DRY ROUGH	
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s)	Age - 33 Biennial Flight Revie	W	ertificate - Flight T	ime (Ho	ours)	WAIVERS/	LIMIT
PRIVATE SE LAND	Current - Y Months Since - Aircraft Type - C	ES Total	- 8 Model- UNK/N	5	Last 24	Hrs - UN Days-	•

Instrument Rating(s) - NONE \_\_\_\_\_

----Narrative----

SHORTLY AFTER MAKING A NORMAL TAKEOFF AND CLIMB, THE AIRCRAFT MADE A 180 DEGREE TURN AND FLEW TOWARDS THE DEPARTURE AIRPORT AT WHAT WITNESSES DESCRIBED AS LOW AND SLOW. SHORTLY AFTERWARD, THE AIRCRAFT NOSED DOWN AND DESCENDED, UNCONTROLLED, TO THE TERRAIN. POST ACCIDENT INVESTIGATION REVEALED NO MECHANICAL MALFUNCTION OR FUEL SUPPLY SHORTAGE. THE ACFT SUSTAINED SUBSTANTIAL DAMAGE, AND THE LOW TIME, NEWLY CERTIFICATED PRIVATE PILOT, AND PASSENGER SUFFERED SERIOUS INJURIES.

	Brief of .	Accident (Continued)	
File No 24	10 5/04/88 NELIGH,NE	A/C Reg. No. N2872R	Time (Lcl) - 1930 CDT
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER(PARTIAL) - NON-M CLIMB	ECHANICAL	<i>,</i>
Finding(s) 1. UNDETERMINED			
	LOSS OF CONTROL - IN FLIGHT DESCENT - EMERGENCY		
	IN FLIGHT COLLISION WITH TERRAIN/WATE DESCENT - UNCONTROLLED	R	
	MAINTAINED - PILOT IN COMMAND ADVERTENT - PILOT IN COMMAND		
Probable Cause			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

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File No 2459 8/28/88 YORK,N	E A/C Reg	A/C Reg. No. N3J			1730	CDT
Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION) Aircraft SUBSTAN		Fatal	Injur Serious		r None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire NONE	Crew	0	1	0	0
Aircraft Information Make/Model - PIPER J3 Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1220 No. of Seats - 2	Eng Make/Model - CON Number Engines - 1 Engine Type - REC Rated Power -		St	[nstalled/A tall Warnin		ed – YES/YE em – NO
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC	Itinerary Last Departure Point SAME AS ACC/INC Destination SAME AS ACC/INC		Airport Da	RPORT/STŔIP ata		
Wind Dir/Speed- 210/008 KTS Visibility - 20.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	ATC/Airspace Type of Flight Plan - Type of Clearance - Type Apch/Lndg -	NONE	Runway Runway	Lth/Wid - Surface -	N/A N/A N/A N/A	
	Biennial Flight Review	Total - Make/Model-	t Time (Ho 985 275	ours) Last 24 Last 30	Days-	UNK/NR

Instrument Rating(s) - NONE

----Narrative----

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THE PILOT REPORTED THAT JUST AFTER TAKEOFF FROM THE GRASS AIRSTRIP, THE ENGINE SPUTTERED AND LOST POWER. HE ATTEMPTED TO LAND ON A NEARBY ROAD AND JUST AS THE RIGHT MAIN WHEEL TOUCHED DOWN, THE ENGINE BEGAN TO DEVELOP POWER. THE ACFT STRUCK A POWER POLE AND FLIPPED OVER IMPACTING THE TERRAIN IN AN INVERTED ATTITUDE. REASON FOR THE REPORTED LOSS OF POWER WAS NOT DETERMINED.

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Brief	of	Accident	(Continued)
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File No 245	59 8/28/88 YORK,NE	A/C Reg. No. N3J	Time (Lcl) - 1730 CDT
	LOSS OF ENGINE POWER TAKEOFF - INITIAL CLIMB		
Finding(s) 1. UNDETERMINED			
Occurrence #2 Phase of Operation	IN FLIGHT COLLISION WITH OBJECT DESCENT - EMERGENCY		
Finding(s) 2. OBJECT - UTILITY	POLE		
Probable Cause			
The National Transpor is/are finding(s) 1	rtation Safety Board determines that	the Probable Cause(s) of this accie	dent
Factor(s) relating to	this accident is/are finding(s) 2		

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-Basic Information Type Operating Certificate-NONE (GENER.	ΔΙ ΔΥΤΔΤΤΟΝ)	Aircraft D	amage		Injur	ries	
Type operating certificate None (dener	RE AVIATION)	SUBSTANTI		Fatal			None
Type of Operation -PERSONAL		Fire	Cre		0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING		NONE	Pas	ss O	0	0	1
Accident occurred burning "Landing							
-Aircraft Information							
Make/Model - MOONEY M20			IING IO-360-A1A		Installed/A		
Landing Gear - TRICYCLE-RETRACTABLE	Number Eng				Stall Warnir	ng System	- YES
Max Gross Wt - 2575		= - RECIP	-FUEL INJECTED	<b>,</b>			
No. of Seats - 4	Rated Power		ю нр 				
-Environment/Operations Information							
Weather Data	Itinerary				Proximity		
Wx Briefing - NO RECORD OF BRIEFIN					IRPORT/STRIF	>	
Method - N/A	MANCHESTEI	R, NH			_		
Completeness - N/A	Destination			Airport I	Data		
Basic Weather - VMC	CONCORD, N	1		Dunito	. Idant	- N/A	
Wind Dir/Speed- UNK/NR Visibility - 40.0 SM	ATC/Airspace				y Ident - y Lth/Wid -	•	
Lowest Sky/Clouds - UNK/NR	Type of Flig	nht Plan - N			y Surface -		
Lowest Ceiling -	Type of Clea				y Status -		
Obstructions to Vision- NONE			ORCED LANDING		, statue	,	
Precipitation - NONE	31 - 1 7	5					
Condition of Light - DAYLIGHT							
-Personnel Information							
Pilot-In-Command	Age - 30 Biennial Flight Ro	Me	dical Certific	ate - VALII	MEDICAL-NO	D WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Re	eview	Fli	ight Time (I	Hours)		
COMMERCIAL	Current	- UNK/NR	Total -	1870	Last 24	4 Hrs - UN	K/NR
SE LAND	Months Since Aircraft Type	- UNK/NR	Make/Model-	370	Last 30	) Days- UN	
	Aircraft Type	- UNK/NR	Instrument-	205	Last 90	Days-	
			Multi-Eng -	UNK/NR	Rotorcr	raft - UN	K/NR
Instrument Rating(s) - NONE							
-Narrative RTLY AFTER TAKEOFF FROM MANCHESTER, NEW H. CRAFT EXPERIENCED AN ENGINE FAILURE AND A RGENCY WHEELS UP LANDING ON A BRIDGE ON R AIRPLANE REVEALED A HOLE IN THE ENGINE U INECTING ROD. METALLURGICAL EXAM INDICATED	T THE SAME TIME OIL DUTE 93 IN HOOKSETT PPER CASE AT THE NO	SPLATTERED , NEW HAMPSH . 2 CYLINDER	ON THE WINDSHI HRE. A POST AC AND A FRACTUR	ELD. THE P CIDENT INS RED AND DEF	ILOT MADE AN PECTION OF DREMED NO. 2		

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File No 24	14 3/27/88	MANCHESTER, NH	A/C Reg. N	o. N2746W	Time (Lcl) - 1715 EDT
Occurrence #1 Phase of Operation		OWER(TOTAL) - MECH FA	ILURE/MALF		
Finding(s) 1. ENGINE ASSEMBLY 2. ENGINE ASSEMBLY 3. ENGINE ASSEMBLY 4. MAINTENANCE,I	,CONNECTING ROD BO ,CONNECTING ROD CA	LT - SEPARATION	NCE PSNL		
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGE	NCY			
Occurrence #3 Phase of Operation					
Finding(s) 5. WHEELS UP LANDI	NG - PERFORMED - P	ILOT IN COMMAND			
Probable Cause					

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s)  $4\,$ 

Factor(s) relating to this accident is/are finding(s) 1,2,3

Basic Information							
Type Operating Certificate-NONE (GENERA		craft Damage			Injur		••••
Type of Operation -INSTRUCTIONA		BSTANTIAL	Crew	Fatal O	Serious 1	Minor O	None 0
Flight Conducted Under -14 CFR 91		NE State	Pass	0	ò	0	0
Accident Occurred During -TAKEOFF			1 400	Ŭ	Ũ	Ũ	Ŭ
Aircraft Information							
Make/Model - ENSTROM F28F		- LYCOMING HIO-	360-F 1AD	ELT I	nstalled/A	ctivated ·	- NO -N/#
Landing Gear - SKID	Number Engines			St	all Warnin	g System –	- NO
Max Gross Wt - 1950	Engine Type		JECTED				
No. of Seats - 3	Rated Power	- 225 HP					
Environment/Operations Information							
Weather Data	Itinerary			Airport F			
Wx Briefing - NO RECORD OF BRIEFING		oint		ON AIRF	ORT		
Method - N/A Completeness - N/A	BRADFORD,NH Destination			Airport Da	+-		
Basic Weather - VMC	CONCORD,NH			Amport Da	lla		
Wind Dir/Speed- VARIABLE/007 KTS	CONCORD, NIT			Runway	Ident -	UNK/NR	
Visibility - UNK/NR	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - CLEAR	Type of Flight P	lan - NONE			Surface -		
Lowest Ceiling - NONE	Type of Clearanc				Status -		
Obstructions to Vision- NONE	Type Apch/Lndg	- TRAFFIC P.	ATTERN	-			
Precipitation - NONE							
Condition of Light ~ DAYLIGHT							
Personnel Information '						·	
Pilot-In-Command	Age - 63					IVERS/LIM:	IT
Certificate(s)/Rating(s)	Biennial Flight Review			t Time (Ho			
STUDENT	Current - N/	A Total	-	119 96	Last 24	Hrs - UNK	
	Months Since - N/	A Make/M	oael-	96 / ND	Last 30	Days- Days-	8
	Aircraft Type - N/	A Instru	ment- UNI Eng - UNI		Last 90	aft -	
		Mult1-	Eng - UNI		κυτυρορ	ait -	119
Instrument Rating(s) - NONE							

GETTING THE HELICOPTER TO A HOVER, THE PILOT, MADE A TAKEOFF FROM A PRIVATE PAD ON THE PILOT'S PROPERTY. AFTER GETTING THE HELICOPTER TO A HOVER, THE PILOT REPORTED THE HELICOPTER FELT AS IF IT HAD BEEN PUT IN A SEVERE FORWARD ATTITUDE. THE PILOT ATTEMPTED TO MAKE A HARD LANDING ON THE PAD, HOWEVER, HE WAS NOW ALMOST OFF THE PAD AND TREES WERE 25 FEET AHEAD. THE MAIN ROTORS CONTACTED TREES. THE PILOT SAID THE FLIGHT CONTROLS WERE WRENCHED FROM HIS HANDS AND THE TAIL STRUCK A STONE WALL. THE FAA REPORTED THAT THE PILOT SAID HE TOOK OFF WITH A TAILWIND.

# Brief of Accident (Continued)

File No 242	6 12/12/88	BRADFORD, NH		A/C Reg.	No. N5699M	Time (Lc1) - 1200 EST
Occurrence #1 Phase of Operation						
Finding(s) 1. WEATHER CONDITIO 2. PREFLIGHT PLAN		POOR - PILOT IN	COMMAND			
Occurrence #2 Phase of Operation						
Finding(s) 3. OBJECT - TREE(S)						
Probable Cause						
The National Transpor is/are finding(s) 2	tation Safety Boar	d determines that	the Proba	able Cause	(s) of this a	locident

Factor(s) relating to this accident is/are finding(s) 1,3

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Basic Information							
Type Operating Certificate-NONE (GENERAL		ft Damage		_		iries	
		ANTIAL		Fatal	Serious		None
Type of Operation -PERSONAL	Fire		rew	0	0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE	۲	ass	0	0	0	1
Aircraft Information							
Make/Model - GRUMMANEAM AA5B	Eng Make/Model - L				Installed/		
Landing Gear - TRICYCLE-FIXED	Number Engines -				tall Warni	ng System	- YES
Max Gross Wt - 2405	Engine Type - R		BORFI	ÛŔ			
No. of Seats - 4	Rated Power -	180 HP					
Environment/Operations Information							
Weather Data	Itinerary				Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Poin	t		ON AIR	PORT		
Method - N/A	TETERBORO, NJ						
Completeness - N/A	Destination		A	irport Da			
Basic Weather - VMC	MORRISTOWN,NJ			MORRIS		05	
Wind Dir/Speed- 300/010 KTS						- 05	450
Visibility - 10.0 SM	ATC/Airspace	NONE			Lth/Wid Surface	- 6000/ - MACADAM	
Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE	Type of Flight Plan Type of Clearance					- DRY	
Obstructions to Vision- NONE	Type Apch/Lndg		DN	Kunway	Status	DRT	
Precipitation - NONE	Type Apen/Endg	TRAFFIC FAILE					
Condition of Light - DAYLIGHT							
Personnel Information							
	Age - 27	Medical Certif	icato			ATVEDS /IT	мтт
Certificate(s)/Rating(s)	Biennial Flight Review	F		Time (He		AIVER5/EI	
PRIVATE	Current - YES	F		70		4 Hrs - U	NK/NR
SE LAND	Months Since - UNK/N	R Make/Model				80 Days- U	
	Aircraft Type - UNK/N					0 Days- U	
		Multi-Eng		2			
Instrument Rating(s) - NONE							

THE PILOT MADE A BOUNCED LANDING ON RUNWAY 5 WITH WINDS FROM 300 AT 15 - 20 KNOTS. THERE WERE TWO PRIVATE PILOTS ON BOARD AND BOTH ATTEMPTED TO CORRECT THE SITUATION WITH ONE WORKING THE POWER AND THE OTHER ATTEMPTING TO CORRECT THE BOUNCE. THE AIRCRAFT FELL OFF ON A WING AND CRASHED.

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File No 24	41 4/30/88	MORRISTOWN NJ	A/C Reg. No. N4557Q	Time (Lcl) - 1515 EDT	
Occurrence #1 Phase of Operation					
3. WEATHER CONDITI	LS - IMPROPER USE	DF - PILOT IN COMMAND - PILOT PASSENGER			
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATER TOUCHDOWN			
Probable Cause		· · · · · · · · · · · · · · · · · · ·	robable Cause(s) of this accide		

is/are finding(s) 2,4

Factor(s) relating to this accident is/are finding(s) 1,3

File No 2514 5/29/88 COLTS	NECK, NJ A/C Reg	K,NJ A/C Reg. No. N5202G			Time (Lcl) - 1350 EDT			
Basic Information Type Operating Certificate-NONE (GENERAL	SUBSTAN		Fatal	Injur Serious	ies Minor	None		
Type of Operation -OTHER WORK US Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF	E Fire NONE	Crew Pass	0	0	0 0	1 0		
Aircraft Information Make/Model - CESSNA 305A Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 2100 No. of Seats - 2	Eng Make/Model - CON Number Engines - 1 Engine Type - REC Rated Power - 2		S	[nstalled/A tall Warnin		•		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure Point COLTS NECK,NJ			Proximity RPORT/STRIP				
Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 100/010 KTS	Destination LOCAL		Airport Da		N/A			
<ul> <li>Visibility - 20.0 SM</li> <li>Lowest Sky/Clouds - CLEAR</li> <li>Lowest Ceiling - NONE</li> <li>Obstructions to Vision- NONE</li> <li>Precipitation - NONE</li> <li>Condition of Light - DAYLIGHT</li> </ul>	ATC/Airspace Type of Flight Plan - Type of Clearance - Type Apch/Lndg -	NONE FORCED LANDING	Runway Runway Runway	Lth/Wid - Surface - Status -	N/A N/A N/A			
		Medical Certificat		MEDICAL-WA		IT		
COMMERCIAL SE LAND,ME LAND	Current - YES Months Since - 21 Aircraft Type - UNK/NR	Make/Model-			Days-	6 0 20		

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PLT REPORTED THAT SHORTLY AFTER PICKING UP THE BANNER TO BE TOWED, ENG RPM BEGAN TO DROP. HE SWITCHED TANKS AND DROPPED THE BANNER BUT ALTITUDE STILL COULD NOT BE MAINTAINED. A LANDING WAS SET UP AND THE FLAPS SET AT 45 DEGREES. TOUCHDOWN WAS IN A LAND FILL AND DURING LANDING ROLL OUT, THE AIRCRAFT COLLIDED WITH A 10' HIGH CHAIN LINK FENCE. AIRCRAFT HAD STC FOR AUTO FUEL AND AUTO FUEL WAS USED. TEMPERATURE WAS 92 DEGREES AND THE OPERATOR SAID THAT HE HAD EXPERIENCED VAPOR LOCK WITH SOME OF HIS OTHER AIRCRAFT THAT DAY.

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# Brief of Accident (Continued)

COLTS NECK,NJ	А/С кед. NO. N5202G	Time (Lc1) - 1350 EDT
DWER _ CLIMB		
		· · · · · · · · · · · · · · · · · · ·
ION WITH OBJECT		
-	d determines that the	d determines that the Probable Cause(s) of this accid

is/are finding(s) 1,2

File No 2496 7/04/88 LINDEN	I,NJ	A/C Reg	. No. N6655L	Ţ	Time (Lcl) - 1700 EDT		
Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft I SUBSTANT	•	Fatal	Injur Serious		None
Type of Operation -INSTRUCTIONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING		Fire NONE		rew O ass O	0 0	0 0	2 0
Aircraft Information Make/Model - LAKE LA-4 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 2400 No. of Seats - 4	Number E Engine T	Model - LYCO Ingines - 1 Type - RECI Wer - 1	PROCATING-CAR	ç	Installed/# Stall Warnir		
<ul> <li>Environment/Operations Information</li> <li>Weather Data</li> <li>Wx Briefing - NO RECORD OF BRIEFING</li> <li>Method - N/A</li> <li>Completeness - N/A</li> <li>Basic Weather - VMC</li> <li>Wind Dir/Speed- 130/010 KTS</li> <li>Visibility - 7.0 SM</li> <li>Lowest Sky/Clouds - 25000 FT SCATT</li> <li>Lowest Ceiling - NONE</li> <li>Obstructions to Vision- HAZE</li> <li>Precipitation - NONE</li> <li>Condition of Light - DAYLIGHT</li> </ul>	LINDEN, Destinatic LOCAL ATC/Airspac ERED Type of F Type of C	on ce light Plan - I	NONE	OFF Al Airport E LINDEN Runway Runway Runway	N / Ident - / Lth/Wid - / Surface -	- 14 - 2493/	75
	Age - 29 Biennial Flight	: Review	edical Certif F	light Time (H		AIVERS/LIM	IIT
COMMERCIAL, CFI SE LAND	Current Months Sinc	- YES ce - O vpe - UNK/NR	Total Make/Model	- 330 - 31 - 69	Last 24 Last 30	) Days-	5 31 68

Instrument Rating(s) - AIRPLANE

----Narrative----

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ON FINAL TAKEOFF OF A FULL STOP LANDING PRACTICE, THE STUDENT PILOT WAS AT THE CONTROLS BUT WAS HAVING DIFFICULTY MAINTAINING DIRECTIONAL CONTROL OF THE ACFT AS IT CLIMBED VERY SLOWLY. THE CFI TOOK OVER APPLYING LARGE AMOUNTS OF LEFT AILERON TO MAINTAIN A WINGS LEVEL ATTITUDE. AT THIS POINT, THE STUDENT OBSERVED CREASES IN THE UPPER SKIN OF THE LEFT WING. THE ACFT WAS ABLE TO CLEAR POWER LINES, BUT DUE TO THE SURROUNDING TERRAIN, THE CFI ELECTED TO LAND STRAIGHT AHEAD IN MARSHLAND. THE ACFT BOUNCED ON TOUCHDOWN AND DECELERATED RAPIDLY AS THE ACFT SPUN AROUND. METALLURGICAL INSPECTION REVEALED THE LEFT WING CONTAINED A COMPRESSION BUCKLE WITH UPWARD BENDING OF THE WING. THE INTERNAL STRUCTURAL MEMBERS OF THE WING SHOWED SIGNS OF OVERLOAD/OVERSTRESS FAILURES.

# Brief of Accident (Continued)

21) - 1700 EDT	Time (Lcl) -	A/C Reg. No. N6655L	96 7/04/88 LINDEN,NJ	File No 249
	Υ.		HARD LANDING LANDING - FLARE/TOUCHDOWN	Occurrence #1 Phase of Operation
			IMENT BOLT - OVERLOAD	Finding(s) 1. WING,WING ATTACH
			MISCELLANEOUS/OTHER TAKEOFF - GROUND RUN	Occurrence #2 Phase of Operation
			IG - NOT POSSIBLE - DUAL STUDENT IG - NOT POSSIBLE - PILOT IN COMMAND(CFI)	
				0ccurrence #3 Phase of Operation
			LOSS OF CONTROL - ON GROUND LANDING - FLARE/TOUCHDOWN	
			DN - SOFT	inding(s) 4. TERRAIN CONDITIO
				Probable Cause
7	dent	ble Cause(s) of this accide		Probable Cause

Factor(s) relating to this accident is/are finding(s) 4

Basic Information Type Operating Certificate-NONE (GE		aft Damage		Injuries	
Type operating ber thirdate home (de	•	TANTIAL	Fatal		or None
Type of Operation -PERSONAL		Cre			1 0
Flight Conducted Under -14 CFR 9	1 NONE	Pas	s O	0	2 0
Accident Occurred During -LANDING					
Aircraft Information					
Make/Model - CESSNA 182		CONTINETAL 0-470-R			
Landing Gear - TRICYCLE-FIXED		1		stall Warning Sys	tem - YES
Max Gross Wt - 2950		RECIPROCATING-CARBL	IRETOR		
No. of Seats - 4	Rated Power -	230 HP			
Environment/Operations Information	-				
Weather Data	Itinerar			Proximity	
Wx Briefing - NO RECORD OF BRIE		nt	OFF AI	RPORT/STRIP	
Method - N/A Completeness - N/A	ELIOT, ME				
Basic Weather - VMC	Destination WILDWOOD.NJ		Airport [	Jata	
Wind Dir/Speed- 240/011 KTS	WILDWOOD, NO		Runway	/Ident - N/A	
Visibility - 10.0 SM	ATC/Airspace			Lth/Wid - N/A	
Lowest Sky/Clouds - 4000 FT		n - NONE		Surface - N/A	
Lowest Ceiling - NONE	Type of Clearance	- NONE	Runway	Status - N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- FORCED LANDING			
Precipitation - NONE					
Condition of Light - DAYLIGHT					
Personnel Information					
Pilot-In-Command	Age - 56	Medical Certific			ERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review		ight Time (F		<u>^</u>
ATP, CFI	Current - YES Months Since - 1	Total - Make/Model-	7026	Last 24 Hrs	
SE LAND,ME LAND,ME SEA HELICOPTER	Aircraft Type - PA-2		209	Last 30 Days Last 90 Days	
HELICOPTER	Affectant Type - PA-2	Multi-Eng ~	4348	Rotorcraft	-
		Marti Eng	4546	Kotor crart	1301
Instrument Rating(s) - AIRPLAN	E, HELICOPTER				
 Narrative					
	ND MADE AN OFF AIRPORT LANDIN	G IN A FIELD. STRIK	ING A BUTIT	ING AND	
JEGGINA 182 EXPERIENCED A PUWER TUSS A					

File No 24	17 8/08/88	WILDWOOD,NJ	A/C Reg. No. N20722	Time (Lcl) - 1430 EDT
Occurrence #1 Phase of Operation		DWER(TOTAL) - MECH	FAILURE/MA≃F	
Finding(s) 1. ENGINE ASSEMBLY 2. FLUID,FUEL - EX 3. FUEL SUPPLY -	-	PILOT IN COMMAND		
Occurrence #2 Phase of Operation		ICY		
Occurrence #3 Phase of Operation		ON WITH OBJECT		
Finding(s) 4. OBJECT - BUILDI	NG(NONRESIDENTIAL)			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,3,4

Factor(s) relating to this accident is/are finding(s) 1

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### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Type Upenating Contificate-NONE (CENE							
Type Operating Certificate-NONE (GENE	RAL AVIATION)	Aircraft Damage			Injur		N
Type of Operation -PERSONAL		DESTROYED Fire	Crew	Fatal O	Serious 1	Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91		NONE	Pass	0	1	2	0
Accident Occurred During -DESCENT		NONE	1 2 3 3	Ū		2	0
Aircraft Information							
Make/Model - PIPER PA-60		Model - LYCOMING I	0-540-K1F5		Installed/A		
Landing Gear - TRICYCLE-RETRACTABLE		gines - 2		S	tall Warnin	g System	- YES
Max Gross Wt - 5500		pe - RECIP-FUEL	INJECTED				
No. of Seats - 6	Rated Pow	er - 290 HP					
Environment/Operations Information							
leather Data	Itinerary			Airport	Proximity		
Wx Briefing - NO RECORD OF BRIEFI	NG Last Depar	ture Point		OFF AI	RPORT/STRIP		
Method - N/A	BLAIRSTO	WN,NJ					
Completeness - N/A	Destination		J	Airport D			
Basic Weather - VMC	SAME AS	ACC/INC		SOMERS			
Wind Dir/Speed- 280/012 KTS					Ident -		
Visibility - 15.0 SM	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - CLEAR		ight Plan - NONE			Surface -		
Lowest Ceiling - NONE		earance - NONE		Runway	Status -	DRY	
Obstructions to Vision- NONE	Type Apch/	Lndg - GO ARO	UND				
Precipitation - NONE	,						
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 44		Certificate			IVERS/LIM	міт
Certificate(s)/Rating(s)	Biennial Flight	Review		t Time (H			
PRIVATE		- UNK/NR Tot	al - : e/Model- trument- UNI	2300	Last 24	Hrs - UN	
SE LAND, ME LAND		- UNK/NR Mak	e/Model-	800	Last 30	) Days- UN	
	Aircraft Typ	e – UNK/NR Ins	trument- UN	<td>Last 90</td> <td>) Days- UN</td> <td></td>	Last 90	) Days- UN	
		Mult	ti-Eng - UNA	<td>Rotorcr</td> <td>aft - UN</td> <td>NK/NR</td>	Rotorcr	aft - UN	NK/NR

----Narrative----

THE AIRCRAFT WAS ON FINAL APPROACH TO RUNWAY 30 AT SOMERSET AIRPORT, SOMERVILLE, NEW JERSEY WHEN THERE WAS A LOSS OF POWER OF THE RIGHT ENGINE. THE PILOT RAISED THE LANDING GEAR AND FLAPS, AND THE AIRCRAFT ROLLED TO THE RIGHT, DESCENDED TOWARD THE GROUND AND CRASHED. THE FUEL SELECTOR VALVE TO THE RIGHT WING TANK WAS IN THE CLOSED POSITION. THE RIGHT ENGINE MAGNETOS WERE DEFECTIVE.

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File No 2448 12/31/88 SOMERVILLE,NJ	A/C Reg. No. N90393	Time (Lcl) - 1200 EST
Occurrence #1 LOSS OF ENGINE POWER Phase of Operation APPROACH - VFR PATTERN - FINAL APPROA	АСН	
Finding(s) 1. IGNITION SYSTEM,MAGNETO - BURNED 2. IGNITION SYSTEM,MAGNETO - WORN 3. FUEL SYSTEM,SELECTOR VALVE - CLOSED 4. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN CO	DMMAND	
Occurrence #2 LOSS OF CONTROL - IN FLIGHT Phase of Operation GO-AROUND (VFR) 5. GO-AROUND - ATTEMPTED - PILOT IN COMMAND 6. AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND 7. FUEL TANK SELECTOR POSITION - PERFORMED - PILOT IN COM 8. DIVERTED ATTENTION - PILOT IN COMMAND 9. RAISING OF FLAPS - PERFORMED - PILOT IN COMMAND	1MAND	
Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATE Phase of Operation DESCENT - UNCONTROLLED	R	· · · ·
Probable Cause		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 3,4,5,6,8

Factor(s) relating to this accident is/are finding(s) 1,2,7,9

-Basic Information				Totun		
Type Operating Certificate-NONE (GENERAL		aft Damage ROYED	Fatal	Injur Serious	Minor	None
Type of Operation -PERSONAL	Fire		ew 1	0	0	0
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91	NONE		iss 0	õ	ő	ŏ
Accident Occurred During -APPROACH			ther 1	õ	õ	õ
-Aircraft Information						
Make/Model - BEECH B23		LYCOMING 0-360-A2G		Installed/A		
Landing Gear - TRICYCLE-FIXED	Number Engines -			tall Warning	g System	- YES
Max Gross Wt - 2450		RECIPROCATING-CARB	URETOR			
No. of Seats - 4	Rated Power -	180 HP				
-Environment/Operations Information						
Weather Data	Itinerary			Proximity		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Poi CIMARRON	nt	ON AIR	PURI		
Completeness - N/A	Destination		Airport D	a+a		
Basic Weather - VMC	RATON,NM		•	NT SCOUT RA	NCH	
Wind Dir/Speed- 030/004 KTS					06	
Visibility - 20.0 SM	ATC/Airspace			Lth/Wid -		50
Lowest Sky/Clouds - N/A	Type of Flight Pla	n - NONE		Surface -		
Lowest Ceiling - 4000 FT BROKEN	Type of Clearance	- NONE	Runway	Status -	DRY	
Obstructions to Vision- NONE	Type Apch/Lndg	- FULL STOP	-			
Precipitation - NONE		PRECAUTIONARY	LANDING			
Condition of Light - DAYLIGHT						
-Personnel Information						
	ge - 49				WAIVERS/	LIMIT
	iennial Flight Review	F1	ight Time (H		llaa	0
	Current - YES	Total -	10/1	Last 24		0
SE LAND, ME LAND	Months Since - 17 Aircraft Type - C-17		141	Last 30 Last 90		2 2
	All Chart Type - C-17	Multi-Eng -	37	Last 90	Days-	2
Instrument Rating(s) - AIRPLANE						

WITNESSES REPORTED THAT AFTER STARTING THE ENG THE PILOT TAXIED TO THE END OF THE RUNWAY AND THE ENG QUIT. AFTER DRAINING THE SUMPS THE ENG RESTARTED AFTER SEVERAL ATTEMPTS. THE ACFT THEN DEPARTED AND THE WITNESSES LEFT THE AIRPORT. NO ONE SAW THE ACDT. THE WRECKAGE WAS FOUND ABOUT 3 HRS LATER. THE ACFT HAD BEEN PARKED AT THE AIRPORT FOR 11 DAYS WITH FUEL TANKS PARTIALLY FILLED. FUEL TANK CAP SEALS WERE DETERIORATED AND SEVERAL RAIN SHOWERS HAD OCCURRED AT THE AIRPORT DURING THE 11 DAYS. WATER WAS FOUND IN THE FUEL TANKS DURING THE WRECKAGE EXAMINATION.

File No 25	08 8/02/88	CIMARRON, NM	A/C Reg. No. N4006T	Time (Lcl) - 1400 MDT
Occurrence #1 Phase of Operation			-MECHANICAL	
Finding(s) 1. FUEL SYSTEM,CAP 2. FLUID,WATER - F 3. AIRCRAFT PREF	UEL	OT IN COMMAND		
Occurrence #2 Phase of Operation.		NCY		
Occurrence #3 Phase of Operation		ION WITH TERRAIN/WA	TER	
Finding(s) 4. PLANNED APPROAC 5. MANEUVER - IMPR				
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3,4,5

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File No 2407 7/04/88 VERDI,	NV A/C Re	A/C Reg. No. N49787			Time (Lcl) - 1403 PDT			
-Basic Information	· · · · · · · · · · · · · · · · · · ·							
Type Operating Certificate-ON-DEMAND AIR	TAXI Aircraft	Damage		Injur	ies			
	DESTROY	ED	Fatal	Serious	Minor	None		
Type of Operation -PERSONAL	Fire	Crew	1	0	0	0		
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0		
Accident Occurred During -CLIMB								
-Aircraft Information								
Make/Model - CESSNA 152	Eng Make/Model - LYC	DMING 0-235-L2C	ELT	Installed/Ad	ctivated	- YES/YF		
Landing Gear - TRICYCLE-FIXED	Number Engines - 1		S	tall Warning	g System	- YES		
Max Gross Wt - 1670	Engine Type - REC	IPROCATING-CARBURI	ETOR					
No. of Seats - 2	Rated Power -	110 HP						
-Environment/Operations Information		+						
Weather Data	Itinerary		Airport	Proximity				
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point			RPORT/STRIP				
Method - N/A	REND, NV							
Completeness - N/A	Destination		Airport D	ata				
Basic Weather - VMC	OROVILLE, CA							
Wind Dir/Speed- 220/014 KTS	,		Runwa∨	Ident -	N/A			
Visibility - 40.0 SM	ATC/Airspace				N/A			
	ERED Type of Flight Plan -	NONE			N/A			
Lowest Ceiling - NONE	Type of Clearance -		•		N/A			
Obstructions to Vision- NONE		NONE			,			
Precipitation - NONE	.,							
Condition of Light - DAYLIGHT								
-Personnel Information								
Pilot-In-Command	Age - 33	Medical Certifica	te - VALID	MEDICAL-NO	WAIVERS/	LIMIT		
Certificate(s)/Rating(s)	Biennial Flight Review		nt Time (H		······			
PRIVATE	Current - NO	Total -		Last 24	Hrs -	2		
SELAND	Months Since - 25	Make/Model-				2		
	Aircraft Type ~ C-152	Instrument-		Last 90	-	6		
		Multi-Eng -		Rotorcra	-	õ		

Instrument Rating(s) - NONE

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----Narrative----

THE AIRCRAFT COLLIDED WITH MOUNTAINOUS TERRAIN SHORTLY AFTER TAKEOFF. THE ACCIDENT SITE WAS ON THE LEEWARD SIDE OF THE MOUNTAIN RIDGE. WIND VELOCITIES WERE REPORTED TO BE 20 KNOTS GUSTING TO 30 KNOTS. OTHER PILOTS REPORTED EXTREME DOWNDRAFTS IN THE ACCIDENT AREA ON THE DAY OF THE ACCIDENT. THE PILOT DID NOT HAVE A CURRENT BIENNAL FLIGHT REVIEW AS REQUIRED BY THE FARS. THE PILOT HAD FLOWN THE ROUTE TWICE IN THE PAST, BUT OVER TWO YRS BEFORE THE ACCIDENT.

		ытег	of Accident (continued)		
File No 240	7 7/04/88	VERDI, NV	A/C Reg. No. N49787	Time (Lc1) - 1403 PDT	
Occurrence #1 Phase of Operation					
Finding(s) 1. WEATHER CONDITIO					
2. WEATHER CONDITIO	N - MOUNTAIN WAVE				
3. WEATHER CONDITIO		- NOT PERFORMED	- PILOT IN COMMAND		
5. INADEQUATE R	ECURRENT TRAINING	- PILOT IN COMMA			
<pre>6. ALTITUDE - NOT 0 7. CLIMB - NOT POSS</pre>					
8. STALL - INADVERT					
Occurrence #2		· · ·	WATER		
Phase of Operation	DESCENT - UNCUNTR	ULLED			
Finding(s) 9. OBJECT - TREE(S)					

10. TERRAIN CONDITION - MOUNTAINOUS/HILLY

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 4,6

Factor(s) relating to this accident is/are finding(s) 1,2,3,5

File No 2440 4/08/88 WEST	SENECA, NY A/C F	Reg. No. N59845		ime (Lcl) -	0230 EDT	
-Basic Information				T a '	•	
Type Operating Certificate-NONE (GENERA	_ AVIATION) ATCCAT	t Damage	Fatal	Injur Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew		0	Minor 1	None 0
Flight Conducted Under -14 CFR 91	NONE	Pass	•	0	0	0
Accident Occurred During -LANDING	NONE	rass	0	0	U	0
-Aircraft Information						
Make/Model - PIPER PA-31-325	Eng Make/Model - Ly	COMING TIO-540-F28	D ELT	Installed/A	ctivated ·	- YES/YE
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2		S	tall Warnir	ng System <sup>.</sup>	- YES
Max Gross Wt - 6500	Engine Type - RE					
No. of Seats - 8	Rated Power -	325 HP				
 -Environment/Operations Information						
Weather Data	Itinerary		Airport	Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point			RPORT/STRIP	•	
Method - N/A	BUFFALO,NY		0			
Completeness - N/A	Destination		Airport D	ata		
Basic Weather - IMC	JAMESTOWN, NY		•			
Wind Dir/Speed- UNK/NR			Runway	Ident -	N/A	
Visibility - UNK/NR	ATC/Airspace		Runway	Lth/Wid -	N/A	
Lowest Sky/Clouds - 3000 FT SCAT	FERED Type of Flight Plan	- IFR	Runway	Surface -	MACADAM	
Lowest Ceiling - NONE	Type of Clearance	- NONE	Runway	Status -	DRY	
Obstructions to Vision- NONE	Type Apch/Lndg	- FORCED LANDING	-			
Precipitation - NONE						
Condition of Light - NIGHT(DARK)						
-Personnel Information '						
Pilot-In-Command	Age - 47				IVERS/LIM	IΤ
Certificate(s)/Rating(s)	Biennial Flight Review		ht Time (H			
COMMERCIAL, CFI	Current - YES	Total -		Last 24		6
SE LAND, ME LAND	Months Since - 3	Make/Model-			) Days- UN	•
	Aircraft Type - UNK/NF	2 Instrument- Multi-Eng -		Last 90	) Days-	45
Instrument Rating(s) - AIRPLANE						

#### ----Narrative----

THE FLIGHT DEPARTED BUFFALO UNDER IFR CONDITIONS TO JAMESTOWN, NEW YORK. SEVERAL APPROACHES WERE MADE TO LAND BUT DUE TO THE WEATHER CONDITIONS, THE PILOT ELECTED TO RETURN TO BUFFALO STILL UNDER IFR. DURING INITIAL CONTACT WITH CONTROL TOWER, THE PILOT ADVISED THEM THAT HE WAS LOW ON FUEL AND REQUESTED DIRECT FLIGHT TO BUFFALO. ABOUT 5 MILES SSW OF BUFFALO BOTH ENGINES QUIT AND THE PILOT ADVISED THAT HE WAS NOT GOING TO MAKE IT. AT THIS TIME THE FLIGHT WAS ISSUED EMERGENCY VECTOR TO BUFFALO, BUT THE AIRCRAFT CRASHED ADJACENT TO ROUTE 400 IN WEST SENECA, NEW YORK.

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File No 24	40 4/08/88	WEST SENECA, NY	A/C Reg. No. N59845	Time (Lc1) - 0230 EDT
Occurrence #1 Phase of Operation		OWER		
Finding(s) 1. WEATHER CONDITI 2. PREFLIGHT PLA 3. FLUID,FUEL - EX	NNING/PREPARATION HAUSTION	- INACCURATE - PILOT IN C	OMMAND	
Occurrence #2 Phase of Operation		NCY		
Occurrence #3 Phage of Operation		ION WITH TERRAIN/WATER		
Probable Cause				-
The National Transpo	rtation Safety Boa	rd determines that the Pr	obable Cause(s) of this acc	cident

is/are finding(s) 2

## National Transportation Safety Board Washington, D.C. 20594

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Brief of Accident

Basic Information		noft Domogo			Traiura		
Type Operating Certificate-NONE (GENERA		raft Damage TROYED		Fatal	Injur Serious		None
Type of Operation -PERSONAL	Fire		Crew	0	1	0	0
Flight Conducted Under -14 CFR 91	NON	E	Pass	0	1	3	0
Accident Occurred During -DESCENT							
-Aircraft Information							
Make/Model - BEECHCRAFT A23-24	Eng Make/Model -		-A2B6		nstalled/A		
Landing Gear - TRICYCLE-FIXED	Number Engines -			St	all Warnin	g System	- YES
Max Gross Wt - 2550	Engine Type -		CTED				
No. of Seats - 4	Rated Power -	200 HP					
-Environment/Operations Information							
Weather Data	Itinerary			Airport P			
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Po	int		OFF AIR	PORT/STRIP		
Method - N/A	ASHLAND, OH				* -		
Completeness - N/A Basic Weather - VMC	Destination LYONS,NY			Airport Da	ELCHER AIR	CTDID	
Wind Dir/Speed- 200/012 KTS	L FONS, NF					N/A	
Visibility - 20.0 SM	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - CLEAR	Type of Flight Pl	an - NONF			Surface -		
Lowest Ceiling - NONE	Type of Clearance				Status -		
Obstructions to Vision- NONE	Type Apch/Lndg			····· <b>,</b>			
Precipitation - NONE							
Condition of Light - DAYLIGHT							
-Personnel Information							
	Age - 37					WAIVERS/	LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review			nt Time (Ho			
PRIVATE	Current - YES			457			5
SE LAND	Months Since - 9			11			5
	Aircraft Type - C-1	50 Instrume Multi-En		0 18	Last 90	Days-	10
Instrument Rating(s) - NONE							
-Narrative							

WITNESSES STATED THE PILOT HAD MADE SEVERAL ATTEMPTS TO LAND PRIOR TO THE ACCIDENT. THEY ALSO STATED THE PILOT WAS ATTEMPTING TO LAND TO THE NORTH WITH WINDS BLOWING FROM A SOUTHERLY DIRECTION AT 10 TO 15 MPH.

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File No 24	01 5/08/88	LYONS, NY	A/C Reg. No. N7982L	Time (Lc1) - 1820 EDT
Occurrence #1 Phase of Operation		- IN FLIGHT		
Finding(s) 1. WEATHER CONDITI 2. WRONG RUNWAY 3. AIRSPEED - NOT 4. STALL/MUSH	- SELECTED - PILOT			
Occurrence #2 Phase of Operation			ATER	· · · · · · · · · · · · · · · · · · ·
Probable Cause				
The National Transpo is/are finding(s) 2		rd determines that	the Probable Cause(s) of this acci	dent

Factor(s) relating to this accident is/are finding(s) 1

Type Operating Certificate-NONE (GENER	AL AVIATION) A	ircraft Damag	e		Inju	ıries	
	9	SUBSTANTIAL		Fatal	Serious		None
Type of Operation -PERSONAL		re	Crew		0	-	1
Flight Conducted Under -14 CFR 91	1	IONE	Pase	s O	0	0	1
Accident Occurred During -LANDING							
Aircraft Information							
Make/Model - TAYLORCRAFT BC-12D	Eng Make/Model						
<pre>Landing Gear - TAILWHEEL-ALL FIXED</pre>	Number Engines				Stall Warni	ing System	n - NO
Max Gross Wt - 1200	Engine Type			RETOR			
No. of Seats - 1	Rated Power	- 65 HP					
Environment/Operations Information							
Weather Data	Itinerary				Proximity		
Wx Briefing - FSS	Last Departure			ON AI	RPORT		
Method - TELEPHONE	BROOKHAVEN, N	,					
Completeness - UNK/NR	Destination			Airport			
Basic Weather - VMC	LOCAL				HAVEN		
Wind Dir/Speed-					y Ident	- 15	
Visibility - 7.0 SM	ATC/Airspace				y Lth/Wid		
Lowest Sky/Clouds - CLEAR	Type of Flight				y Surface		7
Lowest Ceiling - NONE	Type of Clearar			Runwa	y Status	- DRY	
Obstructions to Vision- NONE	Type Apch/Lndg	- TRAFF	IC PATTERN				
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information Pilot-In-Command	Age - 51						
Certificate(s)/Rating(s)	Age - 51 Biennial Flight Revie	Medica		ate – VALI ght Time (		AIVER5/LI	MII
COMMERCIAL, ATP	Current - Y		tal -			.4 Hrs - L	
SE LAND, ME LAND						80 Days-	· · ·
HELICOPTER ,GLIDER	Months Since - Aircraft Type - E	U Ma 1-747 To	ke/Model- strument-	1744	Last 3	10 Days-	
HELICOPTER , GLIDER	All-Chart Type - E	5-747 IN Mu	lti-Eng ~	11690	Last s	raft -	
		Ma		11080	KO LOI C	nart	30
Instrument Rating(s) - AIRPLANE							
Narrative							

File No 24	30 5/21/88 BROOKHAVE	N,NY A/C Reg	J. No. N96193	Time (Lc1) - 1415 EDT
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER GO-AROUND (VFR)			
Finding(s) 1. FUEL SYSTEM,CAR 2. CARBURETOR HE	BURETOR - ICE AT - IMPROPER USE OF - PILOT	IN COMMAND		
Occurrence #2 Phase of Operation	IN FLIGHT COLLISION WITH OB LANDING	JECT		
Finding(s) 3. OBJECT - TREE(S	)			
	NOSE OVER LANDING - FLARE/TOUCHDOWN			
Probable Cause				
The National Transpo is/are finding(s) 1	rtation Safety Board determin ,2	es that the Probable Caus	e(s) of this accide	nt

File No 2454 7/23/88 PENDLE	ETON,NY A/C Re	eg. No. N53784	Т	ime (Lcl) -	1400 EDT	
Basic Information Type Operating Certificate-NONE (GENERAL	_ AVIATION) Aircraf SUBSTAN		Fatal	Injur Serious	ies Minor	None
Type of Operation -BANNER TOW Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Fire NONE	Crew Pass	0 0	1 0	0 0	0
Aircraft Information Make/Model - BELLANCA 7GCAA Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 1650 No. of Seats - 3	Eng Make/Model - LY( Number Engines - 1 Engine Type - RE( Rated Power -		S	Installed/A tall Warnin		
Environment/Operations Information weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- UNK/NR Visibility - UNK/NR Lowest Sky/Clouds - UNK/NR	Itinerary Last Departure Point SAME AS ACC/INC Destination LOCAL ATC/Airspace Type of Flight Plan		OFF AI Airport D PENDLE Runway Runway	TON AIRPARK	09 3800/	75 PF
Lowest Ceiling - Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Type of Clearance Type Apch/Lndg	NONE			DRY	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,CFI SE LAND	Age - 49 Biennial Flight Review Current - YES Months Since - 4 Aircraft Type - UNK/NR	Total - : Make/Model- UN	t Time (H 2930 <td>lours) Last 24 Last 30 Last 90</td> <td>IVERS/LIM Hrs - UNI Days- UNI Days- UNI aft - UNI</td> <td></td>	lours) Last 24 Last 30 Last 90	IVERS/LIM Hrs - UNI Days- UNI Days- UNI aft - UNI	

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PILOT OF THE BELLANCA HAD JUST STARTED HIS APPROACH TO PICK UP A BANNER, WHEN THE ENGINE WAS HEARD TO BE RUNNING ROUGH. HE CONTINUED WITH THE BANNER PICKUP. A WITNESS REPORTED THAT WHEN POWER WAS APPLIED, THE ENGINE RAN EXTREMELY ROUGH AND EMITTED BLACK SMOKE. GROUND PERSONNEL INSTRUCTED THE PILOT TO RELEASE THE BANNER. THE WITNESS SAID THAT THE PILOT RELEASED THE BANNER AND STARTED A SHALLOW TURN TO THE RIGHT. THE AIRCRAFT THEN DROPPED OUT OF SIGHT BEHIND A LINE OF TREES AND IMPACTED THE GROUND. THERE WAS EVIDENCE THE AIRCRAFT HAD CRASHED IN A STEEP NOSE DOWN ATTITUDE. AN EXAM OF THE AIRCRAFT REVEALED THERE WAS PLENTY OF FUEL ON BOARD. AN OPERATIONAL CHECK OF THE ENGINE WAS MADE AFTER SEVERAL DAMAGED COMPONENTS WERE REPLACED; IT STARTED AND RAN NORMALLY UP TO ABOUT 1300 TO 1400 RPM. DUE TO A BENT CRANKSHAFT FLANGE, THE ENGINE WAS NOT CHECKED AT A HIGHER RPM.

SS OF ENGINE POWER NEUVERING		
	· · · · · · · · · · · · · · · · · · ·	
	SS OF CONTROL - IN FLIGHT NEUVERING TAINED - PILOT IN COMMAND - PILOT IN COMMAND FLIGHT COLLISION WITH TERRAIN/WATER SCENT - UNCONTROLLED	SS OF CONTROL - IN FLIGHT NEUVERING TAINED - PILOT IN COMMAND - PILOT IN COMMAND FLIGHT COLLISION WITH TERRAIN/WATER

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,3,4

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Basic Information							
Type Operating Certificate-NONE (GENERAL	_ AVIATION) Ai	rcraft Damage			Injur	ies	
		ESTROYED		Fatal			None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91	Fi	re	Crew	1	0	0	0
Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	Ν	IONE	Pass	· 0	1	0	0
Aircraft Information Make/Model - AERONCA 7CCM	Eng Make/Model	- CONTINENTAL (	~85	Е Г Т	Installed/A	ctivated	- NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED		- 1			tall Warnin		•
Max Gross Wt - 1300		- RECIPROCATIN				.g. 0,0 com	
No. of Seats - 2	Rated Power						
Environment/Operations Information							
Weather Data	Itinerary	<b>.</b>			Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Departure			OFF AI	RPORT/STRIP		
Method - N/A	SAME AS ACC/I	NC					
Completeness - N/A Basic Weather - VMC	Destination SPENCERPORT.N	IV	A	irport D	ата		
Wind Dir/Speed- VARIABLE/005 KTS	SPENCERFURI,	11		Pupuav	Ident -	N/A	
Visibility - 15.0 SM	ATC/Airspace					N/A N/A	
Lowest Sky/Clouds - CLEAR	Type of Flight	Plan - NONE		-		N/A	
Lowest Ceiling - NONE	Type of Clearar					N/A	
Obstructions to Vision- NONE	Type Apch/Lndg			(Cariney	otatab	17/5	
Precipitation - NONE	· )po //po//, _//_g	,					
Condition of Light - DAYLIGHT							
Personnel Information	Ann 50	Maddar 1. O			DION		
Pilot-In-Command	Age - 58 Rieppiel Elight Dovie	Medical Ce					
Certificate(s)/Rating(s) PRIVATE	Biennial Flight Revie Current - N		- UNK	: Time (H		Hrs - UN	
SE LAND	Months Since - 3	0 10tai 10 Maka/I	Model- UNK		Last 20	Days- UN	
	Aircraft Type - L	INK/NR Instru	ument- UNK		Last 90	Days UN	
			-Eng - UNK			aft - UN	•
				•			• • • • • •

----Narrative----

THE ACCIDENT ACFT COLLIDED WITH TERRAIN SHORTLY AFTER TAKEOFF FROM A PVT AIRSTRIP WHILE ON A BUSINESS FLT. A WITNESS TO THE ACCIDENT STATED THAT HE SAW THE ACCIDENT ACFT LIFT OFF AND TURN. HE HEARD THE ACFT BUT DID NOT SEE THE IMPACT AND SAID THE ENGINE WAS AT FULL POWER AND SOUNDED NO DIFFERENT THAN ANY OTHER TAKEOFF. THE PASSENGER AND MEMBERS OF THE PLT'S FAMILY WOULD NOT DISCUSS THE ACCIDENT AND REFUSED TO THE INTERVIEWED. AT THE TIME OF THE ACCIDENT THE PLT POSSESSED A PRIVATE PILOT CERTIFICATE BUT NO MEDICAL CERTIFICATE. INVESTIGATION SHOWED THE ACFT TO BE OUT OF LICENSE ALTHOUGH EXAMINATION OF THE ACFT AND POWERPLANT FAILED TO REVEAL ANY MECHANICAL DEFECT.

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## Brief of Accident (Continued)

File No 24	90 8/15/88	BARKER, NY	A/C Reg. No. N83255	Time (Lc1) - 1820 EDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL Takeoff - Initia			
Finding(s) 1. AIRCRAFT CONTROL	NOT MAINTAINED	- PILOT IN COMMAND		
Occurrence #2 Phase of Operation	IN FLIGHT COLLIS DESCENT - UNCONT	ION WITH TERRAIN/WATER ROLLED		
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1

te-NONE (GENERAL AV	-	2	Fatal			None
-OTHER WORK USE -14 CFR 91 -LANDING	Fire NONE		0			0
	Number Engines - 1 Engine Type - RE	CIPROCATING-CARBURE	S.			
5 KTS SM UNK/NR	SAME AS ACC/INC Destination LOCAL ATC/Airspace Type of Flight Plan Type of Clearance	- NONE - NONE	OFF AIF Airport Da Runway Runway Runway	RPORT/STRIP ata Ident - Lth/Wid - Surface -	N/A N/A N/A	
	nnial Flight Review Current - YES Months Since - 2	Fligh Total - Make/Model- Instrument- UN	nt Time (Ho 6000 1000 IK/NR	burs) Last 24 Last 30 Last 90	Hrs - Days- Days-	3 30 90
	-OTHER WORK USE -14 CFR 91 -LANDING 	SUBSTAI -OTHER WORK USE -14 CFR 91 -LANDING Eng Make/Model - FR Number Engines - 1 Engine Type - RE Rated Power - DORD OF BRIEFING DRD OF BRIEFING Last Departure Point SAME AS ACC/INC Destination LOCAL 5 KTS SM ATC/Airspace UNK/NR Type of Flight Plan 3500 FT OVERCAST SM ATC/Airspace UNK/NR Type of Clearance NONE - NONE - NONE - DAYLIGHT Age - 56 Biennial Flight Review Current - YES Months Since - 2	SUBSTANTIAL -OTHER WORK USE -14 CFR 91 -LANDING Eng Make/Model - FRANKLIN 6V-350-A Number Engines - 1 Engine Type - RECIPROCATING-CARBURE Rated Power - 235 HP Dormation Itinerary DRD OF BRIEFING Last Departure Point SAME AS ACC/INC Destination LOCAL 5 KTS SM ATC/Airspace UNK/NR Type of Flight Plan - NONE 3500 FT OVERCAST Type of Clearance - NONE - NONE Type Apch/Lndg - FORCED LANDING NONE - NONE - NONE - DAYLIGHT Age - 56 Medical Certificat Biennial Flight Review Fligh Current - YES Total - Months Since - 2 Make/Model- Aircraft Type - BH-206 Instrument- UN	SUBSTANTIAL Fatal -OTHER WORK USE Fire Crew O -14 CFR 91 NONE Pass O -LANDING Eng Make/Model - FRANKLIN 6V-350-A ELT : Number Engines - 1 S Engine Type - RECIPROCATING-CARBURETOR Rated Power - 235 HP ormation Itinerary Airport f SAME AS ACC/INC Destination Airport Da LOCAL Runway SM ATC/Airspace Runway SM ATC/Airspace Runway SM ATC/Airspace NONE Runway SM ATC/Airspace NONE Runway 3500 FT OVERCAST Type of Clearance - NONE Runway UNK/NR Type of Flight Plan - NONE Runway SM ATC/Airspace NONE Runway ONNE - DAYLIGHT Age - 56 Medical Certificate - VALID Biennial Flight Review Flight Time (Ho Current - YES Total - 6000 Months Since - 2 Make/Model - 1000 Aircraft Type - BH-206 Instrument - UNK/NR	SUBSTANTIAL Fatal Serious -OTHER WORK USE Fire Crew 0 0 -14 CFR 91 NONE Pass 0 0 -LANDING Eng Make/Model - FRANKLIN 6V-350-A ELT Installed/A Number Engines - 1 Stall Warnin Engine Type - RECIPROCATING-CARBURETOR Rated Power - 235 HP Dormation DRD OF BRIEFING Last Departure Point OFF AIRPORT/STRIP SAME AS ACC/INC Destination Airport Data LOCAL Runway Ident - Runway Lth/Wid - UNK/NR Type of Flight Plan - NONE Runway Surface - SM ATC/Airspace NONE Runway Surface - NONE Type Apch/Lndg - FORCED LANDING NONE - NONE Type Apch/Lndg - FORCED LANDING NONE - DAYLIGHT Age - 56 Medical Certificate - VALID MEDICAL-WA Biennial Flight Review Flight Time (Hours) Current - YES Total - 6000 Last 24 Months Since - 2 Make/Model - 1000 Last 24 Months Since - 2 Make/Model - 1000 Last 30 Aircraft Type - BH-206 Instrument- UNK/NR Last 90	SUBSTANTIAL       Fatal       Serious       Minor         -OTHER WORK USE       Fire       Crew       0       0       1         -14 CFR 91       NONE       Pass       0       0       0       1         -LANDING       Eng Make/Model - FRANKLIN 6V-350-A       ELT Installed/Activated       Number Engines - 1       Stall Warning System         Eng ine Type       - RECIPROCATING-CARBURETOR       Stall Warning System       Stall Warning System         ormation       Itinerary       Airport Proximity       OFF AIRPORT/STRIP         DRD OF BRIEFING       Last Departure Point       OFF AIRPORT/STRIP       SAME AS ACC/INC         Destination       Airport Data       LOCAL       Runway Ident       - N/A         5 KTS       Runway Ident       - N/A       Mumay Status       - N/A         SM       ATC/Airspace       Runway Status       - N/A         UNK/NR       Type of Clearance       NONE       Runway Status       - N/A         NONE       Type Apch/Lndg       - FORCED LANDING       - N/A         NONE       OAYLIGHT       - YES       Total       - 6000       Last 24 Hrs - Months Since - 2         Aircnaft Type - BH-206       Instrument- UNK/NR       Last 90 Days- Aircraft Type - BH-206 <t< td=""></t<>

----Narrative----

PILOT SAID THAT HE EXPERIENCED A SEVERE DOWNDRAFT AND A POWER LOSS DURING A POWER LINE PATROL FLIGHT AT AN ALTITUDE OF ABOUT 200 FEET. THE PILOT ATTEMPTED TO AUTOROTATE TO A LANDING BUT IMPACTED TERRAIN AND TREES. LOCAL WINDS WERE REPORTED AT 35 KTS GUSTING TO 45 KTS. POST ACCIDENT TEST RUN OF THE ENG FAILED TO REVEAL ANY MECHANICAL FAILURES/MALFUNCTIONS.

# Brief of Accident (Continued)

File No 24	24 11/10/88	CHAMPION, NY	A/C Reg. No. N2AR	Time (Lcl) - 1530 EST	
Occurrence #1 Phase of Operation		OWER			
Finding(s) 1. WEATHER CONDITI 2. AIRCRAFT HANDLI		D - PILOT IN COMMANE	)		
Occurrence #2 Phase of Operation		ION WITH OBJECT			
Finding(s) 3. OBJECT - TREE(S	)				
<sub>J</sub> Probable Cause					
The National Transpo is/are finding(s) 1		rd determines that t	the Probable Cause(s) of this acc	ident	

Factor(s) relating to this accident is/are finding(s) 3

5

Brief of Accident

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File No 2513 11/18/88 SHIRLE	A/C Reg. N	A/C Reg. No. N8697A		Time (Lcl) - 1546 EST			
-Basic Information Type Operating Certificate-NONE (GENERAL Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	AVIATION)	Aircraft Dan DESTROYED Fire ON GROUND	age Crew Pass		Injur Serious O O	ries Minor O O	None O O
-Aircraft Information Make/Model - BEECH A35 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 2650 No. of Seats - 4	Number Engine	e/Model - CONTINE Engines - 1 Type - RECIP-F ower - 185	UEL INJECTED		Installed/A itall Warnir		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 300/006 KTS Visibility - 20.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAWN	SAME A Destinati LOCAL ATC/Airspa Type of Type of		E	ON AIR Airport D BROOKH Runway Runway Runway	ata IAVEN Ident - Lth/Wid - Surface -		150
	Current Months Sin	t Review	Total - Make/Model- U	ht Time (H 456 NK/NR	lours) Last 24 Last 30	Hrs - Ul Days- Ul Days- Ul	NK/NR

Instrument Rating(s) - NONE

----Narrative----

THE ACFT MADE A STEEP CLIMB ON TAKEOFF, TURNED SHARPLY TO THE LEFT, AND SPIRALED TO THE GROUND. THE RIGHT RUDDER CABLE WAS FOUND SEPARATED UNDER THE FUEL TANK. THE CABLE STRANDS IN THE AREA OF THE SEPARATION WERE SEVERELY CORRODED. THE CORROSION COMPLETELY CONSUMED MANY OF THE WIRES. ONLY A FEW RECOGNIZABLE FRACTURES WERE FOUND ON THE WIRES AND THESE FRACTURES APPEARED TYPICAL OF OVER STRESS SEPARATIONS. THE LAST ANNUAL INSPECTION OF THE ACFT WAS PERFORMED 3 MONTHS PRIOR TO THE ACCIDENT.

### Brief of Accident (Continued)

File No 25	13 11/18/88	SHIRLEY, NY	A/C Reg. No. N8697A	Time (Lcl) - 1546 EST
Occurrence #1 Phase of Operation			· .	
2. MAINTENANCE, A	NUAL INSPECTION -	ABLE/ROD - CORRODED IMPROPER - OTHER MAINT ABLE/ROD - SEPARATION	ENANCE PSNL	
Occurrence #2 Phase of Operation		ON WITH TERRAIN/WATER COLLED		
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3

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	National Transpor		Board				
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				i de se			÷ .
	Contraction of the						e en la seconda
	Brief	of Accident				·	
File No 2432 11/03/88 BRIDG	ETOWN,	A/C Req.	No. N9674	т тал и	ime (Lcl) - (	0220 EST	1
Basic Information Type Operating Certificate-AIR CARRIER	- FLAG/DOMESTIC	Aircraft Da	amage		Injuri	es	
Name of Carrier -PAN AM	,	NONE		Fatal	Serious	Minor	None
Type of Operation -SCHEDULED, IN	TI PAX/CARGO	Fire	Cre		1	0	15
Flight Conducted Under -14 CFR 121		NONE	Pas		ò	õ	196
Accident Occurred During -CRUISE			140		Ŭ		,
Aircraft Information	Eng Malia /			E1 T	Installed/Ac	tivotod	
Make/Model - BOEING B-747-123	•	Model - P&W J]	90-7A				•
Landing Gear - TRICYCLE-RETRACTABLE		gines - 4		3	itall Warning	system -	- YES
Max Gross Wt - 710000 No. of Seats - 395	Engine Ty Rated Pow						
Weather Data Wx Briefing - COMPANY Method - IN PERSON Completeness - WEATHER NOT PERTINENT Basic Weather - VMC Wind Dir/Speed- UNK/NR Visibility - UNK/NR Lowest Sky/Clouds - N/A Lowest Sky/Clouds - N/A Lowest Ceiling - UNK/NR Obstructions to Vision- UNK/NR Precipitation - UNK/NR Condition of Light - NIGHT(DARK)	NEW YORK Destination RIO DE J ATC/Airspace Type of Fl	ANEIRO ight Plan - If earance - If	R	OFF AI Airport C Runway Runway Runway	/ Ident -   / Lth/Wid -   / Surface -		
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) ATP ME LAND	Age - 58 Biennial Flight Current Months Since Aircraft Typ	Review - UNK/NR - UNK/NR		ight Time (H 19500 5700 UNK/NR		Days- UNH Days- UNH	
Instrument Rating(s) - AIRPLANE							

----Narrative----

THE FLIGHT ATTENDANT ENTERED THE ELEVATOR SHAFT, FAILED TO NOTICE THE ELEVATOR WAS NOT PRESENT AND CLOSED THE ELEVATOR DOOR BEHIND HER. AT THE SAME TIME A FLIGHT ATTENDANT ON THE UPPER DECK ENTERED THE ELEVATOR AND STARTED THE ELEVATOR DOWN. THE FLIGHT ATTENDANT BELOW THE ELEVATOR SCREAMED AND THE ELEVATOR WAS STOPPED THEN RETURNED TO THE UPPER LEVEL. THE FLIGHT ATTENDANT SUFFERED A LACREATED SCALP AND COMPRESSION OF THE T2 AND T5 VERTEBRAE. ACCORDING TO THE OPERATOR, THERE WERE VISUAL CUES PRESENT THAT WOULD INDICATE THE ELEVATOR WAS NOT PRESENT.

File No 243	2 11/03/88	BRIDGETOWN,	A/C Reg. No. N9674	Time (Lcl) - 0220 EST	
Occurrence #1 Phase of Operation	MISCELLANEOUS/OT CRUISE - NORMAL	HER			
	- FLIGHT ATTENDAN		RMINED		
Probable Cause					

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,3

Factor(s) relating to this accident is/are finding(s) 2

#### National Transportation Safety Board Washington, D.C. 20594

### Brief of Accident

-Basic Information Type Operating Certificate-NONE (GENER Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91	XAL AVIATION)	Aircraft Damage SUBSTANTIAL Fire NONE	Crew Pass	Fatal O O	Injur Serious 1 O	Minor	None O O	
Accident Occurred During -LANDING								
-Aircraft Information Make/Model - ROCKWELL 112A Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2650 No. of Seats - 4	Number   Engine	ke/Model - LYCOMING IG Engines - 1 Type - RECIP-FUEL Power - 200 HP			Installed/A Stall Warnin		- YES	) 
Environment/Operations Information Weather Data Wx Briefing - UNK/NR Method - UNK/NR Completeness - UNK/NR Basic Weather - VMC Wind Dir/Speed- 030/011 KTS Visibility - 20.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Destination SANDUSI ATC/Airspa Type of Type of	oarture Point GHBY,OH Ion SKY,OH		OFF AI Airport D GRIFFI Runway Runway Runway	NG-SANDUSKY / Ident - / Lth/Wid - / Surface -	Ρ - 09 - 3553/		
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE	Age - 55 Biennial Fligh Current	nt Review	Certificate Fligh	e - VALID t Time (H 575	lours)	AIVERS/LIM 4 Hrs - UN		• • • •
SE LAND	Months Sin	nce - 12 Make	e/Model- trument-	279		0 Days-	4 4	

Instrument Rating(s) - NONE

-------------Narrative----

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THE PLT HAD FLOWN ONLY 4 HRS DURING LAST 90 DAYS ALL OF WHICH WAS IN THE ACCIDENT ACFT. THE PLT REPORTED THE LANDING WAS FAST AND THE ACFT BOUNCED ON TOUCHDOWN. DIRECTIONAL CONTROL OF THE ACFT WAS LOST AND THE PLT ATTEMPTED A GO-AROUND DURING WHICH PARTIAL POWER WAS APPLIED. THE ACFT CONTACTED A TREE DURING CLIMB OUT AND CAME TO REST IN THE BAY.

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Brief of Accident (Continued)

File No 242	2 7/01/88	SANDUSKY, OH	A/C Reg. No. N1463J	Time (Lcl) - 1900 EDT
Occurrence #1 Phase of Operation				
2. LACK OF RECE	NT EXPERIENCE - PI	ED - PILOT IN COMMAND LOT IN COMMAND PROPER - PILOT IN COMMA	ND	
ccurrence #2 hase of Operation				
inding(s) 4. TERRAIN CONDITIO	N - TREE(S)			
ccurrence #3 hase of Operation	IN FLIGHT COLLISI DESCENT - UNCONTR	ON WITH TERRAIN/WATER OLLED		
inding(s) 5. TERRAIN CONDITIO	N - WATER			
Probable Cause	-			
he National Transpor s/are finding(s) 1,		d determines that the P	robable Cause(s) of this accid	lent
actor(s) relating to	this accident is/	are finding(s) 2,4		

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information					<b>T</b> -= 4 · · ·		
Type Operating Certificate-COMMUTER	VC	Aircraft Da SUBSTANTIA		Fatal	Inju Serious		None
Type of Openation -SCHEDULED D	NASSENCED	Fire				M I HOI	2
Name of Carrier -BRITT AIRWA Type of Operation -SCHEDULED,D Flight Conducted Under -14 CFR 135	OMESTIC, TASSENGER	NONE	Pas			2	4
Accident Occurred During ~LANDING							
Aircraft Information							
Make/Model - FAIRCHILD SA-226-TC			TT TPE331-10UA				
Landing Gear - TRICYCLE-RETRACTABLE	Number Engir				Stall Warni	ng System	- YES
Max Gross Wt - 12500	Engine Type Rated Power						
No. of Seats - 20	Rated Power	- 1000	) nP				
Environment/Operations Information							
Weather Data	Itinerary				Proximity		
W×Briefing - COMPANY Method - TELEPHONE	Last Departur			ON AI	RPORT		
		:/INC		Adappent	Data		
Completeness - WEATHER NOT PERTINEN Basic Weather - VMC				Airport HOPKI			
Wind Dir/Speed- CALM	LONDON, CD					- 23L	
Visibility - 15.0 SM	ATC/Airspace				y Lth/Wid		150
Lowest Sky/Clouds - 25000 FT SCA		nt Plan - If	R		y Surface		
Lowest Ceiling - NONE	Type of Clear				y Status		-
Obstructions to Vision- NONE	Type Apch/Lnd						
Precipitation - NONE	<b>31</b>	•					
Condition of Light - DAYLIGHT							
Personnel Information							<i>.</i> <b>.</b>
Pilot-In-Command	Age - 32 Biennial Flight Rev	Mec	dical Certific			O WAIVERS	/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Rev Current	view	F1 i	ght Time (	Hours)		~
ATP, CFI						4 Hrs -	6
SE LAND, ME LAND	Months Since - Aircraft Type -	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Make/Model-	1/44		0 Days- 0 Days-	65
	All chart Type -	SA22010	Multi-Eng -		Last 9	0 Days-	190
			Multi-Eng -	1960			
Instrument Rating(s) - AIRPLANE							

DETERMINED THAT THE CONTROL LINKAGE HAD COME LODSE CAUSING THE RIGHT ENGINE POWER FLUCTUATIONS AND NO REVERSE THRUST DURING THE ABORT.

CAPTAIN RESULTING IN REDUCED BRAKING EFFECTIVENESS. INSPECTION OF THE RIGHT ENGINE PROPELLER GOVERNOR LINKAGE

Brief	of	Accident	(Continued)
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FILE NO 247	1 8/16/88	CLEVELAND,OH	A/C Reg. No. N322BA	Time (Lcl) - 0757 EDT	
ccurrence #1 hase of Operation		NT/SYSTEM FAILURE/MAL RUN	FUNCTION		
inding(s) 1. PROPELLER GOVERN 2. PROPELLER GOVERN	•				
ccurrence #2 hase of Operation	OVERRUN Takeoff - aborte	)			
inding(s) 3. ABORTED TAKEOFF	- DELAYED - PILOT				
ccurrence #3 hase of Operation					
Probable Cause					

The National Transportation is/are finding(s) 1,2,3

.

Brief of Accident

Type Operating Certificate-NONE (	GENERAL AVIATION)	Aircraft Damag	e		Injuries	
	CTIONAL	DESTROYED	Crow	Fatal	Serious Mir	
Type of Operation -INSTRU Flight Conducted Under -14 CFR	CTIONAL	Fire ON GROUND	Crew Pass	. 0	2	0 0 0 1
Accident Occurred During -DESCEN		UN GROUND	Other		ŏ	1 0
Aircraft Information						
Make/Model - PIPER PA-23-160		Model - LYCOMING	0-320-B1A		Installed/Activa	
Landing Gear - TRICYCLE-RETRACTA		ngines - 2			tall Warning Sys	stem ~ YES
Max Gross Wt - 3800 No. of Seats - 4		ype - RECIPROCA wer - 160 HP		TUR		
NO. OF Seats - 4		· · · •				
-Environment/Operations Information- Weather Data	 Itinerary			Ainmont I	Proximity	
Wx Briefing - NO RECORD OF BR		cture Point			RPORT/STRIP	
Method - N/A	NAPOLEOI			OIT AI		
Completeness - N/A	Destinatio			Airport Da	ata	
Basic Weather - VMC	LOCAL					
Wind Dir/Speed- 330/007 KTS				Runway	Ident - N/A	
Visibility - 15.0 SM	ATC/Airspace	e		Runway	Lth/Wid - N/A	
Lowest Sky/Clouds - 4000 F					Surface - N/A	
Lowest Ceiling - NONE		learance - IFR		Runway	Status - N/A	
Obstructions to Vision- NONE	Type Apch	/Lndg - ILS-C				
Precipitation - NONE		FORCE	D LANDING			
Condition of Light - DAYLIGH	T 					
Personnel Information Pilot-In-Command	4.70 06	Medica Review - YES To e - 9 Ma				. / I TMTT
Certificate(s)/Rating(s)	Age - 20 Biennial Flight	Review	Fligh	t Timo (Ho	MEDICAL-WAIVERS	5/ [] [] []
COMMERCIAL	Current	- YES To	tal -	1164	Last 24 Hrs	- 7
SE LAND, ME LAND	Months Since	e - 9 Ma	ke/Model-	101	Last 30 Dave	s- 82
	Aircraft Tv	be - PA-23 In	strument-	126	Last 90 Days	s- 295
			lti-Eng -	185	Rotorcraft	- 1,
Instrument Rating(s) - AIRPL						
Narrative						
_E PRACTICING ILS APPROACHES AND REC						
	LIVING VECTURA, IME AL	NURALI EAFERIENUEU	A LUJJ UF U	NAL DLADE (		

SUBSEQUENT EXAMINATION REVEALED A FATIGUE FAILURE OF THE PROPELLER HUB. FACTORS CONCERNING INITIATION OF THE FATIGUE FRACTURE WERE NOT POSSIBLE FROM PHYSICAL EVIDENCE FOUND.

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# Brief of Accident (Continued)

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Factor(s) relating to this accident is/are finding(s) 4,5,6

1. S. S. S. S. J.

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is/are finding(s) 2

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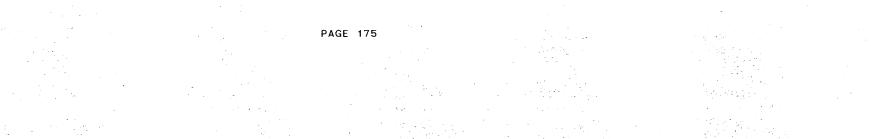
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Brief of Accident A/C Reg. No. N9877C File No. - 2486 9/18/88 ZANESVILLE.OH Time (Lcl) - 0615 EDT \_\_\_\_\_ ----Basic Information----Type Operating Certificate-NONE (GENERAL AVIATION) Aircraft Damage Injuries DESTROYED Fatal Serious Minor None Type of Operation -PERSONAL Fire Crew 1 0 0 0 Flight Conducted Under -14 CFR 91 NONE Pass 1 0 0 0 Accident Occurred During -CRUISE --Aircraft Information----ELT Installed/Activated - YES/YES Eng Make/Model - LYCOMING 0-540-J3C5D Make/Model - CESSNA 182RG Stall Warning System - YES Landing Gear - TRICYCLE-RETRACTABLE Number Engines - 1 Engine Type Max Gross Wt - 3100 - RECIPROCATING-CARBURETOR No. of Seats - 4 Rated Power - 235 HP ----Environment/Operations Information----Weather Data Airport Proximity Itinerary Wx Briefing - NO RECORD OF BRIEFING Last Departure Point OFF AIRPORT/STRIP Method - N/A ZANESVILLE.OH Completeness - N/A Destination Airport Data Basic Weather - IMC UNK/NR Wind Dir/Speed- 180/004 KTS Runway Ident - N/A Visibility - 65.0 SM ATC/Airspace Runway Lth/Wid - N/A Lowest Sky/Clouds -PART OBS Type of Flight Plan - NONE Runway Surface - N/A Lowest Ceiling - 400 FT OVERCAST Type of Clearance - NONE Runway Status - N/A Obstructions to Vision- FOG Type Apch/Lndg - NONE Precipitation - NONE Condition of Light - NIGHT(DARK) ----Personnel Information----Pilot-In-Command Age - 47 Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT Certificate(s)/Rating(s) Biennial Flight Review Flight Time (Hours) Current - NO Total - 1617 Last 24 Hrs - UNK/NR PRIVATE SE LAND Months Since - 42 Make/Model- UNK/NR Last 30 Davs- UNK/NR Aircraft Type - C-182RG Instrument- UNK/NR Last 90 Davs- 8 Multi-Eng - UNK/NR Rotorcraft - UNK/NR Instrument Rating(s) - NONE ----Narrative----THE VFR PILOT AND HIS STUDENT PILOT RATED RIGHT SEAT PASSENGER DEPARTED THE AIRPORT WHILE IT WAS STILL DARK. IN INSTRUMENT METEOROLOGICAL CONDITIONS WITH EXTREMELY RESTRICTED VISIBILITIES DUE TO DENSE FOG (WITNESSES ESTIMATED AS LITTLE AS 15 FEET VISIBILITY IN AREAS). ABOUT 15 MINUTES AFTER TAKEOFF. THE AIRCRAFT STRUCK TREES AND IMPACTED AN AREA OF HIGH TERRAIN NORTHEAST OF THE DEPARTURE AIRPORT. A LOCAL RESIDENT REPORTED HEARING THE SOUND OF AN ENGINE, LOUD AND RUNNING STEADY, COMING TOWARD HIS HOUSE. HE HEARD A THUD AND THE ENGINE NOISE QUIT. HE STATED THAT IT SOUNDED SO CLOSE THAT HE THOUGHT IT WAS THE NEWSPAPER DELIVERY TRUCK ON THE ROAD. THE AIRCRAFT WRECKAGE AND IT'S OCCUPANTS WERE DISCOVERED ABOUT 4 HOURS LATER. POST ACCIDENT INVESTIGATION REVEALED NO EVIDENCE OF PRE-IMPACT AIRFRAME/ENGINE/SYSTEM MALFUNCTION/FAILURE. WITNESSES STATED THAT THE PILOT FREQUENTLY OPERATED IN ADVERSE WEATHER CONDITIONS.

	0/10/00			
FILE NO 2486	9/18/88	ZANESVILLE, OH	A/C Keg. NO. N98//C	Time (Lcl) - 0615 EDT
ccurrence #1		ION WITH OBJECT		
nding(s) 1. JUDGEMENT - POOR 2. OVER CONFIDEN( 3. WEATHER CONDITION	CE IN PERSONAL A	ND BILITY - PILOT IN COMMA	ND	
4. FLIGHT INTO KNOW	VN ADVERSE WEATH AINING - PILOT I - LOW CEILING		IN COMMAND	
8. WEATHER CONDITION 9. VISUAL LOOKOUT 10. LIGHT CONDITION - 11. TERRAIN CONDITION	- FOG RESTRICTED - P DARK NIGHT - HIGH TERRAIN	ILOT IN COMMAND		
ccurrence #2 nase of Operation [	IN FLIGHT COLLIS	ION WITH TERRAIN/WATER		
inding(s) 12. TERRAIN CONDITION				
Probable Cause				
	-	rd determines that the	Probable Cause(s) of this accid	ent
s/are finding(s) 1,2	•			



## National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2412 5/08/88 PAWNEE	-, oix A/	C Reg. No. N1424C		ime (Lc1) - 1535		
Basic Information Type Operating Certificate-NONE (GENERAL		raft Damage TROYED	Fatal	Injuries Fatal Serious Minor		
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF	Fire NON		Crew O Pass O	1 C 0 2		
Aircraft Information Make/Model - PIPER PA-22-135 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 1950 No. of Seats - 4	Number Engines - Engine Type -	LYCOMING 0-290-D 1 RECIPROCATING-CA 135 HP	ç	Installed/Activat Stall Warning Syst		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC	Itinerary Last Departure Po PAWNEE,OK Destination HUNTER,OK	int	OFF Al Airport [ PAWNE	MUNICIPAL		
Wind Dir/Speed- 270/019 KTS Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	ATC/Airspace Type of Flight Pl Type of Clearance Type Apch/Lndg	- NONE	Runway Runway	/ Ident - 36 / Lth/Wid - 2100 / Surface - GRASS / Status - DRY		
Personnel Information Pilot-In-Command Certificate(s)/Rating(s)	Age - 50 Biennial Flight Review	Medical Certi	ficate - EXPIF Flight Time (H			
NONE	Current - N/A Months Since - N/A Aircraft Type - N/A	Total Make/Mode	- 700 1- 300 t- 0	Last 24 Hrs -	- 0 - 0	
Instrument Rating(s) - NONE						

----Narrative----

THE UNLICENSED PILOT AND TWO PASSENGERS WERE INJURED WHEN THEIR AIRPLANE FAILED TO CLIMB AFTER DEPARTING FROM A TURF RUNWAY. THE AIRPLANE COLLIDED WITH TREES AND IMPACTED THE TERRAIN RESULTING IN THE DESTRUCTION OF THE AIRCRAFT. THE AIRCRAFT WAS APPROXIMATELY 300 POUNDS OVER MAXIMUM GROSS WEIGHT AND THE PILOT WAS ATTEMPTING TO TAKE OFF WITH A LEFT CROSS WIND THAT WAS GUSTING UP TO 26 MPH.

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File No 2412	5/08/88	PAWNEE, OK	A/C Reg. No. N1424C	Time (Lcl) - 1535 CDT
Occurrence #1 Phase of Operation	-			
	EXPERIENCE - PIL			
Occurrence #2 Phase of Operation			ER	
Finding(s) 5. TERRAIN CONDITION	I - GROUND			
Probable Cause				
The National Transport	ation Safety Boar	d determines that t	he Probable Cause(s) of this accide	ent

is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 3,4,5

File No 2423 3/29/88 ERIE	, P,A A/C Re	g. No. N36440	Time (Lcl) - 1500 EDT				
Basic Information Type Operating Certificate-NONE (GENER/ Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91	AL AVIATION) Aircraft SUBSTAN Fire NONE	TIAL Crew	Fatal 0 0	Injur Serious 0 0		None 1 1	
Accident Occurred During -TAKEOFF							
Aircraft Information Make/Model - PIPER PA-32 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 3400 No. of Seats - 6	5 71	OMING ID-540-K1G5D IP-FUEL INJECTED 300 HP		nstalled/A all Warnin			
Environment/Operations Information							
Weather Data	Itinerary		Airport P				
Wx Briefing - NO RECORD OF BRIEFING	•		ON AIRPO	ואנ			
Method - N/A	TIDIOUTE,PA						
Completeness - N/A	Destination		Airport Da	ta			
Basic Weather - VMC	ERIE, PA		-				
Wind Dir/Speed- 240/020 KTS			Runway 1				
Visibility - 10.0 SM	ATC/Airspace	-	Runway I				
Lowest Sky/Clouds - CLEAR	Type of Flight Plan -			Surface -			
Lowest Ceiling - NONE	Type of Clearance -		Runway S	status -	UNK/NR		
Obstructions to Vision- NONE	Type Apch/Lndg -	NONE					
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 53	Medical Certificate	e - VALID M	AEDICAL-WA	IVERS/LIMI	т	
Certificate(s)/Rating(s)	Biennial Flight Review	Flight	t Time (Hou	urs)			
PRIVATE	Current - YES	Total - :	2300	Last 24	Hrs -	3	
SE LAND	Months Since - 6	Make/Model-	66	Last 30	Days- UNK	/NR	
	Aircraft Type - UNK/NR	Instrument- UN	<td></td> <td>Days-</td> <td>63</td>		Days-	63	
		Multi-Eng - UN	<td>Rotorcr</td> <td>aft - UNK</td> <td>/NR</td>	Rotorcr	aft - UNK	/NR	
Instrument Rating(s) - AIRPLANE							

THE PILOT ATTEMPTING TO TAKEOFF FROM A PRIVATE SOD FIELD ALLEGED THAT AFTER LIFT OFF THE AIRPLANE SETTLED BACK ONTO THE RUNWAY AND RAN OFF THE END. IT CLEARED A CULVERT AT THE END OF THE RUNWAY THEN CAME TO A STOP. THE PILOT THOUGHT THAT GUSTY WINDS AND WINDSHEAR COULD HAVE CAUSED ACCIDENT.

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File No 24	23 3/29/88 ERIE,PA	A/C Reg. No. N36440	Time (Lcl) - 1500 EDT
Occurrence #1 Phase of Operation	LOSS OF CONTROL – IN FLIGHT TAKEOFF – INITIAL CLIMB		
	ON - GUSTS ADEQUATE - PILOT IN COMMAND ITIVE - PILOT IN COMMAND		
Occurrence #2 Phase of Operation	ON GROUND COLLISION WITH TERRAIN/WAT TAKEOFF - INITIAL CLIMB	ER	
Probable Cause			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 1

### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

-Basic Information Type Operating Certificate-NONE (GENERA	ΔΥΤΔΤΤΩΝ)	Aircraft D	lamage		Injur	ies	
Type operating ber threate None (dealer		DESTROYED		Fatal	Serious	Minor	None
Type of Operation -PERSONAL		Fire		rew 1	0	0	0
Flight Conducted Under -14 CFR 91		NONE	Pa	ass 0	0	0	0
Accident Occurred During -CRUISE			0	ther O	0	0	1
-Aircraft Information							
Make/Model - SCHLEICHER ASW-20		lodel - N/A		EL1	<pre>Installed/A</pre>		
Landing Gear - TAILWHEEL-RETRACTABLE M		gines - N/A			Stall Warnin	ng System	- NO
Max Gross Wt - 1000	Engine Typ						
No. of Seats - 1	Rated Powe	er - N/A	· · · · · · · · · · · · · · · · · · ·				
-Environment/Operations Information							
Weather Data	Itinerary				t Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Depart			OFF #	IRPORT/STRIP	•	
Method - N/A	FAIRFIELD	<b>),</b> PA '					
Completeness - N/A	Destination			Airport	Data		
Basic Weather - VMC	LOCAL			_			
Wind Dir/Speed- 015 KTS						N/A	
Visibility - 40.0 SM						N/A	
	TERED Type of Fli					N/A	
Lowest Ceiling - UNK/NR	Type of Cle			Runwa	ay Status -	N/A	
Obstructions to Vision- NONE	Type Apch/L	_ndg - N	IONE				
Precipitation - NONE							
Condition of Light - DAYLIGHT	· · · · · · · · · · · · · · · · · · ·						
-Personnel Information							
Pilot-In-Command	0		edical Certif				
Certificate(s)/Rating(s)	Biennial Flight F			light Time (	•		
PRIVATE	Current	- YES	Total		Last 24		1
	Months Since	- 12	Make/Model	- 731	Last 30		0
GLIDER	Aircraft Type	e - UNK/NR	Instrument	- 0	Last 90	) Days-	10

----Narrative----

THE PILOT OF N311DP STATED HE SAW N34JH COMING TOWARD HIS GLIDER, SEVERAL HUNDRED FEET HIGHER AND SLIGHTLY TO THE RIGHT. HE WATCHED THE GLIDER PASS BY AT AN ALT OF 3,000 FT. APRX 30 SECONDS TO 1 MINUTE AFTER HE SAW N34JH PASS BY, HE HEARD A LOUD BANG AND HIS GLIDER PITCHED UP. HIS SPOILERS DEPLOYED AS WELL AS HIS LANDING GEAR. HE RETRACTED HIS SPOILERS AND LANDING GEAR AND LANDED THE GLIDER UNEVENTFULLY. THE GLIDER, N34JH, WAS SEEN BY A WITNESS SPIRALING TO THE GROUND.

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File No 2501 4/09/88	FAIRFIELD, PA	A/C Reg. No. N34JH	Time (Lcl) - 1400 EDT
Occurrence #1 MIDAIR COLLISION	•		

Phase of Operation CRUISE - NORMAL

Finding(s)

1. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

2. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND \_\_\_\_\_

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2



Basic Information					<b>-</b>		
Type Operating Certificate-NONE (GE	NERAL AVIATION)	Aircraft [ SUBSTANT]		Fatal	Injur <sup>.</sup> Serious	ies Minor	None
Type of Operation -PERSONAL		Fire	Crev		0	0 0	None
Flight Conducted Under -14 CFR 9		NONE	Pass	-	0	0	Ŏ
Accident Occurred During -CRUISE		NONE	Othe		õ	0	õ
Aircraft Information							
Make/Model - SCHLEICHER ASW-20	5	ake/Model - N/A			Installed/Ac		
Landing Gear - TAILWHEEL-RETRACTAB		r Engines - N/A		S	tall Warning	g System	- NO
Max Gross Wt - 1000		e Type – N/A					
No. of Seats - 1	Rated	Power - N/A					
Environment/Operations Information	• • • • • • • • • • • • • • • • • • • •						
Weather Data	Itinerar	v		Airport	Proximity		
Wx Briefing - NO RECORD OF BRIE	ING Last D	eparture Point		OFF AI	RPORT/STRIP		
Method - N/A	FAIR	FIELD, PA					
Completeness - N/A	Destina	tion		Airport D	ata		
Basic Weather - VMC	SAME	AS ACC/INC					
Wind Dir/Speed- 345/015 KTS				Runway	Ident -	N/A	
Visibility - 40.0 SM						N/A	
Lowest Sky/Clouds - 4500 FT S						N/A	
Lowest Ceiling - UNK/NR		f Clearance – M		Runway	Status -	N/A	
Obstructions to Vision- NONE	Туре А	pch/Lndg - I	NONE				
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 42		edical Certifica			IVERS/LIM	IT
Certificate(s)/Rating(s)		ght Review		ght Time (H			
PRIVATE, COMMERCIAL, CFI	Current	- YES	Total -		Last 24		2
SE LAND		ince - 4					0
GLIDER	Aircraft	Type - UNK/NR	Instrument-	0	Last 90	Days-	20

----Narrative----

THE PILOT-IN-COMMAND OF N311DP STATED HE SAW N34JH COMING TOWARD HIS GLIDER, SEVERAL HUNDRED FEET HIGHER AND SLIGHTLY TO THE RIGHT. HE WATCHED THE GLIDER PASS BY AND WAS LEVEL AT 3000 FEET MSL AND INDICATING 60 KNOTS. APPROXIMATELY 30 SECONDS TO 1 MINUTE AFTER HE SAW N34JH NPAS BY, HE HEARD A LOUD BANG AND HIS GLIDER PITCHED UP. HIS SPOILERS DEPLOYED AS WELL AS HIS LANDING GEAR. HE RETRACTED HIS SPOILERS AND LANDING GEAR AND LANDED THE GLIDER UNEVENTFULLY. THE GLIDER N34JH WAS SEEN BY A WITNESS SPIRALING TO THE GROUND.

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File No 2501	4/09/88	FAIRFIELD, PA	A/C Reg. No. N311DP	Time (Lcl) - 1400 EDT

Occurrence #1 MIDAIR COLLISION Phase of Operation CRUISE - NORMAL

Finding(s)

1. VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT 2. CLEARANCE - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

2. CLEARANCE - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information Type Operating Certificate-NONE (GEN	FRAL AVIATION)	Aircraft Da	mage		Injur	ies		
		DESTROYED	lindge	Fatal	Serious		r No	one
Type of Operation -PERSONAL		Fire	Crew		1	0		0
Flight Conducted Under -14 CFR 9	I	NONE	Pass	s 2 <sup>°</sup>	0	0		Ō
Accident Occurred During -TAKEOFF								
Aircraft Information								
Make/Model - PIPER PA-22-150		/Model - LYCOMI	NG 0-320-A2B					
Landing Gear - TRICYCLE-FIXED		ngines – 1			tall Warnin	g Syst	em – YES	3
Max Gross Wt - 2000		ype - RECIPR		ETOR				
No. of Seats - 4	Rated Po	wer - 150	HP					
Invironment/Operations Information	•							
leather Data	Itinerary			Airport	Proximity			
Wx Briefing - FSS	Last Depa	rture Point		OFF AI	RPORT/STRIP			
Method - TELEPHONE	THOMASV	ILLE,PA						
Completeness - FULL	Destinatio	n		Airport D	ata			
Basic Weather - VMC	MYRTLE	BEACH, SC		YORK A	IRPORT			
Wind Dir/Speed- 250/019 KTS						16		
Visibility - 6.0 SM	ATC/Airspac				Lth/Wid -		/ 100	
Lowest Sky/Clouds - 4000 FT S					Surface -			
Lowest Ceiling - 6000 FT E		learance - NO		Runway	Status -	N/A		
Obstructions to Vision- FOG	Type Apch	/Lndg - NO	NE					
Precipitation - NONE				÷				
Condition of Light - DAYLIGHT								
, Personnel Information								
Pilot-In-Command	Age - 41		ical Certifica			WAIVE	RS/LIMIT	ĩ
Certificate(s)/Rating(s)	Biennial Flight			pht Time (H				
PRIVATE	Current		Total -					
SE LAND		e - 20						
	Aircraft Ty	pe – C-172RG	Instrument-	8	Last 90	Days-	10	

----Narrative----

THE PILOT ATTEMPTED TO TAKEOFF ON RWY 16 WITH LOCAL WINDS FROM 270-290 DEGS AT 15 KNOTS WITH GUSTS. THE TAKEOFF WAS PERFORMED FROM AN INTERSECTION, 300 FEET FROM THE APPROACH END OF THE RWY. AFTER CLIMBING APRX 25 FEET, THE ACFT ENTERED A LEFT TURN, CLIMBED TO APRX 100 FEET AGL AND COLLIDED WITH TREES. CALCULATIONS INDICATE THE ACFT WAS AT LEAST 71 LBS OVER MAX GROSS WT AT TAKEOFF. WEATHER INFO LISTED ABOVE IN THE DATA IS THE OFFICIAL WEATHER REPORTED 1 NM FROM THE ACCIDENT SITE.

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File No 244	49 4/29/88	THOMASVILLE, PA	A/C Reg. No. N3O14Z	Time (Lcl) - 1205 EDT
Occurrence #1 Phase of Operation				
3. AIRCRAFT WEIGHT 4. ALL AVAILABLE RU	ING/PREPARATION AND BALANCE - EX JNWAY - NOT USED ROL - NOT MAINT	- IMPROPER - PILOT IN COM (CEEDED - PILOT IN COMMAN - PILOT IN COMMAND AINED - PILOT IN COMMAND		
Occurrence #2 Phase of Operation		ISION WITH TERRAIN/WATER NTROLLED		
Probable Cause				

is/are finding(s) 5

Factor(s) relating to this accident is/are finding(s) 1,2,3,4,6

Basic Information Type Operating Certificate-NONE (GENERA		ft Democro		Tanática		
Type operating centricate None (General		aft Damage FANTIAL	Fatal	Injur Serious		None
Type of Operation -PERSONAL	Fire		rew 0	0	. 0	1
Flight Conducted Under -14 CFR 91	NONE		ass O	õ	Õ	0
Accident Occurred During -TAKEOFF						
Aircraft Information						
Make/Model - GRUMMAN AA-1B	Eng Make/Model - L			Installed/A		
Landing Gear - TRICYCLE-FIXED	Number Engines -			Stall Warnin	g System	- YES
Max Gross Wt - 1560		RECIPROCATING-CARE	BURETOR			
No. of Seats - 2	Rated Power -	108 HP				
Environment/Operations Information						
Weather Data	Itinerary		Airport	Proximity		
Wx Briefing - NO RECORD OF BRIEFING		nt	OFF A	[RPORT/STRIP		
Method - N/A	SAME AS ACC/INC					
Completeness - N/A	Destination		Airport [			
Basic Weather - VMC	UNK/NR			3 RANCH		
Wind Dir/Speed- 050/005 KTS					05	
Visibility - 15.0 SM	ATC/Airspace			/Lth/Wid -		
Lowest Sky/Clouds - CLEAR	Type of Flight Plar				GRASS/TU	RF
Lowest Ceiling - NONE Obstructions to Vision- NONE	Type of Clearance		Runwa	/ Status -	DRY	
Precipitation - NONE	Type Apch/Lndg	- NONE				
Condition of Light - DAYLIGHT						
Personnel Information						
Pilot-In-Command	Age - 47	Medical Certif			IVERS/LIM	IT
Certificate(s)/Rating(s)	Biennial Flight Review		light Time (H			
PRIVATE	Current - YES	Total ·	201	Last 24		0
SE LAND	Months Since - 7	Make/Model 3 Instrument		Last 30		1
	Aircraft Type - AA-1E	s instrument	- 8	Last 90	Days-	3

----Narrative----

THE PLT RPRTD THAT DRG TAKEOFF, THE ENG LOST POWER AFTER THE ACFT HAD BECOME AIRBORNE & WAS ABOUT 20 FT ABOVE THE RWY. SUBSEQUENTLY, THE ACFT CRASHED ABOUT 50 FT FROM THE DEP END OF THE RWY & WAS SUBSTANTIALLY DAMAGED. AN INVESTIGATION REVEALED THAT DRG THE OCCURRENCE, THE TAIL OF THE ACFT COLLIDED WITH A SIGN NEAR THE RIGHT SIDE OF THE RWY, WHICH WAS LOCATED ABOUT 100 FT BEFORE THE DEP END & EXTENDED 8 FT ABOVE THE GROUND. THE ACFT THEN HIT A STONE FENCE & A TREE BEFORE COMING TO REST. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE AIRFRAME OR ENG WAS FOUND. DRG AN OPNL CHECK, THE ENG RAN NORMALLY.

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File No 245	55 5/30/88 DOVER,PA	A/C Reg. No. N9981L	Time (Lcl) - 1000 EDT
	LOSS OF ENGINE POWER TAKEOFF - INITIAL CLIMB		
inding(s) 1. UNDETERMINED			
Occurrence #2 Phase of Operation	IN FLIGHT COLLISION WITH OBJECT TAKEOFF - ABORTED		
inding(s) 2. PROPER ALIGNMENT 3. OBJECT - SIGN 4. OBJECT - FENCE 5. OBJECT - TREE(S)	- NOT MAINTAINED - PILOT IN COMMAND		•
Probable Cause			

Factor(s) relating to this accident is/are finding(s) 2,3,4,5

PAGE 187

asic Information							
Type Operating Certificate-NONE (GENE	RAL AVIATION)	Aircraft Damage DESTROYED	e	Fatal	Injur Serious		None
Type of Operation -PERSONAL		Fire	Crew			0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING		NONE	Pass	õ	0 0	õ	1
ircraft Information							
Make/Model - CESSNA 152		lel - LYCOMING (					
Landing Gear - TRICYCLE-FIXED		les - 1			tall Warnin	g System -	· YES
Max Gross Wt - 1670 No. of Seats - 2		- RECIPROCA - 110 HP		TUR			
NO. 01 Seals - 2							
nvironment/Operations Information							
eather Data	Itinerary			Airport	Proximity		
Wx Briefing - UNK/NR	Last Departur	e Point		OFF AI	RPORT/STRIP		
Method - UNK/NR	YOUNGSTOWN,	OH					
Completeness - UNK/NR	Destination			Airport D	ata		
Basic Weather - VMC	LOCAL						
Wind Dir/Speed- UNK/NR						N/A	
Visibility - 20.0 SM	ATC/Airspace				Lth/Wid -		
Lowest Sky/Clouds - UNK/NR		it Plan - NONE			Surface -		
Lowest Ceiling -	Type of Clear	ance - NONE		Runway	Status -	N/A	
Obstructions to Vision- UNK/NR	Type Apch/Lno	lg - FORCEI	D LANDING				
Precipitation - UNK/NR Condition of Light - DAYLIGHT							
Condition of Light - DAYLIGH							
ersonnel Information		•					
Pilot-In-Command	Age - 53	Medica	1 Certificat	e - VALID	MEDICAL-NO	WAIVERS/L	IMIT
Certificate(s)/Rating(s)	Biennial Flight Rev			t Time (H			
COMMERCIAL	Current -	YES TO	tal -	1100	Last 24	Hrs - UNK	(/NR
SE LAND	Months Since -	O Mal	ke/Model-	900	Last 30		
	Aircraft Type -	UNK/NR In:	strument-	0	Last 90	Days-	

----Narrative----

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ABOUT 20 MINUTES AFTER TAKEOFF AND AT ABOUT 2,000 FEET A.G.L., THE RENTED AIRPLANE EXPERIENCED A POWER LOSS. THE PILOT SELECTED AN OPEN FIELD IN WHICH TO LAND. THE AIRPLANE WAS SUBSTANTIALLY DAMAGED DURING THE LANDING ON ROUGH TERRAIN. POST ACCIDENT INSPECTION DISCLOSED 7 GALLONS OF FUEL IN THE LEFT TANK AND THE RIGHT TANK WAS EMPTY. A SMALL AMOUNT OF FUEL WAS FOUND IN THE GASCOLATOR; HOWEVER, THE CARB WAS EMPTY. NO MECHANICAL FAILURE/MALFUNCTION WAS FOUND.

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	31 8/01/88	HILLSVILLE, PA	A/C Reg. No. N4609L	Time (Lc1) - 0945 EDT
Occurrence #1	LOSS OF ENGINE P	OWER		
Phase of Operation	CRUISE - NORMAL		No.	
	BURETOR - STARVATI	DN - PILOT IN COMMAND		
Occurrence #2 Phase of Operation	DESCENT - EMERGE			
		TOUCHDOWN		
Occurrence #3 Phase of Operation Finding(s) 4. TERRAIN CONDITI	LANDING - FLARE/	TOUCHDOWN		

Factor(s) relating to this accident is/are finding(s) 4

is/are finding(s) 1,2,3

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Time (Lcl) - 1140 EDT File No. - 2418 8/07/88 KUTZTOWN, PA A/C Reg. No. N65920 . . . . . . . . . . . . . . ----Basic Information----Type Operating Certificate-NONE (GENERAL AVIATION) Injuries Aircraft Damage SUBSTANTIAL Fatal Serious Minor None 0 0 0 Type of Operation -INSTRUCTIONAL Fire Crew 1 0 0 0 Flight Conducted Under -14 CFR 91 NONE Pass 0 Accident Occurred During -DESCENT ----Aircraft Information----Make/Model - SCHWEIZER SGS 1-34 Eng Make/Model - N/A ELT Installed/Activated - NO -N/A Landing Gear - SKI/WHEEL Number Engines - N/A Stall Warning System - NO Max Gross Wt - 840 Engine Type - N/A No. of Seats -1 Rated Power - N/A ------Environment/Operations Information----Weather Data Itinerary Airport Proximity ON AIRSTRIP Wx Briefing - NO RECORD OF BRIEFING Last Departure Point SAME AS ACC/INC Method - N/A Airport Data Completeness - N/A Destination Basic Weather - VMC KUTZTOWN LOCAL Wind Dir/Speed- UNK/NR Runwav Ident - 17 Runway Lth/Wid - 1930/ Visibility - UNK/NR ATC/Airspace 50 Lowest Sky/Clouds -CLEAR Type of Flight Plan - NONE Runway Surface - ASPHALT Lowest Ceiling NONE Type of Clearance - NONE Runway Status - DRY - NONE Obstructions to Vision- NONE Type Apch/Lndg Precipitation - NONE Condition of Light - DAYLIGHT --Personnel Information----Pilot-In-Command Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT Age -16 Certificate(s)/Rating(s) Biennial Flight Review Flight Time (Hours) Current - N/A 43 Last 24 Hrs - UNK/NR STUDENT Total -1 Months Since - N/A Make/Model-Last 30 Days- UNK/NR 0 Last 90 Days-Aircraft Type - N/A Instrument-4

# ----Narrative----

Instrument Rating(s) - NONE

THE SCHWEIZER 1-34 GLIDER WAS BEING TOWED ALOFT BY A POWERED AIRCRAFT WHEN THE CANOPY OF THE GLIDER CAME OPEN IN FLIGHT. THE PILOT TRIED TO LOCK THE CANOPY, HOWEVER HE LOST CONTROL AND THE GLIDER PITCHED UP. THE TOW PLANE WAS PLACED IN NOSE DOWN ATTITUDE AND HE RELEASED THE GLIDER. THE GLIDER IMPACTED ON THE RUNWAY IN A NOSE LOW ATTITUDE.

File No 24	18 8/0	7/88 KUTZTO	WN, PA	A/C Reg. N	o. N65920	Time (Lcl) - 1140 EDT
Occurrence #1	LOSS OF CO	NTROL - IN FLI	GHT			
Phase of Operation	TAKEOFF -	INITIAL CLIMB				
	LING - NOT M		LG. IN COMMAND TE - PILOT IN COMMA	ND		· · · · · · · · · · · · · · · · · · ·
Occurrence #2 Phase of Operation		COLLISION WITH UNCONTROLLED	TERRAIN/WATER			
Probable Cause						
The National Transpo	rtation Safe	ty Board deter	mines that the Prob	able Cause(s	) of this acci	ident

is/are finding(s) 2,3

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File No 2503 8/14/88 WELL	A/C Reg. No. N979	LA 	Time (Lcl) - 1745 EDT			
-Basic Information) Type Operating Certificate-NONE (GENER	RAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fat		uries Minor	None
Type of Operation -PERSONAL		Fire				1
Flight Conducted Under -14 CFR 91		NONE		1 2	ŏ	1
Accident Occurred During -TAKEOFF						
Aircraft Information						
Make/Model - PIPER PA-32RT-300	Eng Make/Mod	el - LYCOMING IO-54	D-K1G59	ELT Installed		
Landing Gear - TRICYCLE-RETRACTABLE	Number Engin			Stall Warn	ing System	n - YES
Max Gross Wt - 3600		- RECIP-FUEL INJ	ECTED			
No. of Seats - 6	Rated Power	- 300 HP				
Environment/Operations Information						
Weather Data	Itinerary			port Proximity	,	
Wx Briefing - UNK/NR	Last Departur		UP	N AIRPORT		
Method - UNK/NR Completeness - UNK/NR	WELLSBORO,P Destination	A	Ainne	ort Data		
Basic Weather - VMC	GREENVILLE,	sc		RAND CANYON ST		
Wind Dir/Speed- 260/015 KTS	GREENVILLE,	30		unway Ident		
Visibility - 15.0 SM	ATC/Airspace			unway Lth/Wid		72
Lowest Sky/Clouds - CLEAR	Type of Fligh	t Plan - VFR		unway Surface		
Lowest Ceiling - NONE	Type of Clear			unway Status		
Obstructions to Vision- NONE	Type Apch/Lnd					
Precipitation - NONE		-				
Condition of Light - DAYLIGHT						
Personnel Information	,					
Pilot-In-Command				ALID MEDICAL-	WAIVERS/LI	MIT
Certificate(s)/Rating(s)	Biennial Flight Rev		Flight Tim		<u>.</u> 04. Une	2
COMMERCIAL	Current -	YES Total	- 2000	Last	24 Hrs - 30 Davs-	3 8
SE LAND, ME LAND	Months Since - Aircraft Type -	C-150 Instrum	del- 1100 ent- 257	Lasi Last	90 Days-	8
	Anciart Type		ng - 40		JU Days	U
Instrument Rating(s) - AIRPLANE						

DURING A SECOND ATTEMPTED TAKEOFF, THE FIRST BEING ABORTED, THE AIRCRAFT FLEW OFF THE END OF THE RUNWAY IN GROUND EFFECT INTO TALL GRASS. THE PILOT REPORTED THAT THE AIRCRAFT WAS OVER GROSS WEIGHT AND THAT HE WAS TAKING OFF IN HIGH DENSITY ALTITUDE.

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File No 250	03 8/14/88	WELLSBORD, PA	A/C Reg. No. N979LA	lime (LCI) - 1745 ED1	
Occurrence #1 Phase of Operation	IN FLIGHT COLLIS TAKEOFF	ION WITH TERRAIN/WAT	ſER		
		INADEQUATE - PILOT			

2. AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND

1. : 1 - -

3. WEATHER CONDITION - HIGH DENSITY ALTITUDE

4. TERRAIN CONDITION - ROUGH/UNEVEN

5. TERRAIN CONDITION - HIGH VEGETATION

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

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Factor(s) relating to this accident is/are finding(s) 3,4,5

Basic Information Type Operating Certificate-NONE (GE		Aircraft Dama			Injur	ioc	
Type operating centrincate-None (Gen	NERAL AVIATION)	DESTROYED		Fatal	Serious		None
Type of Operation -PERSONAL		Fire			0		0
Flight Conducted Under -14 CFR 9		NONE	Pass	0	0	0	0
Accident Occurred During -MANEUVER	[NG						
Aircraft Information							
Make/Model - PIPER PA-28-180		/Model - LYCOMING			nstalled/A		
Landing Gear - TRICYCLE-FIXED		ngines - 1			all Warnin	g System	- YES
Max Gross Wt - 2400 No. of Seats - 4		ype - RECIPRO		R			
	Rated Po	wer - 180 H	1P 				
Environment/Operations Information							
Weather Data	Itinerary				roximity		
Wx Briefing - NO RECORD OF BRIE				OFF AIR	PORT/STRIP		
Method - N/A Completeness - N/A	LOCK HA Destination				*-		
Basic Weather - VMC	LOCAL	n	Al	rport Da	ta		
Wind Dir/Speed- 220/003 KTS	LOCAL			Runway	Ident -	N/A	
Visibility - 12.0 SM	ATC/Airspace	e			Lth/Wid -		
Lowest Sky/Clouds - 5500 FT S			Ξ	Runway	Surface -	N/A	
Lowest Ceiling - OVERCAST	Type of C	learance - NON			Status -		
Obstructions to Vision- NONE	Type Apch	/Lndg - NONE					
Precipitation - NONE							
Condition of Light - DAYLIGHT							
Personnel Information							
Pilot-In-Command	Age - 53	Medic	cal Certificate			IVERS/LI	MIT
Certificate(s)/Rating(s) COMMERCIAL	Biennial Flight	Review - YES	Flight [ota] - 31	Time (Ho	100+ 04	Hrs - Ui	
SE LAND, ME LAND	Months Since	e - 17 M	/ake/Model-UNK/	NP 100	Last 24	Days- U	
SE CAND, ME CAND	Aircraft Tv	pe - PA-28R	Instrument- UNK/	NR	Last 90	Days U	
		N	Make/Model- UNK/ [nstrument- UNK/ Multi-Eng - UNK/	'NR	Rotorcr	aft - U	
Instrument Rating(s) - AIRPLAN	E						
Narrative							
		LEHANNA RIVER WHE	N TT COLLIDED W	ITTH GROU	ND WIRES T	НАТ	
AIRCRAFT WAS FLYING EAST OVER THE WEST	BRANCH UF THE SUSU						

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File No 24	nce #1 IN FLIGHT COLLISION WITH OBJECT f Operation MANEUVERING (s) JECT - WIRE,STATIC VFR PROCEDURES - IMPROPER - PILOT IN COMMAND SUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND nce #2 IN FLIGHT COLLISION WITH TERRAIN/WATER		Time (Lc1) - 1720 EDT
Occurrence #1 Phase of Operation			
2. VFR PROCEDURE	S - IMPROPER - PILOT IN COMMAND		
	IN FLIGHT COLLISION WITH TERRAIN/WATER DESCENT - UNCONTROLLED		
Probable Cause			

The National Transportation Safety Board determines is/are finding(s) 2,3

Factor(s) relating to this accident is/are finding(s) 1

Basic Information Type Operating Certificate-NONE (		rcraft Damage			Inju	rios	
Type operating centricate-none (		UBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation -PERSON	AL Fi	re	Crew	· 0		1	0
Flight Conducted Under -14 CFR	91 N	ONE	Pass	0	0	· 0	• 0
Accident Occurred During -LANDIN							
-Aircraft Information							
Make/Model - CESSNA A185F		- CONTINENTAL	IO-520-CD				
Landing Gear - TAILWHEEL-ALL FIX				S	talī Warnin	ng System	- YES
Max Gross Wt - 3350	Engine lype Rated Power	- RECIP-FUEL I	INJECTED				
No. of Seats - 2	Rated Power	- 300 HP					
-Environment/Operations Information-							
Weather Data Wx Briefing - PATWAS	Itinerary				Proximity	_	
Wx Briefing - PATWAS	Last Departure			OFF AI	RPORT/STRI		
Method - UNK/NR Completeness - WEATHER NOT PER	QUAKERTOWN,PA TINENT Destination			Airport D	a+a		
					& WINGS		
Wind Dir/Speed- 220/006 KTS	LOOKE					- N/A	
Visibility - 7.0 SM	ATC/Airspace				Lth/Wid	- N/A	
Lowest Sky/Clouds - N/A	Type of Flight			Runway	Surface	- N/A	
Lowest Ceiling - 2500 F				Runway	Status	- N/A	
Obstructions to Vision- NONE	Type Apch/Lndg	- FORCED L	ANDING				
Precipitation - NONE	-						
Condition of Light - DAYLIGH							
-Personnel Information		·· ·· ·					
Pilot-In-Command	Age - 50 Biennial Flight Revie	Medical (	Certificat		MEDICAL-W	AIVERS/LI	AT I
Certificate(s)/Rating(s) COMMERCIAL	Current - Y	W ES Total	Fiign	t Time (H	ours)	4 Hrs - U	
SE LAND, ME LAND, SE SEA	Months Since - 2	LS TOLA A Makey	/Model-	2417	Last 24	) Days-	
	Months Since - 2 Aircraft Type - C	-172 Instr	rument-	19	Last 90	Days D Days-	
	All of all c Type - c	172 1000		234	Detere		
FREE BALLOON		Multi	i-Eng -	204	ROTOPCI	raft -	2

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File No 243	3 10/23/88	TRUMBAUERSVILLE, PA	A/C Reg. No. N185SH	Time (Lc1) - 1425 EDT
Occurrence #1 Phase of Operation		OWER(TOTAL) - NON-MECHAN L CLIMB	ICAL	
Finding(s) 1. FLUID,FUEL - STA 2. FUEL TANK SELE 3. AIRCRAFT PREFLIG	CTOR POSITION - N	OT SELECTED - PILOT IN C PILOT IN COMMAND	OMMAND	
Occurrence #2 Phase of Operation	FORCED LANDING DESCENT - EMERGE	NCY		
Occurrence #3 Phase of Operation				
Finding(s)				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 3

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Basic Information Type Operating Certificate-NONE (GENERAL	. AVIATION) Aircraf SUBSTA	t Damage NTIAL	Fatal	Injur Serious		None
Type of Operation -PERSONAL	Fire	Cre	w O	0	0	1
Flight Conducted Under    -14 CFR 91 Accident Occurred During   -LANDING	NONE	Pas	s O	0	1	1
Aircraft Information				· · · · · · · · · · · · · · · · · · ·		
Make/Model - CESSNA 172L Landing Gear - TRICYCLE-FIXED	Eng Make/Model - LY Number Engines - 1			Installed/A Stall Warnin		
Max Gross Wt - 2300	Engine Type - RE			starr warnin	ig system	- 163
No. of Seats - 4		145 HP				
Environment/Operations Information				- *		
Weather Data	Itinerary			Proximity		
Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Last Departure Point WILMINGTON,DE		UFF AI	RPORT/STRIP		
Completeness - N/A	Destination		Airport D	)ata		
Basic Weather - IMC	BLOCK ISLAND, RI		PROVID			
Wind Dir/Speed- 170/004 KTS					N/A	
Visibility - 1.125 SM	ATC/Airspace		Runway	/Lth/Wid -	N/A	
Lowest Sky/Clouds - PART OBS	Type of Flight Plan				N/A	
Lowest Ceiling -	Type of Clearance		Runway	/ Status -	N/A	
Obstructions to Vision- HAZE	Type Apch/Lndg					
Precipitation - NONE		FULL STOP				
Condition of Light - DAWN		FORCED LANDING				
Personnel Information Pilot-In-Command	Age - 46	Medical Certific	ate - VALIG	MEDICAL-NO	WATVERS/	
Certificate(s)/Rating(s)	Biennial Flight Review		ale VALIL aht Time (F		WAIVERS/	
COMMERCIAL		Total -	<b>U</b> .		Hrs -	6
SE LAND	Months Since - 1					20
	Aircraft Type - C-172					45

Instrument Rating(s) - AIRPLANE

----Narrative----

THE FLT DEPARTED WILMINGTON, DE, ON AN IFR FLT PLAN EN ROUTE TO BLOCK ISLAND. ACCORDING TO THE PLT, AS HE PASSED THE HAMPTON VOR HE SAW FOG OBSCURING THE GROUND. UPON REACHING THE DESTINATION, BOSTON CENTER CLEARED THE ACFT FOR THE APCH TO BLOCK ISLAND. THE PLT STATED HE WAS UNABLE TO SHOOT THE APCH DUE TO LOW FUEL AND REQUESTED ASSISTANCE TO A CLEAR AREA OR TO AN ILS APCH. BOSTON CENTER VECTORED THE ACFT TO THE GROTON ARPT WHERE THE PLT MADE AT LEAST FOUR ATTEMPTS TO LOCATE THE ARPT. THE ACFT WAS THEN VECTORED TO WESTERLY, WHERE ONCE AGAIN THE ARPT COULD NOT BE LOCATED DUE TO WX. THE ACFT WAS BEING VECTORED TO PROVIDENCE WHEN FUEL EXHAUSTION WAS EXPERIENCED AND THE ACFT WAS DITCHED IN THE NARRAGANSET BAY.

# Brief of Accident (Continued)

File No 250	02 7/30/88	NO. KINGSTOWN,RI	A/C Reg. No. N19699	Time (Lcl) - 0503 EDT
Occurrence #1 Phase of Operation		ER(TOTAL) - NON-MECHAN	ICAL	
Finding(s) 1. WEATHER CONDITIO 2. APPROACH CHARTS 3. FUEL SUPPLY - 4. FLUID,FUEL - EXH	- UNAVAILABLE EXCEEDED - PILOT IN	COMMAND		
Occurrence #2 Phase of Operation			· · · · · · · · · · · · · · · · · · ·	
Occurrence #3 Phase of Operation				
Finding(s) 5. TERRAIN CONDITIO	N - WATER			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 3,4

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2451 11/06/88 SMITHFIELD,RI		Reg. No. N5462B	Time (Lcl) - 1345 EST			
Basic Information Type Operating Certificate-NONE (GENERA Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT	_ AVIATION) Aircrat DESTR( Fire NONE	Crew	Fatal 1 1	Injurie Serious O O	s Minor O O	None 0 0
Aircraft Information Make/Model - CESSNA 152 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 1630 No. of Seats - 2	Number Engines - Engine Type - Ri	(COMING 0-235-L2C 1 ECIPROCATING-CARBURE 110 HP	S	Installed/Act tall Warning		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 210/010 KTS Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	Itinerary Last Departure Point SMITHFIELD,RI Destination LOCAL ATC/Airspace Type of Flight Plan Type of Clearance Type Apch/Lndg	- NONE - NONE	OFF AI Airport D Runway Runway Runway	Proximity RPORT/STRIP ata Ident - N Lth/Wid - N Surface - N Status - N	/A /A	
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE SE LAND,ME LAND Instrument Rating(s) - AIRPLANE	Age - 37 Biennial Flight Review Current - YES Months Since - 7 Aircraft Type - C-150	Fligh  Make/Model-	nt Time (H 196 70 49	ours) Last 24 H Last 30 D	rs - ays-	1 2

----Narrative----

THE ACFT WAS OBSERVED TO MAKE 2 OR 3 LOW & SLOW PASSES OVER AN AREA NEAR THE PASSENGER'S HOME. ACCORDING TO WITNESSES, IT BEGAN ASCENDING OVER A TREE LINE, THEN IT NOSED DOWN & CRASHED. THE PASSENGER'S HUSBAND & DAUGHTER WERE OUTSIDE THEIR HOME & SAW THE ACDNT. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND DRG THE INVESTIGATION.

File No 2451	11/06/88 SMITH	IFIELD,RI	A/C Reg. No. N5462B	Time (Lcl) - 1345 EST
Occurrence #1 LOS Phase of Operation MAN		IGHT		
Finding(s) 1. LOW PASS - PERFORMED 2. MANEUVER - INITIATED 3. AIRSPEED - NOT MAINT 4. STALL - INADVERTENT	- PILOT IN COMMAND AINED - PILOT IN COM	MAND		
Occurrence #2 IN Phase of Operation DES		H TERRAIN/WATER		
Finding(s) 5. ALTITUDE - INADEQUAT	E - PILOT IN COMMAND			
Probable Cause				
The National Transportati is/are finding(s) 3,4	on Safety Board dete	rmines that the	Probable Cause(s) of this accid	Jent

Factor(s) relating to this accident is/are finding(s) 5

File No 2419 1/18/88 AUSTIN	I,TX A/C	A/C Reg. No. N9811N Time (Lc1) - 0800 CST					
Basic Information Type Operating Certificate-NONE (GENERAL	. AVIATION) Aircra NONE	ft Damage		Fatal	Inju Serious	ies Minor	None
Type of Operation -BUSINESS	Fire		Crew	0	0	0	1
Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	NONE		Pass	0	3	0	0
Aircraft Information							
Make/Model - ADAMS BALLOON A-60 Landing Gear - N/A Max Gross Wt - 1800	Eng Make/Model - N Number Engines - N Engine Type - N	/A /A			Installed/ tall Warnii		
No. of Seats - UNK/NR	Rated Power - N	'A 					
Environment/Operations Information							
Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure Poin AUSTIN,TX	t			Proximity RPORT/STRI	>	
Completeness - N/A Basic Weather - VMC	Destination LOCAL		Α	irport D	ata		
Wind Dir/Speed- 290/020 KTS						- N/A	
Visibility - 20.0 SM	ATC/Airspace				•	- N/A	
Lowest Sky/Clouds - CLEAR	Type of Flight Plan					DIRT	
Lowest Ceiling - NONE	Type of Clearance			Runway	Status	- D <b>R</b> Y	
Obstructions to Vision- NONE	Type Apch/Lndg	- FULL STOP					
Precipitation - NONE Condition of Light - DAYLIGHT	1	2					
 Personnel Information							
Pilot-In-Command	Age - 47	Medical Cer	tificate	- NO MF	DICAL		
Certificate(s)/Rating(s)	Biennial Flight Review			Time (H			
COMMERCIAL	Current - YES	Total		477	Last 24	4 Hrs -	1
· · · · · · · · · · · · · · · · · · ·	Months Since - 11		del- UNK		Last 3		8
FREE BALLOON	Aircraft Type - UNK/N			0	Last 9		21

Instrument Rating(s) - NONE

----Narrative----

THE COMMERCIAL BALLOON PILOT RELINQUISHED CONTROL OF THE CROWN LINE TO ONE OF THE FOUR PASSENGERS DURING A HIGH WIND LANDING TO A PASTURE. THE PILOT ACTIVATED THE BURNER JUST PRIOR TO LANDING, WHICH RESULTED IN THE BALLOON CLIMBING TO APPROXIMATELY 60 FEET. THE PASSENGER INADVERTENTLY PULLED THE LINE WHICH RELEASED THE AIR FROM THE ENVELOPE, RESULTING IN A RAPID DESCENT TO A HARD LANDING.

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File No 2419 1/18/88 AUSTIN,TX A/C Reg. No. N9811N Time (Lcl) - 0800 CST	
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Occurrence #1 HARD LANDING Phase of Operation LANDING

Finding(s)

1. BALLOON EQUIPMENT, ENVELOPE - COLLAPSED

2. EQUIPMENT, OTHER - INADVERTENT ACTIVATION - PASSENGER

3. RELINQUISHING OF CONTROL - PERFORMED - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2,3



# National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2416 5/23/	88 ROANOK	E,TX	A/C Reg. No. I	N52119	Т	ime (Lcl) -	- 0930 C	DT
Basic Information Type Operating Certificate-N	JONE (GENERAL	AVIATION)	ircraft Damage			Injur	ies	
Type operating certhicate i			SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation -1	INSTRUCTIONAL		ire	Crew	0	0	0	1
Flight Conducted Under -1	14 CFR 91		NONE	Pass	0	0	0	0
Accident Occurred During -1	AKEOFF							
-Aircraft Information								
Make/Model - CESSNA 172P		<b>.</b> .	1 - LYCOMING O	-320-D23		Installed/#		
Landing Gear - TRICYCLE-FI)	(ED	Number Engine				tall Warnir	ng Syste	⊨m − YES
Max Gross Wt - 2150			- RECIPROCAT	ING-CARBURE	TOR			
No. of Seats - 4		Rated Power	- 160 HP					
-Environment/Operations Informa	ation							
Weather Data		Itinerary				Proximity		
The second secon	× .	Last Departure	e Point		ON AIR	PORT		
Method - TELEPHONE		ROANOKE, TX						
Completeness - PARTIAL,LM	ATD BY PILOT	Destination			Airport D			
Basic Weather - VMC		LOCAL			AERO V			
Wind Dir/Speed- 310/014 KT							- 35	
	SM	ATC/Airspace	0.1			Lth/Wid -		
	DNE	ERED Type of Flight				Surface -	· ASPHAL · DRY	.1
Lowest Ceiling - NC Obstructions to Vision-NC		Type of Cleara Type Apch/Lndo		<i>20.</i>	Runway	Status -	DRT	
		Type Apch/Lhdg	- NUNE					
Precipitation - NC Condition of Light - DA								
-Personnel Information Pilot-In-Command		Age - 42	Medical	Certificat	e - VALID	MEDICAL-WA	TVERS/I	INIT
Certificate(s)/Rating(s)		Biennial Flight Revi			t Time (H			
STUDENT		-	N/A Tota		48		Hrs -	UNK/NR
		Months Since -	N/A Make	e/Model-	6	Last 30		
		Aircraft Type -	N/A Ins	e/Model- trument-	0	Last 90	Days-	48
Instrument Rating(s) -	NONE							
STUDENT PILOT WAS DEPARTING FR	ROM RUNWAY 35	ON A LOCAL SOLO INS	TRUCTIONAL FLI	GHT. WHEN A	T LIFTOFF	. THE		
CRAFT WEATHERVANED INTO THE GUS								
FLIPPED OVER AFTER IMPACTING A								

. - - - - - - - - -

File No 24	16 5/23/88	ROANOKE, TX	A/C Reg.	No. N52119	Time (Lc1) - 0930 CDT
Occurrence #1 Phase of Operation					
		INADEQUATE - PILOT IN ( ED - PILOT IN COMMAND			
Occurrence #2 Phase of Operation	IN FLIGHT COLLISI DESCENT - UNCONTR	ON WITH TERRAIN/WATER	· · · · · · · · · · · · · · · · · · ·		
Occurrence #3 Phase of Operation		ON WITH OBJECT			
Occurrence #4 Phase of Operation				1	
Probable Cause					

Brief of Accident 8/07/88 A/C Reg. No. N8355L Time (Lcl) - 2055 CDT File No. - 2415 EDNA, TX ----Basic Information----Type Operating Certificate-NONE (GENERAL AVIATION) Aircraft Damage Iniuries Minor SUBSTANTIAL Fatal Serious None Type of Operation -PERSONAL Fire Crew 0 0 0 1 Flight Conducted Under NONE 0 0 0 2 -14 CFR 91 Pass Accident Occurred During -LANDING ----Aircraft Information----Make/Model - PIPER PA-32RT-300 Eng Make/Model - LYCOMING TIO-540-S1AD ELT Installed/Activated - YES/YES Landing Gear - TRICYCLE-RETRACTABLE Number Engines - 1 Stall Warning System - YES Engine Type Max Gross Wt - 3400 - RECIP-FUEL INJECTED No. of Seats - 7 Rated Power - 300 HP \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ --Environment/Operations Information----Weather Data Airport Proximity Itinerary Wx Briefing - FSS Last Departure Point ON AIRPORT - TELEPHONE FORT STOCKTON, TX Method Completeness - PARTIAL, LMTD BY PILOT Destination Airport Data Basic Weather - VMC SAME AS ACC/INC JACKSON COUNTY Wind Dir/Speed- 170/007 KTS Runwav Ident - 14 ATC/Airspace Runway Lth/Wid - 3400/ 65 Visibility - 7.0 SM Lowest Sky/Clouds ~ CLEAR Type of Flight Plan - NONE Runway Surface - ASPHALT -Type of Clearance - NONE Runway Status - DRY Lowest Ceiling NONE  $T_{ype}$  Apch/Lndg - TRAFFIC PATTERN Obstructions to Vision- HAZE Precipitation - NONE FULL STOP Condition of Light - NIGHT(DARK) \_\_\_\_\_ ----Personnel Information----Pilot-In-Command Aae -47 Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT Certificate(s)/Rating(s) Biennial Flight Review Flight Time (Hours) Last 24 Hrs - UNK/NR PRIVATE Current - YES Total - 1230 Last 30 Days- UNK/NR SE LAND Months Since - 21 Make/Model-303 Aircraft Type - UNK/NR Instrument-20 Last 90 Davs- UNK/NR

Instrument Rating(s) - NONE

----Narrative----

UPON ARRIVAL AT THE UNCONTROLLED DESTINATION AIRPORT, THE PILOT MADE A VISUAL APPROACH AND DETERMINED THAT THE "LIGHTS LOOKED DIFFERENT THAN THEY NORMALLY DID." THEREFORE A GO-AROUND WAS INITIATED AND A SECOND APPROACH COMMENCED. LATE IN THE SECOND APPROACH THE PILOT REALIZED THAT HE WAS ABOUT TO LAND IN A CULVERT AND APPLIED FULL POWER, BUT WAS UNABLE TO AVOID THE COLLISION WITH THE TERRAIN. ALTHOUGH THE NDB AND ROTATING BEACON WERE OPERATING, THE RUNWAY HAD BEEN CLOSED SINCE 7/19/88 FOR CONSTRUCTION. THE RUNWAY LIGHTS WERE NOT ILLUMINATED FOR THE ATTEMPTED LANDING IN DARK NIGHT VFR CONDITIONS. IMPACT OCCURRED BETWEEN THE RUNWAY AND A PARALLEL TAXIWAY. A NOTAM WAS ISSUED, HOWEVER, DURING THE WEATHER BRIEF THE PILOT DID NOT SPECIFY HIS DESTINATION. THEREFORE, IT WAS NOT RECEIVED.

File No 24	15 8/07/88 EDNA,TX	A/C Reg. No. N8355L	Time (Lc1) - 2055 CDT	
Occurrence #1 Phase of Operation	IN FLIGHT COLLISION WITH TERRAIN/WATE GO-AROUND (VFR)	R	/	
	- DARK NIGHT NNING/PREPARATION - POOR - PILOT IN COM IES.RUNWAY/LANDING AREA CONDITION - UNA			

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,5

Factor(s) relating to this accident is/are finding(s) 3,4

4. NOTAMS - NOT RECEIVED - PILOT IN COMMAND 5. GO-AROUND - DELAYED - PILOT IN COMMAND

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2413 8/27/88 KATY,	TX A/C Re	g. No. N7746U	Т	ime (Lcl) -	0030 CDT	
-Basic Information Type Operating Certificate-NONE (GENERA	L AVIATION) Aircraft SUBSTAN		Fatal	Injur Serious	ies Minor	None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -LANDING	Fire NONE	Crew Pass	0 0	0 0	1 0	0
-Aircraft Information Make/Model - CESSNA 172E Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2300 No. of Seats - 4	Eng Make/Model - LYC Number Engines - 1 Engine Type - REC Rated Power -		S	Installed/A tall Warnin		
-Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Departure Point BRENHAM,TX			Proximity RPORT/STRIP		
Completeness - N/A Basic Weather - VMC Wind Dir/Speed- CALM	Destination WALLER,TX		Airport Da LOVEY Runway	TRAILS	18	
Visibility - 5.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- HAZE Precipitation - NONE Condition of Light - NIGHT(DARK)	ATC/Airspace Type of Flight Plan - Type of Clearance - Type Apch/Lndg -	NONE	Runway	Surface -	2800 GRASS/TUR DRY	۶F
-Personnel Information Pilot-In-Command		Medical Certificat			WAIVERS/I	IMIT
Certificate(s)/Rating(s) COMMERCIAL,CFI SE LAND	Biennial Flight Review Current - YES Months Since - 1 Aircraft Type - UNK/NR	Total - Make/Model-	114	Last 24 Last 30	Days- UN	2 (/NR 9

Instrument Rating(s) - NONE

----Narrative----

THE PILOT DEPARTED ON THE NIGHT CROSS COUNTRY FLIGHT FOR THE PURPOSE OF ESTABLISHING NIGHT CURRENCY. DURING THE RETURN LEG THE PILOT STOPPED AT THREE AIRPORTS, BUT WAS UNABLE TO FUEL BECAUSE FIXED BASE OPERATORS WERE CLOSED. IN AN EFFORT TO RETURN TO THE POINT OF DEPARTURE THE PILOT OVERFLEW THE DESTINATION BECAUSE AIRPORT LIGHTING WAS SECURED AT 2300. WHILE ON FINAL APPROACH TO A LIGHTED PRIVATE STRIP THE FUEL EXHAUSTION INDUCED POWER LOSS OCCURRED. DURING THE FORCED LANDING THE LEFT WING STRUCK A POWER LINE AND THE AIRPLANE COLLIDED WITH THE TERRAIN NOSE GEAR FIRST.

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Factor(s) relating to this accident is/are finding(s) 4,5,6

## National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

File No 2507 11/24/88 WEATH	ERFORD, TX	A/C Reg. No. N5337S Time (Lcl) - 1420				1420 CST	
-Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft Damage DESTROYED		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT		Fire NONE	Crew Pass	1 1	0 0	0	0
Aircraft Information Make/Model - CESSNA 337A Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 4200 No. of Seats - 4	Number Engi	- RECIP-FUEL			Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 170/009 KTS Visibility - 20.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT		D,TX ht Plan - NONE rance - NONE		OFF AI irport D Runway Runway Runway	Ident - Lth/Wid - Surface -	N/A N/A	
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE,COMMERCIAL SE LAND,ME LAND	Age - 60 Biennial Flight Re Current Months Since Aircraft Type	view - YES Tota - 20 Make - CE-337A Inst		Time (H 700 /NR /NR	ours) Last 24 Last 30 Last 90	IVERS/LIM Hrs - UN Days- UN Days- UN aft - UN	IK/NR IK/NR IK/NR
Instrument Rating(s) - AIRPLANE							

----Narrative----

THE PILOT WAS DESCENDING HIS AIRPLANE WHILE IN SLOW FLIGHT WITH 10 DEGREES FLAPS IN A DOWNWIND TRACK TO LOOK AT PROPERTY THAT HE PLANNED TO PURCHASE. A SECOND AIRPLANE FLEW BY HIS AIRPLANE AT THE LOW ALTITUDE AND BANKED AWAY SHARPLY. THE ACCIDENT AIRPLANE'S WINGS WOBBLED, THE NOSE DROPPED AND IT IMPACTED INTO AN OPEN WHEAT FIELD.

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File No 2507	11/24/88	WEATHERFORD, TX	A/C Reg. No. N5337S	Time (Lcl) - 1420 CST
Occurrence #1 Phase of Operation		- IN FLIGHT		
Finding(s) 1. DIVERTED ATTE 2. AIRSPEED(VS) - NO 3. STALL - UNCONTROL		ILOT IN COMMAND		
Occurrence #2 Phase of Operation		SION WITH TERRAIN/WATER ROLLED		
Finding(s) 4. TERRAIN CONDITION	- OPEN FIELD			
Probable Cause				
	ation Safety Boa	ard determines that the	Probable Cause(s) of this accid	ent

Factor(s) relating to this accident is/are finding(s) 1

Basic Information							
Type Operating Certificate-ON-DEMAND	AIR TAXI	Aircraft Damage DESTROYED		Fatal	Injur Serious		None
Type of Operation -FERRY Flight Conducted Under -14 CFR 91 Accident Occurred During -TAKEOFF		Fire ON GROUND	Crew Pass	- 1 0	0 0	0 0	0 0
Aircraft Information Make/Model - DEHAVILLAND DHC-6-20 Landing Gear - TRICYCLE-FIXED Max Gross Wt - 11579 No. of Seats - 21	Number Engi	del - P&W PT-6A-20A nes - 2 - TURBOPROP - 579 HP	Δ		Installed/A tall Warnin		
Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEF Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 150/010 KTS Visibility - 8.0 SM Lowest Sky/Clouds - N/A Lowest Ceiling - 3400 FT B Obstructions to Vision- NONE Precipitation - NONÉ Condition of Light - DAYLIGHT	SAME AS AC Destination WASHINGTON ATC/Airspace Type of Flig ROKEN Type of Clea	C/INC L,DC ht Plan - IFR		ON AIR Airport D DULLES Runway Runway Runway	ata INT'L Ident - Lth/Wid - Surface -	19L 11500/ CONCRETE DRY	
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,ATP SE LAND,ME LAND HELICOPTER	Age - 50 Biennial Flight Re Current Months Since Aircraft Type	view -YES Total -1 Make/M -DHC-6 Instru	Fligh - 1 Nodel-UN	t Time (H	Last 24 Last 30 Last 90	IVERS/LIM Hrs - UN Days- Days- aft - UN	K/NR 28 120

----Narrative----

THIS WAS THE FIRST FLIGHT AFTER A MAINTENANCE INSPECTION. THE FLAPS WERE LEFT FULL DOWN AFTER A POST-INSPECTION BY COMPANY MECHANICS, BEFORE THE FLIGHT. WITNESSES STATED THE FLAPS WERE DOWN WHEN THE AIRCRAFT TAXIED TO TAKEOFF ON RWY 19L. WITNESSES STATED THE AIRCRAFT CLIMBED STEEPLY AFTER IT LIFTED OFF WITH A PITCH ATTITUDE UP TO 60 DEGREES. ACCORDING TO WITNESSES, THE AIRCRAFT CLIMBED TO 200 TO 500 FT AGL, BEFORE IT STALLED AND DESCENDED NOSE DOWN IN A LEFT TURN. THE AIRCRAFT CRASHED ABOUT 300 FT LEFT OF AND 2000 FT DOWN THE RWY. EXAMINATION OF THE AIRCRAFT REVEALED THE FLAPS WERE FULL DOWN. THE SCROLL TYPE CHECKLIST WAS POSITIONED AT THE BEGINNING OF THE TAKEOFF CHECK. THE FLIGHT MANUAL RECOMMENDS A 10 DEGREE FLAP SETTING FOR TAKEOFF AND PROHIBITS FLAP FULL DOWN TAKEOFF. REVIEW OF PREVIOUS DHC-6 ACCIDENTS INVOLVING FLAP FULL DOWN RESULTED IN A STEEP TAKEOFF CLIMB AND EXCESSIVE PITCH ATTITUDE FOLLOWED BY A STALL. THE POSITION OF THE CONTROL LOCK SUGGESTS IT MAY HAVE BEEN IN THE LOCKED POSITION DRG THE TKOF.

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File No 24	36 7/20/88	CHANTILLY, VA	A/C Reg. No. N7267	Time (Lcl) - 1608 EDT
Occurrence #1 Phase of Operation				
<pre>3. CHECKLIST - NOT 4. PROCEDURES/DIRE</pre>	- PILOT IN COMMAN USED - PILOT IN C CTIVES - NOT FOLLO	D		
Occurrence #2 Phase of Operation		ION WITH TERRAIN/WATE ROLLED	R	
<sub>j</sub> Probable Cause				
The National Transpo is/are finding(s) 1	rtation Safety Boa	rd determines that th	e Probable Cause(s) of this acci	ident

Factor(s) relating to this accident is/are finding(s) 2,3,4,5

File No 2499 9/29/88 CLARKS	SVILLE, VA	A/C Reg. No. N	1325X	т	ime <u>(</u> Lc1) -	0625 EDT	
Basic Information Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft Damage DESTROYED		Fatal	Injur Serious		None
Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT		Fire ON GROUND	Crew Pass	1 0	0 0	0	0 0
Aircraft Information Make/Model - MAULE M-5-210C Landing Gear - TAILWHEEL-ALL FIXED Max Gross Wt - 2306 No. of Seats - 4	Number En Engine Typ	Model - CONTINENTAL gines - 1 pe - RECIP-FUEL er - 210 HP	IO-360-D	ELT	Installed/A tall Warnin	ctivated	
-Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A	Itinerary Last Depar SAME AS J				Proximity RPORT/STRIP		
Completeness - N/A Basic Weather - IMC Wind Dir/Speed- LIGHT AND VARIABLE	Destination CHASE CI	,		Airport D		NI / A	
Wind Diff/speed- LIGHT AND VARIABLE Visibility - 5.0 SM Lowest Sky/Clouds - UNK/NR Lowest Ceiling - OBSCURED Obstructions to Vision- FOG Precipitation - NONE Condition of Light - NIGHT(DARK)	Type of Cle	ight Plan - NONE earance - NONE Lndg - NONE		Runway Runway	Lth/Wid - Surface -	N/A N/A N/A N/A	
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL SE LAND	Biennial Flight I Current	- UNK/NR Make	Fligh	t Time (H 2019 K/NR	ours) Last 24	Hrs - UNH	

Instrument Rating(s) - AIRPLANE

----Narrative----

WITNESSES REPORTED LOW CLOUDS, POOR VISIBILITY, AND FOG WHEN THE ACFT TOOK OFF. ACCORDING TO WITNESSES, THE ACFT CIRCLED THE AIRPORT SHORTLY AFTER TAKEOFF. WITNESSES REPORTED THE ENGINE SOUND INCREASED AND DECREASED SEVERAL TIMES BEFORE THE ACFT DESCENDED AND CRASHED IN A STEEP NOSE DOWN ATTITUDE. THE PLT WAS INSTRUMENT RATED; HOWEVER THERE WAS NO FLIGHT PLAN FILED FOR THE FLIGHT. RECORDS WERE NOT AVAILABLE TO DETERMINE THE PLT'S INSTRUMENT PROFICIENCY. EXAMINATION OF THE ACFT DID NOT REVEAL EVIDENCE OF MECHANICAL MALFUNCTION. POST MORTEM EXAMS DID NOT REVEAL EVIDENCE OF PHYSICAL IMPAIRMENT OR INCAPACITATION.

Brief	of	Accident (	(Continued)
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File No 24	99 9/29/88	CLARKSVILLE, VA	A/C Reg. No. N325X	Time (Lc1) - 0625 EDT
Occurrence #1 Phase of Operation		TER WITH WEATHER		
	TO IMC - PERFORMED	- PILOT IN COMMAND BILITY - PILOT IN COMMAN	ND	
Occurrence #2 Phase of Operation		- IN FLIGHT	. · · ·	
Finding(s) 4. SPATIAL DIS	ORIENTATION - PILO			
Occurrence #3 Phase of Operation		ION WITH TERRAIN/WATER		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2,4

#### National Transportation Safety Board Washington, D.C. 20594

Brief of Accident

Basic Information					<b>_</b> .		
Type Operating Certificate-NONE (GENERAL	AVIATION)	Aircraft Damag	ge	<b>F</b> = + = 3	Injur		Name -
Type of Operation -FERRY		SUBSTANTIAL Fire	Chai	Fata) 0	Serious	Minor 1	None
Type of Operation -FERRY Flight Conducted Under -14 CFR 91		NONE	Crew Pass	-	0	ò	0
Accident Occurred During -LANDING		NONE	Fass		· ·	U	0
Aircraft Information							
Make/Model ~ LAKE LA-4-200		Model - LYCOMING	10-320		Installed/A		-
Landing Gear - TRICYCLE-RETRACTABLE		gines – 1		S	Stall Warnin	g System	- YES
Max Gross Wt - 2400	Engine Ty						
No. of Seats - 4	Rated Pow	er - 200 Hf	)				
Environment/Operations Information							
Weather Data	Itinerary				Proximity		
Wx Briefing - NO RECORD OF BRIEFING	Last Depar			OFF A]	IRPORT/STRIP	1	
Method - N/A	BURLINGT	•					
Completeness - N/A	Destination			Airport [	Data		
Basic Weather - VMC	LACONIA,	NH		D	Trinat	N/A	
Wind Dir/Speed- Visibility - 6.0 SM	ATC/Airspace					N/A N/A	
Visibility - 6.0 SM Lowest Sky/Clouds - UNK/NR		ight Plan - NONE				N/A N/A	
Lowest Ceiling - 6000 FT BROKEN		earance - NONE				N/A	
Obstructions to Vision- NONE		Lndg - FORCI		Kanway	y status	17/ 8	
Precipitation - NONE			ED EANDING				
Condition of Light - DAYLIGHT							
Personnel Information							
	ge- 62	Medica	al Certifica	te - VALIC	MEDICAL-WA	IVERS/LIM	IT
	iennial Flight			ht Time (F			
ATP,CFI	Current		otal -	13495	Last 24	Hrs -	2
SE LAND, ME LAND, SE SEA	Months Since	- 3 Ma	ake/Model-	60	Last 30	) Days-	85
	Aircraft Typ	e - B-55 II	nstrument-	3341	Last 90	Days-	206

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Instrument Rating(s) - AIRPLANE

----Narrative----

AFTER EXPERIENCING AN ENGINE PROBLEM DURING A FERRY FLIGHT, THE PILOT ATTEMPTED TO LAND AT KNAPP STATE AIRPORT IN MONTPELIER, VERMONT. HOWEVER, DURING THE APPROACH THE ENGINE QUIT AND THE PILOT HAD TO MAKE AN EMERGENCY LANDING IN A NEARBY FIELD. DURING THE LANDING THE AIRPLANE STRUCK A DITCH AND NOSED OVER. A POST ACCIDENT EXAMINATION REVEALED THAT THE FUEL SYSTEM WAS CONTAMINATED WITH WATER AND PARTICLES OF RUST.

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File No 24	27 7/30/88	MONTPELIER, VT	A/C Reg. No. N2883P	Time (Lcl) - 1530 EDT
Decurrence #1 Phase of Operation		OWER		
Finding(s) 1. FLUID,FUEL - CO 2. FLUID,FUEL - WA	TER			
Occurrence #2 Phase of Operation				·
Occurrence #3 Phase of Operation		ION WITH TERRAIN/WATER		
inding(s) 3. TERRAIN CONDITIO	DN - DITCH			
Probable Cause	·			

is/are finding(s) 1,2

Factor(s) relating to this accident is/are finding(s) 3

## National Transportation Safety Board Washington, D.C. 20594

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Brief of Accident

File No 2462 8/01/88 RACI	NE,WI A/	C Reg. No. N56352	Т	Time (Lcl) - 1541 CDT				
-Basic Information Type Operating Certificate-NONE (GENER Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT			Fatal rew O iss O	Injur Serious O 1	ies Minor O O	None 1 0		
Aircraft Information Make/Model - MOONEY M2OK Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 2900 No. of Seats - 4	Number Engines - Engine Type -	RECIP-FUEL INJECTE 210 HP	S	tall Warnir	ig System			
Environment/Operations Information Weather Data Wx Briefing - FSS Method - TELEPHONE Completeness - WEATHER NOT PERTINEN Basic Weather - VMC Wind Dir/Speed- 210/009 KTS Visibility - 15.0 SM Lowest Sky/Clouds - 7500 FT SCA	GRAND RAPIDS,MI ATC/Airspace TTERED Type of Flight Pl Type of Clearance	an - NONE	Airport OFF AI Airport D Runway Runway Runway Runway Runway	Proximity RPORT/STRIF	N/A N/A N/A			
Personnel Information Pilot-In-Command Certificate(s)/Rating(s) PRIVATE SE LAND	Age - 37 Biennial Flight Review Current - YES Months Since - 13 Aircraft Type - M2C	Make/Model-	ight Time (H 1050 980	ours) Last 24 Last 30	Hrs - Days-	5		
Instrument Rating(s) - NONE								
Narrative E∴PRIVATE PILOT AND HIS PASSENGER DEPARTED								

PREFLIGHT. FLIGHT WAS CONDUCTED AT 13,500 FEET MSL. APPROXIMATELY 5 HOURS AND 33 MINUTES INTO FLIGHT THE PILOT ADVISED KANKAKEE AFSS THAT HE WAS OVER LAKE MICHIGAN AND "LOW ON FUEL." THE AIRCRAFT DITCHED AT APPROXIMATELY 1541 CDT. BOTH OCCUPANTS WERE RETRIEVED BY THE U.S. COAST GUARD 1 HOUR AND 30 MINUTES AFTER DITCHING. THE AIRCRAFT HAS NOT BEEN RECOVERED.

File No 24	62 8/01/88	RACINE,WI	A/C Reg. No. N56352	Time (Lcl) - 1541 CDT
Occurrence #1 Phase of Operation	LOSS OF ENGINE PO CRUISE - NORMAL	DWER(TOTAL) - NON-ME	ECHANICAL	
Finding(s) 1. AIRCRAFT PREFLI 2. FLUID,FUEL - EX 3. EMERGENCY PROCE	HAUSTION			
Occurrence #2 Phase of Operation	DESCENT - EMERGEN	NCY		
Occurrence #3		TOUCHDOWN		

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 1

			Time (Lcl) - 1145 CDT				
-Basic Information							
Type Operating Certificate-NONE (GENE	RAL AVIATION)	Aircraft Damage	2		Injur		
		DESTROYED		Fatal	Serious		None
Type of Operation -PERSONAL		Fire	Crew		1	0	0
Flight Conducted Under -14 CFR 91 Accident Occurred During -DESCENT		NONE	Pass	0	2	2	0
-Aircraft Information							
Make/Model - PIPER PA-32-260		Model - LYCOMING (	)-540-E4B5		Installed/A		
Landing Gear - TRICYCLE-FIXED		gines - 1			tall Warning	g System	- YES
Max Gross Wt - 3400 No. of Seats - 6		oe - RECIPROCAT er - 260 HP	ING-CARBURI	ETOR			
NO. OF Seals - 6	Rated Powe	er - 260 HP					
-Environment/Operations Information							
Weather Data	Itinerary	- * ·		Airport	proximity		
Wx Briefing - COMMERCIAL WX SERVIO		ture Point			RPORT/STRIP		
Method - TELETYPE	WATERTOW	N,WI		· · ·			
Completeness - FULL	Destination			Airport Da	ata .		
Basic Weather - VMC	SAULT ST	. MARIE,MI					
Wind Dir/Speed- 200/012 KTS						N/A	
Visibility - 15.0 SM	ATC/Airspace					N/A	
Lowest Sky/Clouds - N/A Lowest Ceiling - 25000 FT BR(		ight Plan - NONE earance - NONE				N/A N/A	
Obstructions to Vision- NONE		Lindg - FORCED		Runway	status -	N/A	
Precipitation - NONE	туре дреп/т		LANDING				
Condition of Light - DAYLIGHT							
-Personnel Information							
Pilot-In-Command	Age - 45				MEDICAL-WA	IVERS/LIM	IT
Certificate(s)/Rating(s) COMMERCIAL	Biennial Flight I Current		al -	ht Time (Ho 436	Last 24	line	
SE LAND, ME LAND	Months Since		ar - (e/Model-		Last 24 Last 30	–	1 27
JE LAND, ME LAND	Aircraft Type		strument-		Last 90		60
			ti-Eng -	21		Days	
Instrument Rating(s) - AIRPLANE							

THE PILOT PLANNED A CROSS-COUNTRY TRIP WITH PASSENGERS AND BECAUSE OF THEIR WEIGHT, HE ELECTED TO NOT FILL THE OUTBOARD TANKS WITH FUEL. HE TOOK OFF WITH THE EMPTY RIGHT OUTBOARD TANK SELECTED AND FUEL STARVATION OCCURRED AT 200' AGL. THE PILOT WAS ATTEMPTING TO AVOID POWER LINES AND TREES WHEN THE ACFT STALLED AND DESCENDED TO TERRAIN IMPACT.

File No 242	29 9/08/88 WATI	ERTOWN,WI	A/C Reg. No. N9346C	Time (Lcl) - 1145 CDT	
Occurrence #1 Phase of Operation	LOSS OF ENGINE POWER( TAKEOFF - INITIAL CLI	ГОТАL) - NON-MECH ИВ	ANICAL		
	ARVATION ECTOR POSITION - MISREAU ENT EXPERIENCE IN TYPE (				
	LOSS OF CONTROL - IN DESCENT - EMERGENCY	FLIGHT			
Finding(s) 4. UNSUITABLE TERRA 5. STALL - INADVER1	ENT - PILOT IN COMMAND				
Occurrence #3 Phase of Operation	IN FLIGHT COLLISION W DESCENT - UNCONTROLLE	TH TERRAIN/WATER			
Finding(s) 6. TERRAIN CONDITIO	DN - GROUND				
Probable Cause					
The National Transpor is/are finding(s) 2,		ermines that the	Probable Cause(s) of this accid	ent	
Factor(s) relating to	this accident is/are f	inding(s) 1			

1

Basic Information		-		<b>-</b> .		
Type Operating Certificate-NONE (GENERAL A Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91 Accident Occurred During -TAXI	SUBSTAN Fire NONE	Crew Pass	0 0	Injur Serious O O	Minor O O	None 1 0
-Aircraft Information Make/Model - CESSNA 340 Landing Gear - TRICYCLE-RETRACTABLE Max Gross Wt - 5975 No. of Seats - 6	Eng Make/Model - CON Number Engines - 2 Engine Type - REC Rated Power - 3	TINENTAL TSIO-520 IP-FUEL INJECTED	-N ELT	Installed/A tall Warnin	ctivated	
-Environment/Operations Information Weather Data Wx Briefing - UNK/NR Method - UNK/NR Completeness - WEATHER NOT PERTINENT Basic Weather - IMC Wind Dir/Speed- 300/010 KTS Visibility - 2.000 SM Lowest Sky/Clouds - UNK/NR Lowest Sky/Clouds - UNK/NR Lowest Ceiling - 300 FT OVERCAS Obstructions to Vision- FOG Precipitation - SNOW Condition of Light - DAYLIGHT	CHARLESTON,WV ATC/Airspace Type of Flight Plan -	NONE NONE	ON AIR Airport Da WELCH Runway Runway Runway		UNK/NR UNK/NR	
-Personnel Information Pilot-In-Command Age Certificate(s)/Rating(s) Bio COMMERCIAL SE LAND,ME LAND Instrument Rating(s) - AIRPLANE	e - 42 M ennial Flight Review Current - YES Months Since - O Aircraft Type - UNK/NR	Fligh Total -	nt Time (H 9700	ours) Last 24	Hrs - UNA Days- UNA Days- UNA aft - UNA	

OF THE RUDDER WERE SEVERED. THE PLT WAS UNAWARE OF THE WIRE CONTACT AND FLEW ONTO HIS DESTINATION WHERE A LINEMAN INFORMED THE PLT OF THE DAMAGE.

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File No 24	93 4/07/88	PINEVILLE, WV	A/C'Reg. No. N340FB	Time (Lcl) - 0900 EDT
Occurrence #1 Phase of Operation	ON GROUND COLLIS TAXI	ION WITH OBJECT		
Finding(s) 1. OBJECT - WIRE,S 2. CLEARANCE - N	TATIC OT MAINTAINED - PI			
Probable Cause				

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 2

Factor(s) relating to this accident is/are finding(s) 1

File No 2444 4	/14/88 CHARLESTO	N,WV	A/C Reg. No. N1	1 10UR	Т	ime (Lc1) -	0945 ED	Т.
Basic Information Type Operating Certifica Name of Carrier Type of Operation Flight Conducted Under Accident Occurred During	-PIEDMONT AVIATIO -SCHEDULED,DOMEST -14 CFR 121	N	Aircraft Damage SUBSTANTIAL Fire NONE	Crew Pass	Fatal O O	Injur Serious O O	ies Minor 3 5	None 3 51
-Aircraft Information Make/Model - FOKKER F Landing Gear - TRICYCLE Max Gross Wt - 73000 No. of Seats - 72		Number Engi	- TURBOJET			Installed/A tall Warnin		
-Environment/Operations Info Weather Data Wx Briefing - UNK/NR Method - UNK/NR Completeness - WEATHEN Basic Weather - VMC Wind Dir/Speed- 190/00 Visibility - 7.0 Lowest Sky/Clouds - Lowest Ceiling - Obstructions to Vision Precipitation Condition of Light	R NOT PERTINENT 4 KTS SM N/A 25000 FT OVERCAST - NONE - NONE		NC C/INC ht Plan - IFR		OFF AI Airport D YEAGER Runway Runway Runway	Ident - Lth/Wid - Surface' -	05 6302/	
-Personnel Information Pilot-In-Command Certificate(s)/Rating(s ATP ME LAND		- 45 nnial Flight Re Current Months Since Aircraft Type	view -YES Total -1 Make/ -F-28 Instr	Fligh I - 1 /Model-	nt Time (H 11009 325 NK/NR	Last 24 Last 30 Last 90		1 NK/NR NK/NR

Instrument Rating(s) - AIRPLANE

----Narrative----

THE ACFT WAS AT FLIGHT LEVEL 310 WHEN THE NO. 2 ENGINE FIRST STAGE TURBINE DISC SEPARATED, CAUSING AN UNCONTAINED ENGINE FAILURE. TURBINE DEBRIS PENETRATED THE FUSELAGE STRUCTURE AND CAUSED DEPRESSURIZATION. THE PILOT MADE AN EMERGENCY DESCENT AND LANDED AT CHARLESTON, WV WHICH WAS ABOUT 50 MILES AWAY. THE INVESTIGATION REVEALED SEVERE RUBBING BETWEEN THE FIRST STAGE TURBINE DISC AND THE INTERSTAGE SEAL. THE LOW PRESSURE TURBINE HAD 119 HOURS SINCE IT WAS OVERHAULED, WHICH INCLUDED THE REPLACEMENT OF THE INTERSTAGE SEAL. THE INVESTIGATION REVEALED MAINTENANCE PERSONNEL EXPERIENCED DIFFICULTIES ESTABLISHING CLEARANCE BETWEEN THE INTERSTAGE AND THE LOW PRESSURE TURBINE DISC AFTER THE REPLACEMENT. ALL OF THE FIRST CLASS SECTION AND TWO CABIN SECTION PASSENGER OXYGEN MASKS FAILED TO DEPLOY.

File No 244	4 4/14/88	CHARLESTON, WV	A/C Reg. No. N110UR	Time (Lcl) - 0945 EDT
Occurrence #1 Phase of Operation		POWER(TOTAL) - MECH F	AILURE/MALF	
3. TURBINE ASSEMBLY	STALLATION - IMPR TURBINE WHEEL - RECTIVES - NOT FOL	COPER - OTHER MAINTEN, CHAFED LOWED - OTHER MAINTEN		
Occurrence #2 Phase of Operation				
Finding(s) 6. TURBINE ASSEMBLY 7. FUSELAGE,CABIN -	,TURBINE WHEEL -			

The National Transportation Safety Board determines that the Probable Cause(s) of this accident is/are finding(s) 1,2

Factor(s) relating to this accident is/are finding(s) 3,4,5,6,7

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	Brief of Accid	ent				
File No 2450 4/29/88 FAYETTEV	VILLE,WV A/C Reg. No. N13261		Т	Time (Lcl) - 1815 EDT		
-Basic Information Type Operating Certificate-NONE (GENERAL A Type of Operation -PERSONAL Flight Conducted Under -14 CFR 91		TANTIAL Cre	w O	Injur Serious O O	Minor	None 1 3
Accident Occurred During -LANDING						
-Aircraft Information Make/Model - CESSNA 172M Landing Gear - TRICYCLE-FIXED Max Gross Wt - 2300 No. of Seats - 4	Number Engines - Engine Type -	LYCOMING 0-320-E2D 1 RECIPROCATING-CARBU 150 HP	S	Installed// tall Warnir		
<pre>-Environment/Operations Information Weather Data Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 260/008 KTS Visibility - 8.0 SM Lowest Sky/Clouds - N/A Lowest Ceiling - 5500 FT BROKEN Obstructions to Vision- NONE Precipitation \ - NONE Condition of Light - DAYLIGHT</pre>	Itinerary Last Departure Poi BROOKVILLE,OH Destination FAYETTEVILLE,WV ATC/Airspace Type of Flight Pla Type of Clearance Type Apch/Lndg	n - NONE - NONE	ON AIR Airport D FAYETT Runway Runway Runway Runway	ata	- 2145/ - ASPHALT	20
	e - 40 ennial Flight Review Current - YES Months Since - 13 Aircraft Type - C-17	Fli - Total - Make/Model	ght Time (H 209 172	ours) Last 24 Last 3(	) WAIVERS/ 4 Hrs - UN ) Days- UN ) Days-	IK/NR IK/NR

Instrument Rating(s) - NONE

----Narrative----

\_ \_ \_ \_ \_ \_ \_ \_ \_

ACCORDING TO THE PILOT, AFTER USING THE TETRAHEDRON TO DETERMINE THE WIND DIRECTION, HE LANDED ON RWY 03. THE PILOT STATED THAT DURING THE LANDING FLARE, THE ACFT FLOATED AND DID NOT TOUCH DOWN UNTIL HALFWAY DOWN THE RUNWAY. HE STATED THAT HE WAS UNABLE TO STOP BEFORE HE OVERRAN THE RWY AND STRUCK A FENCE. ACCORDING TO A PILOT-WITNESS, THE LOCAL WINDS WERE VARIABLE AT 20 KTS. THE WITNESS STATED THE WIND FAVORED A LANDING ON RWY 03. THE WITNESS STATED THE ACFT TOUCHED DOWN 1000 FT DOWN THE RWY. ACCORDING TO THE WITNESS, THIS WAS THE PILOT'S THIRD ATTEMPT TO LAND. THE PILOT REPORTED NO MECHANICAL MALFUNCTION.

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Brief of Accident (Continued)							
	File No 2450	4/29/88	FAYETTEVILLE, WV	A/C Reg. No. N13261	Time (Lc1) - 1815 EDT	-	
	urrence #1 OVER se of Operation LAND	RUN ING - ROLL					
1 2	ding(s) . AIRSPEED - EXCESSIVE . IN-FLIGHT PLANNING/DE . LACK OF RECENT EX	CISION - INA	DEQUATE - PILOT IN COMM	AND			
	-Probable Cause			· · · · · · · · · · · · · · · · · · ·			
	National Transportatio are finding(s) 1	n Safety Boa	ard determines that the I	Probable Cause(s) of this accid	ent		

Factor(s) relating to this accident is/are finding(s) 2,3

\*U.S.G.P.0:1991-281-626:20032



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